

Links to Learning and Sustainability

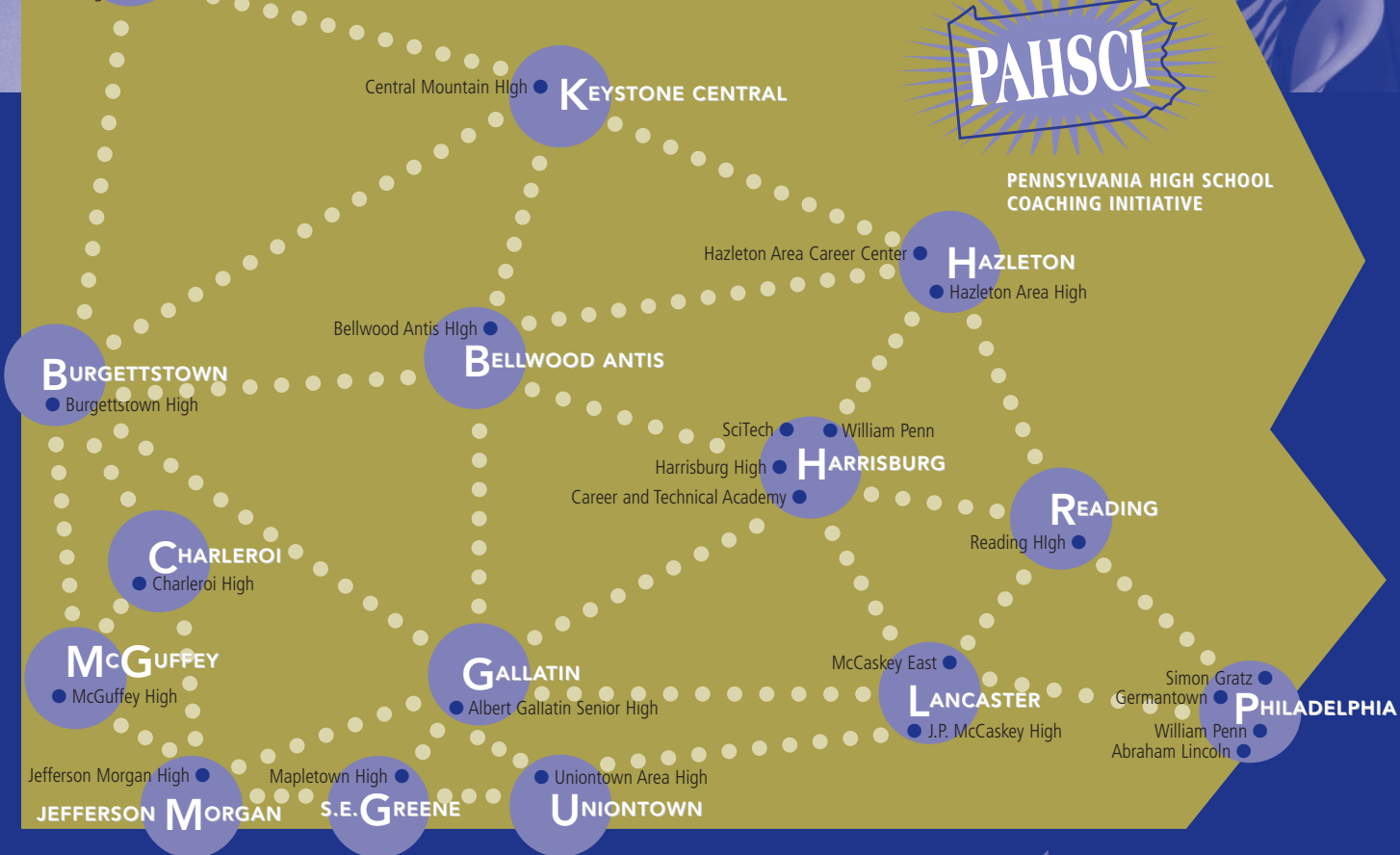
Year Three Report of the Pennsylvania High School Coaching Initiative



- Strong Vincent
- ERIE
- Central High
- East High



PENNSYLVANIA HIGH SCHOOL COACHING INITIATIVE





Research for Action (RFA) is a Philadelphia-based, non-profit organization engaged in education research and evaluation. Founded in 1992, RFA works with public school districts, educational institutions, and community organizations to improve the educational opportunities for those traditionally disadvantaged by race/ethnicity, class, gender, language/cultural difference, and ability /disability. For more information about RFA please go to our website, www.researchforaction.org.

About this Report

Research for Action's third and final report completes a three-year evaluation study of the Pennsylvania High School Coaching Initiative (PAHSCI). This report presents lessons from the PAHSCI model of school-based instructional coaching and mentoring as a vehicle for job-embedded professional learning. Reporting from an analysis using qualitative methods including interviews of teachers and coaches and observations of classroom lessons, the report examines the influence of coaching on the implementation of research-based literacy practices applicable across the content areas. It explores student engagement and coaching's contribution to teachers' ability to reflect on and change classroom practice. Finally, this report discusses the strengths and challenges of PAHSCI's influence on the individual, the school, the district and the state to link learning and build sustainability.

Mission Statement

Through research and action, Research for Action seeks to improve the education opportunities and outcomes of urban youth by strengthening public schools and enriching the civic and community dialogue about public education. We share our research with educators, parent and community leaders, students, and policy makers with the goals of building a shared critique of educational inequality and strategizing about school reform that is socially just.

Links to Learning and Sustainability

Year Three Report of the Pennsylvania High School Coaching Initiative

2008

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Introduction

In education reform lore, one finds informative, even colorful, stories of ideas and beliefs morphing into action. The Pennsylvania High School Coaching Initiative (PAHSCI) — a three-year public-private partnership spearheaded by the Pennsylvania Department of Education (PDE) and funded by the Annenberg Foundation — provides its own unique examples of individuals reaching into the silos in secondary education and partnering in new and exciting ways.

PAHSCI is a high school reform model that links 15 districts and 24 high-need schools serving over 30,000 students across the state to improve teaching and learning at the secondary level.¹ The PAHSCI model centers around school-based literacy and math instructional coaches who support teachers in infusing research-based literacy practices across the curriculum to help improve students' literacy and achievement.² Providing an additional layer of support, PAHSCI employs three-person teams of seasoned educators (content and leadership mentors) who provide direct site-based monthly mentoring of coaches and administrators. Further deepening the scope of its influence, PAHSCI seeks to *link and sustain* learning for individuals, schools, districts, and the state.

Research for Action (RFA)³ was asked to investigate and describe the lessons from PAHSCI, drawing on research methods of participant observation, interviewing, surveying, and document analysis.⁴ In two previous reports: *Promising InRoads: Year One Report of the Pennsylvania High School Coaching Initiative*, September, 2006 and *Making a Difference: Year Two Report of the Pennsylvania High School Coaching Initiative*, October, 2007, we present findings from the first two years of PAHSCI.⁵

While many questions remain regarding the impact of instructional coaching on improving student performance, the research literature

points to a general belief that when implemented well, instructional coaching influences teachers' capacity to "behave more skillfully in daily interactions (e.g., asking questions, listening, provoking, giving [and receiving] feedback)" — a highly significant outcome in its own right. Coaches working one-on-one with teachers has influenced the growth of *new perspectives* that then generate *new practices* in daily classroom instruction and these new practices directly link to high student achievement.⁶

During the third year of the Initiative, RFA was asked to shift the data collection from questionnaires and surveys of all administrators, coaches, and teachers to gaining an in-depth understanding of the influence of one-on-one coaching on the implementation of literacy-rich instructional best practices. In fall and winter 2007-08, we visited 102 classrooms in 9 schools, interviewed 109 teachers and, subsequently, the 31 coaches with whom they worked.

Based on our observations and interviews, we argue that one-on-one coaching greatly influenced the implementation of the Penn Literacy Network (PLN) Framework, a set of research-based literacy practices that are at the heart of PAHSCI professional learning. The synergy of working with a coach and the emphasis on student-centered instruction were influential in developing participating teachers' ability to reflect on their actual practice, both with coaches and with their peers, and, as a result, to enhance students' engagement in their own learning. We present the PAHSCI Theory of Change, and, within the limitations of the data collected, argue the strengths and challenges of PAHSCI's influence on the individual, the school, the district, and the state to link learning and build leadership capacity in such a way as to increase the likelihood of sustainability.

This Year Three Report, *Links to Learning and Sustainability*, describes PAHSCI

¹ See Appendix A for a list of participating districts and schools.

² We define literacy as a complex phenomenon that involves the ability to understand, interpret, create, and communicate using a variety of written materials from different contexts.

³ See inside front cover for information about RFA.

⁴ See Appendix B, Research Methodology.

⁵ See Appendix C, Findings from the Year One and Year Two Reports.

⁶ Lambert, L. (1995). *Building Leadership Capacity in Schools*. Association for Supervision and Curriculum Development. Alexandria, Virginia USA.

partner organizations' efficacy in creating well-established communications and building collaborative learning among individuals, schools, districts, and the state. In addition to the overwhelmingly positive data showing strengthened links to learning among the PAHSCI participants, we also present some of the issues and challenges which require continued research and evaluation. Our goal is to present a report that is useful to PAHSCI partners and participants as they reflect on past efforts and look to the future. We also hope that it is instructive for educators, policy makers, and researchers interested in PAHSCI as a model for other initiatives.

The report consists of six sections:

Section 1 revisits the PAHSCI vision, goals, and design and presents the PAHSCI Theory of Change.

Section 2 focuses on the instructional coaches central to the PAHSCI model, including the evolution of the coach's role over the three years, the challenges coaches faced, and how they and the Initiative responded.

Section 3 takes the reader inside PAHSCI classrooms to examine how teachers' instructional practices link to student engagement and learning.

Section 4 identifies elements of the PAHSCI model that help sustain instructional change.

Section 5 looks at the roles that have been played by individuals (teachers, coaches, mentors, administrators), organizations (Initiative partners, schools, districts), and the Pennsylvania Department of Education and advisory boards to both link and sustain PAHSCI learning and leadership.

And finally, **Section 6** provides a model showing the developmental stages of implementing PAHSCI, revisits the Theory of Change, and summarizes important lessons from this Initiative.

Section 1 PAHSCI's Vision, Goals, and Design

PAHSCI's goal is to improve instruction in literacy and math and all subject areas through the application of specific literacy strategies, through teachers helping and leading other teachers with instructional strategies in their classroom. The results are engagement of students within the classroom, communication of students within the classroom, and increased student achievement.

–District Superintendent

In 2005, the Pennsylvania Department of Education (PDE), in partnership with the Annenberg Foundation, assembled a core “mastermind” group of individuals to design and implement the Pennsylvania High School Coaching Initiative (PAHSCI). This highly respected and well-connected group held a set of compelling beliefs about school reform, adolescent literacy, instructional coaching and mentoring, and leadership development. Armed with many years of experience in leading school and district initiatives, they were advocates of literacy-rich classrooms across content areas as a strategy to increase *intellectual coherence* or aligned activities that invite students to use their minds well as they travel to classrooms throughout their day.⁷

Vision

The vision for PAHSCI underscores the importance of highly qualified teachers and highly qualified district and school leaders working, learning, and translating that learning to help teach *all* students. PDE's proposal to the Annenberg Foundation states, the “consistent delivery of quality instruction within an individual school and across a set of schools is one of the most challenging tasks districts face — it is also one of the most daunting. Districts that are successful oftentimes have in place a system-wide strategy for guiding the content of school- and district-based professional development and a means for supporting effective practice inside schools and classrooms.”⁸ To address this challenge, PAHSCI coaches are trained to guide teachers' implementation of research-based, literacy-rich strategies

⁷ Sizer, T.R. (1991). No Pain, No Gain. *Educational Leadership*.

⁸ Proposal to the Annenberg Foundation from the Pennsylvania Dept. of Education. (2005).

- **What factors influenced the design of Pennsylvania's Initiative?**
- **What is the PAHSCI Theory of Change?**
- **What key questions have emerged in evaluating the PAHSCI model?**

across the content areas. In addition, regional courses allow teachers who attend to learn these strategies alongside the coaches.

Crafting a public-private partnership with PDE, the Annenberg Foundation provided a \$31 million, three-year investment in high school reform. PDE contracted Foundations, Inc., and the Penn Literacy Network (PLN) at the University of Pennsylvania's Graduate School of Education to co-design an intensive professional development system to provide research-based training and support to participating schools and districts. Using school-based instructional coaching and mentoring and linking these efforts under a state-sponsored initiative represents a strategic use of resources. Supporting educational improvement and fostering an environment conducive to leadership development by networking high-need high schools across the Commonwealth represents a shift from the isolation often experienced by staff and leadership at these schools and, importantly, supplies a multiplier effect to the scope and impact of professional learning that takes place.

Moving beyond previous state training opportunities and workshop activities, PAHSCI's vision features school- and classroom-based work with teachers through school-based coaches who provide ongoing support to teachers and mentor teams who provide monthly site-based support to coaches and building and district administrators. An external evaluator, Research for Action (RFA) and a fiscal agent, The Philadelphia Foundation (TPF) completed the list of partner organizations. Under the leadership of the PAHSCI Program Director and later the Executive Director, the partner organizations conducted the implementation, evaluation, and support for PAHSCI to reach its goals.

Goals

School districts and the state educational system represent a connected and politically relevant system of relationships. Cognizant of the varying student demographics, school infrastructure and school resources at each of the participating high schools, originators of the PAHSCI model were well aware that some student populations across these diverse schools on a daily basis were joining the ranks of high school dropouts. Therefore, focusing on student engagement as a prerequisite to improving student performance was a logical objective.

In the proposal to the Annenberg Foundation, PDE set forth the following ambitious, long-term goals:

- Improve student performance at the participating high schools.

PAHSCI Design Steps

Define the program components so that all participants and stakeholders are aware of program goals, expectations, services, and anticipated outcomes;

Recruit and hire highly trained individuals to become coaches and mentors;

Train the coaches and mentors in content areas and interpersonal skill sets that are aligned with school and district improvement plans as well as the goals of PAHSCI;

Integrate coaching and mentoring with existing school and district initiatives;

Include school and district leaders as participants in the training to empower them to be *informed* supporters and nurturers of coaches and teachers;

Create district- and school-based leadership teams to design, implement, and monitor PAHSCI action plans aligned with state standards and district goals;

Provide ongoing opportunities for data-driven decision making, reflection, and reviewing the outcomes from PAHSCI implementation across participating schools and districts;

Create a pipeline of school, district, and state educational leaders well-equipped to move up a career ladder; and finally,

Contribute to shaping a statewide model of coaching.

- Build capacity throughout the Commonwealth for the expansion of this model.

Additionally, as the Initiative took hold, the following goal emerged:

- Generate a research base that will inform the development of the coaching model and support its refinement and expansion.

Design

As part of a comprehensive plan to foster a “statewide environment for improving schools across the Commonwealth,” PAHSCI’s design supplies an unprecedented statewide infrastructure for on-site, embedded professional development using research-based best practices.

Highlighting the foundational areas of learning — literacy and mathematics — the PAHSCI design places one literacy and one math coach for every 600 students in 24 participating high schools. PAHSCI features instructional coaching and mentoring as a comprehensive plan to enhance the knowledge, skills, and practice of all content area high school teachers and subsequently the engagement and achievement of the students they teach. Coaches at the selected sites are trained to provide in-class coaching and modeling, facilitate peer collaboration, lead data-driven assessments, and promote teacher leadership. (Key steps in the design and implementation of PAHSCI are outlined in the box at left.) To explain how the components of the PAHSCI design fit together to achieve the desired outcomes, we turn to its Theory of Change.

PAHSCI Theory of Change

This Theory of Change was deduced from observations of implementation events and trainings, interviews with PDE and PAHSCI leadership, and examination of proposals and applications of participating schools.

Program Inputs

Partner Supports

The PAHSCI 2008 Theory of Change in Figure 1 begins with the Pennsylvania Department of Education contracting with partners to provide training, support, and resources.

Facilitated by the PAHSCI Director, the partners were to collectively practice “effective problem-solving, adaptive planning, positive personal relations, good communication, ongoing feedback and an empowerment of all partners to carry out the mission and vision of the partnership.”⁹

Partner supports included:

Professional Development

- PLN Trainings/PLN Framework¹⁰
- Foundations’ Networking Sessions

Leadership and Content Mentoring

- Monthly site-based support

Near the end of the first year of implementation the partner organizations, responding to formative feedback, set action goals so that they could measure their contributions to the Initiative’s effectiveness in the three areas below:

Improving Teaching and Learning

PAHSCI schools will support high quality instructional practices through documented increases in student-centered activities focused on reading, writing, and verbal interaction as measured by observations, lesson plans, content, curriculum revisions, assessment practices, walk-throughs,¹¹ and surveys.

Sustainability: Internal and External Ownership

Internal: Schools demonstrate a commitment to institutionalizing best practices learned by participation in instructional coaching and differentiated professional learning opportunities as evidenced by the provision of time and resources, goal orientation specified in their School Improvement Plan (SIP), and Action Plans that show a clear

⁹ Gajda, R. (2004). Utilizing Collaboration Theory to Evaluate Strategic Alliances. *American Journal of Education*, 25(1), 65-77.

¹⁰ PLN Framework: A set of literacy-rich classroom strategies.

¹¹ Walk-Throughs: (*Instructional Walk-Throughs*): A team of observers, usually a building administrator and teachers, however, sometimes parents, visits several classrooms where they look for very specific things. In most Walk-Throughs, the teaching continues and the visitors sit in the back or walk quietly around the room looking for evidence of the particular goal/classroom strategies they would expect to find. Narrowing the focus to specific instructional activities, the team assembles the information from their notes and they share what they have learned with the teachers whose rooms have been observed.

articulation of expectations how to implement, monitor, and assess the goals.

External: PAHSCI Leadership and partner organizations will establish the channels, distribution, methods, and content necessary to influence the educational and legislative communities so that the core ideas and practices of the Initiative garner the support needed to ensure institutionalization.

Leadership

District and school-based administrators will demonstrate knowledge of PAHSCI, commitment to its goals, and provide concrete support for those goals. Project goals will be integrated and visible in protocols administrators use to evaluate teachers, in school planning documents, and in content curriculums.

Instructional Coaching

In the PAHSCI Theory of Change, instructional coaching, bolstered by partner supports, is the primary vehicle for improving teaching and learning. Initial documents (e.g., the Initiative proposal and the coach job description) reveal PAHSCI’s early thinking about an approach to instructional coaching and emphasize several key aspects of the coach’s role. Coaches would:

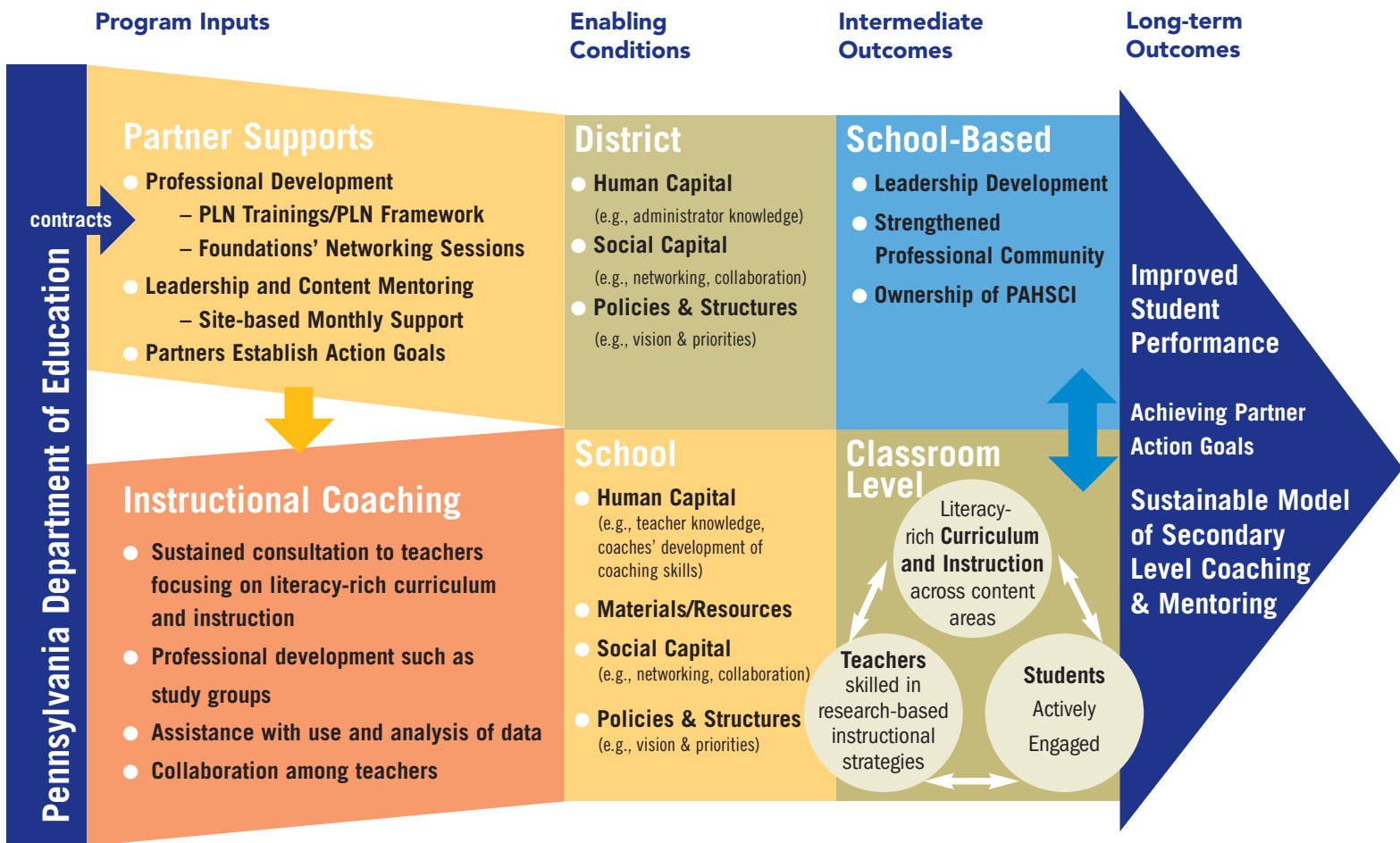
- spend the majority of their time working in classrooms with teachers
- facilitate teacher study groups and other forms of professional development
- be part of the school leadership team and thereby be connected to the process of whole school change
- have deep content knowledge and also be able to work with teachers across disciplines
- play a lead role in analyzing student data and in supporting teachers in using this data for instructional planning

Lastly, an important aspect of PAHSCI’s design is that coaches did not work in isolation but instead were placed in schools in collaborative teams; the number of coaches per team varied depending on school size.

District and School Enabling Conditions

The enabling conditions or pre-existing context and capacity that affects project success include: human capital, materials and

Figure 1 Theory of Change



resources, social capital, and policies and structures. In addition, the “capacity of local personnel to envision and implement change” and to exhibit the ability and the political strength to stay the course for the intervention to receive a fair test¹² directly influenced the implementation of the Initiative. The *Program Input* components described above and how they are implemented in districts and schools affect both Intermediate Outcomes and Long-term Outcomes.

Intermediate Outcomes

School-Based

Three important *Intermediate Outcomes* take place at the school level.

- **Leadership Development:** Leadership is defined by education researchers Spillane et al. as, “the identification, acquisition, allocation, coordination, and use of social, material, and cultural resources necessary to establish the conditions for the possibilities of teaching and learning.”¹³
- **Strengthened Professional Community:** In strong professional communities educators work together “to continuously seek, share, and act on their learning” for the purpose of improving teaching and student achievement.¹⁴ Building strong professional

¹³ Spillane, J. P., Halverson, R. R. & Diamond, J. B. (2001, April). Investigating School Leadership Practice: A Distributed Perspective. *Educational Researcher*, 24.

¹⁴ National High School Alliance (2007). Empowered Educators. [On-line]. Retrieved on March 20, 2007, from www.hsalliance.org/call_action/empowered_educators/research.asp.

¹² Quint, J. (2006). Meeting Five Critical Challenges of High School Reform: Lessons from Research on Three Reform Models. MDRC.

communities within schools is widely considered to positively impact teacher collaboration and thus lead to improved classroom instruction.

- Ownership of PAHSCI: Research on how education innovations are sustained over time shows that ownership of the reform must change hands from external actors to internal actors (i.e., district and school practitioners). Ownership requires deep knowledge of the reform and the authority to perpetuate it.¹⁵

Classroom Level

Three additional Intermediate Outcomes occur at the classroom level.

- Literacy-rich, student-centered curriculum and instruction across content areas: Literacy-rich classrooms and a student-centered curriculum emphasize the importance of having students speak, read, and write as ways to deepen their learning and demonstrate what they know.
- Actively engaged students: Student engagement can be defined as “the student’s psychological investment in and effort directed toward, learning, understanding, or mastering the knowledge, skills, or crafts that academic work is intended to promote.”¹⁶ Students who are actively engaged in their learning attend school regularly, learn more, are more likely to persist to graduation, and are less likely to exhibit problem behaviors.¹⁷
- Teachers skilled in research-based instructional strategies: When teachers consistently

use research-based instructional strategies, their students show achievement gains. This is especially true for low-income and minority students.¹⁸

Long-term Outcomes

The PAHSCI Theory of Change posits that the *Long-term Outcomes* of improved student achievement and a sustainable model of secondary coaching and mentoring occur when the partner organizations effectively provide (as measured by achieving action goals) program inputs and create the intermediate outcomes necessary to accomplish these ultimate goals.

Research Questions

RFA was engaged as a partner organization to assist in evaluating the efficacy of the PAHSCI model. Surveys, interviews, and on-site observations provided in-progress feedback that helped partners identify and address issues during the Initiative. Over the course of the three years, several research questions also emerged as central to assessing PAHSCI’s success and sustainability, as well as providing insight for other educational reform initiatives. In the following sections, we discuss findings related to these questions, which include:

- **How did the role of coaches evolve and change and how did they and the larger Initiative respond to the challenges they faced?**
- **How did instructional coaching and mentoring and its various components shape what happened in classrooms and the professional learning communities within a school and district?**
- **How was student engagement and learning influenced by changing teacher practice associated with professional learning in PAHSCI?**
- **How did PAHSCI align and build learning and leadership within and across linked participating PAHSCI sites?**
- **What lessons were generated by participation in PAHSCI?**

¹⁵ Coburn, C. E. (2003). Rethinking Scale: Moving Beyond Numbers to Deep and Lasting Change. *Educational Researcher*, 32(6), 3-12.

¹⁶ Newmann, (1992). *Student Engagement and Achievement in American Secondary Schools*. New York: Teachers College Press.

¹⁷ Bowen, E. R. (2003). Student Engagement and Its Relation to Quality Work Design: A Review of the Literature. [On-line]. Retrieved on August 31, 2007, from chiron.valdosta.edu/are/ebowenLitReview.pdf; Weiss, C. C. (2003, November). The Neglected Importance of Connections: the role of student engagement in the transition to high school. Presented at the Association for Public Policy Analysis and Management, Washington, DC.

¹⁸ Knapp, M. S., Shields, P. M. & Turnbull, B. (1995, June). Academic Challenge in High-Poverty Classrooms. *Phi Delta Kappan*.

Section 2 Coaches: The Vital Link to Improved Teaching and Learning

Teachers talk about coaches:

This is my second year teaching and it really helped me last year to have a coach come in and observe me...The great thing is [that] coaches have so much experience that they're able to kind of fast-forward some of the lessons so I don't have to learn them on my own. It's really been great to have a coach to help me be a better teacher. —English Teacher

It's just a whole set of eyes and ears and ideas that really can enrich our teaching — and that, of course, should lead to student achievement. —English Teacher

Coaches are at the center of the Pennsylvania High School Coaching Initiative, serving as catalysts for change at the district, school, and classroom level. Why focus on coaching as a strategy to improve student achievement? Research has indicated that effective, high quality teachers are one of the most important factors in student success, with “a growing body of studies showing that students learn more from skilled and experienced teachers.”¹⁹ Supporting teachers to improve their practice, therefore, is central to improving learning outcomes for students. Coaches provide context-specific, job-embedded professional development for teachers. Although the field still lacks conclusive research linking instructional coaching to student achievement, there are studies that indicate that coaching helps teachers better understand new instructional practices and incorporate new strategies into classroom instruction.²⁰

Coaches are expected to have a wide skill set and a significant depth of knowledge in many areas. *Coaching PA*, a white paper produced by the Pennsylvania Department of Education,

¹⁹ Useem, E., Offenberg, R. & Farley, E. (2007). *Closing the Teacher Quality Gap in Philadelphia: New Hope and Old Hurdles*. Philadelphia: Research for Action.

²⁰ Edwards, J. L. & Newton, R. R. (1995). *The Effect of Cognitive Coaching on Teacher Efficacy and Empowerment*. Paper presented at the Annual Meeting of the American Education Research Association, San Francisco, CA; Marsh, J. A., McCombs, J. S., Lockwood, J. R., Martorell, F., Gershwin, D., Naftel, S., Le, V., Shea, M., Barney, H. & Crego, A. (2008). *Supporting Literacy Across the Sunshine State: A Study of Florida Middle School Reading Coaches*. Santa Monica, CA: RAND.; Showers, B. & Joyce, B. (1996). The Evolution of Peer Coaching. *Educational Leadership*, 53, 12-16.

- **Why coaching as a strategy to improve student achievement?**
- **What contributions did coaches make to strengthening professional culture and leadership in schools and districts?**
- **How did the coaching role change over time?**
- **What challenges did coaches face — and how did they and the Initiative respond?**

sets out four major areas for the role of the coach: (1) Provide school- and district-based leadership; (2) Provide instructional leadership; (3) Guide teachers, administrators, and schools in using and interpreting assessment data to inform instruction; and (4) Plan and facilitate professional development.²¹

The International Reading Association’s (IRA) *Standards for Middle and High School Literacy Coaches* divides standards into two categories — leadership and content area. A *partial* list of the skills and expertise identified by the IRA as necessary for effective coaching includes:

- understanding of secondary school culture and students;
- familiarity with the latest research on adolescent literacy, including ELL literacy development, and with concepts of adult learning and motivation;
- deep knowledge of particular high school content area(s);
- ability to help teachers make evidence-based current research applicable to their classrooms;
- ability to develop a comprehensive assessment program with formal and informal measures of achievement;
- ability to work with teachers individually and in groups and to provide professional development in a wide range of strategies and skills.

Not surprisingly, the IRA document also states, “it takes two to three years for most [teachers] to develop the full complement of coaching

²¹ Pennsylvania Department of Education. (2007) *Coaching PA: Coaching as a Vital Component of an Aligned, Standards-Based System*. Harrisburg, PA: Author, 4.

A Vignette

Coaches at the Center of School-wide Learning

During the first year of PAHSCI, both coaches and mentors at Washington High School²² described challenges understanding the coaches' role – *What do coaches do?* These challenges were exacerbated by the fact that the coaches were hired after the formal summer training offered by the Initiative. The coaches credited their mentors' support, especially through shadowing, role playing, and study groups, with providing an important orientation for them to their new role. Mentors described the coaches as a strong team whose skills complemented each other.

At the end of Year Three, coaches and mentors articulated many positive changes in how these coaches coached. A math mentor described a math coach: "The way she has embraced her role has changed. In the beginning, it wasn't easy for her to approach other teachers... The literacy mentor and I operated as a team... encouraging [the coaches] about how you start as a coach. You're going in and just visiting in the beginning and establishing the trust in your new role." A literacy coach noted, "I'm so much more reflective than I was before." This coach also noted that "I had a tendency initially as a coach to use judgmental statements as I'd visit a classroom." She described with pride how she had been able to change her approach and gave the example of working with a teacher struggling with classroom management this year and being able to support him in naming the problem on his own.

Washington High School also had strong administrative support for PAHSCI. Building and district-level administrators attended all the trainings and met regularly with coaches and mentors as a leadership team for

²² All school and names are pseudonyms.

PAHSCI. One coach credited the administrators with providing both support and room for the coaches to work: "Our administrators know when to be hands-on, but a large portion of the time they're hands-off." She also noted that the mentors "have been integral in our communication with the principals" and helping the coaches address administrative directives they had questions about.

By the end of Year Three, both mentors and coaches identified a variety of changes in instructional practice at Washington, as well as increased student engagement. A mentor said, "Now when I see Do Nows, they're related to the rigor of the lesson and the teacher is providing feedback and giving the kids a chance to share — that did not occur initially because...they didn't want the kids talking in the classroom...The first literacy circles we saw were pretty rough; now they're sophisticated." At this stage, coaches and mentors were also identifying a lessening need for mentors. One coach commented that a content mentor "became a peer of mine" and a mentor noted that she was learning a lot from the coaches.

PAHSCI has fostered coherence among the roles and goals of differently positioned participants. The work and approaches of administrators, coaches, and mentors overlap and reinforce each other. An administrator noted, "I've become a lot better at tolerating different perspectives and different positions and opinions...I've found ways to engage staff in much the same way I expect them [teachers] to engage students." Similarly, the mentors model with coaches the kinds of processes and approaches PAHSCI wants teachers to adopt with students.

skills."²³ Indeed, three years of research on PAHSCI indicate important ways that coaches, and the role of the coach in PAHSCI, developed over the course of the Initiative.²⁴

The vignette above touches on some of the key themes of this section and shows how the components of instructional coaching and mentoring came together in one setting. Those themes include the evolution of the coaches and coaching, changing school

²³ International Reading Association. (2006) *Standards for Middle and High School Literacy Coaches*. Newark, DE: Author, 7.

cultures, and the important roles of mentors and administrators. It also looks ahead to future sections focused on coaching's impact on instruction and student engagement.

²⁴ Our sources of data about coaches include surveys of teachers, coaches, and administrators (Years 1 and 2); site visits, which incorporated a range of interviews with administrators, coaches, teachers, and mentors, as well as classroom observations (Years 1, 2, and 3); and observations at and evaluations of PAHSCI professional development events (Years 1, 2, and 3). See Appendix B for more detailed information about methodology.

The Evolution of PAHSCI Coaching

PAHSCI's vision was for coaches to provide job-embedded professional development that would catalyze changed instruction and improved student achievement. The Penn Literacy Network (PLN) framework and research-based strategies were the focus of much of this professional development. As indicated in Section One, initial project documents emphasize key areas within the coach's role. These include

- 1 focus on working in classrooms with teachers,
- 2 participating in the leadership team,
- 3 working with student data, and
- 4 facilitating various forms of small and large group professional development.

Districts' differing contexts and needs interacted with the Initiative's framing of the coach's role and responsibilities. This meant that, in addition to the overall focus on PLN strategies, district and school leaders prioritized aspects of the coaching role that they saw as especially important for their school. For example, in Year One, one district encouraged coaches to work with classroom level data and benchmarks to guide their work with teachers while another encouraged coaches to address teachers' classroom management needs.

The first centralized training for coaches and administrators introduced the Before/During/After (BDA) model to guide lesson planning and teachers' work with students. A BDA consultation cycle for the work of coaches and mentors was also adopted during the first year. BDA guided coaches' one-on-one work with teachers. The goal was for coaches to plan a lesson with a teacher; to visit the classroom to observe, model or co-teach; and later to debrief with the teacher to reflect on the lesson and plan next steps. Similarly, the mentors employed a BDA model in their work with coaches.

PAHSCI did not mandate one specific approach to coaching. The Initiative provided tools that districts and schools could use to customize their coaching approach. Individual schools' action plans were also an important factor shaping implementation. The mentors provided support in shaping the BDA and other tools to meet the needs in different contexts. One framework introduced during Year

One was Killion and Harrison's nine roles of coaches.²⁵ These roles include resource provider, data coach, curriculum specialist, instructional specialist, mentor, classroom supporter, learning facilitator, school leader, and catalyst for change. In Year Two, some districts provided training in cognitive coaching for their coaches. Many coaches found this very helpful but not everyone in PAHSCI was exposed to it. PAHSCI's flexibility and customization related to coaching approach enabled better fit with varying local contexts; it also made evaluation and identifying links between coaching and the desired outcomes more challenging.

Over time, the following aspects of coaching received greater emphasis and development:

One-on-one coaching. PAHSCI had always emphasized the centrality of coaches' classroom work with individual teachers. In Year Two, the Initiative highlighted the importance of this one-on-one work in its ongoing professional development and through the mentors. Initiative leaders wanted to ensure that coaches were not being used in ways that took them away from their central task. They also believed that this one-on-one work was crucial to coaches' ability to foster change.

Working with data. At the end of Year One, coaches' number one request for Year Two professional development was more help in working with teachers around organizing and interpreting data about student learning. In Years Two and Three, professional development and networking sessions focused more on data analysis and guiding teachers in data use. In Year Three, PAHSCI professional development for coaches increased its emphasis on using data to assist teachers in better differentiating instruction.

Specific needs in different school contexts. The Theory of Change shows that school and district capacity and context help shape Initiative implementation and outcomes. In Years Two and Three coaches in some districts requested training to help teachers in particular areas. These included classroom management and working with English language learners and special needs learners. These needs were

²⁵ Killion, J. & Harrison, C. (2005, September). Nine Roles of the School-Based Coach. *Teachers Teaching Teachers* 1(1).

addressed in professional development and through follow up by the mentors.

Over the three years of PAHSCI, coaches worked with teachers and mentors, attended professional development, collaborated with each other, and were engaged in ongoing cycles of coaching and reflection. Coaches helped catalyze an expanding instructionally-focused professional community, the development of a common instructional language, and new leadership roles for coaches and teachers in their schools and districts.

Data from the three years also highlight key areas of professional growth for coaches including: evolving skills and perspectives on the coaches' role as change agents; new knowledge and changed perspectives on teaching and learning; and growth in confidence and view of self.

As coaches developed, gaining confidence and learning more about coaching processes and content (e.g., the Penn Literacy Network framework and strategies), as well as about the role of the coach in making change, they moved into new areas and took on new leadership roles. These developments enabled them to work as catalysts for breaking down some of the traditional barriers to instructional change in high schools and to support their high schools in developing greater professional community and a deeper focus on improving instruction. The following discussion highlights key areas of professional growth and of change in the PAHSCI coaching role.

Breaking Down Teacher Isolation and Building Instruction-Focused Professional Community

Work in high schools is often atomized, with teachers operating behind closed doors with little time, opportunity, or motivation to collaborate. Yet, research indicates the pivotal role professional community can play in facilitating school change. As Arbuckle describes, "In high-performing schools, a nurturing professional community seems to be the 'container' that holds the culture."²⁶ DuFour and Eaker also argue that "the most promising strategy for sustained, substantive school improvement

is developing the ability of school personnel to function as professional learning communities."²⁷ School leadership and professional community are both important elements of a school's instructional capacity²⁸ and must be nurtured to support changes in that capacity and, ultimately, in student achievement.

In Year Three, teachers and coaches in many districts told stories of stronger professional communities with a shared focus on instruction and a common language to talk about it. The following quotes are from teachers and coaches from the same district.

I have seen teachers working together where before, when I first got there, [people focused on their own classrooms]. Now it's not like that at all. And I think the Initiative has fostered that teamwork.
—Coach

We talk about it [instructional strategies] all the time... "we did this" or "I reflected on this." In our English department meetings, we always talk about some type of strategy and...we're talking in the halls...It's not formal but we talk about it quite often.
—Coach

We started doing something in our weekly department meetings; all of the English teachers will come and bring something that they do that works. Based on that, you start thinking, "Well you know what? I didn't think of that and I might try that." As a group, we've seen several different PLN strategies that work in all different grade levels.... We've been given an opportunity to really get an overall view of the English department.
—English Teacher

[At weekly math department meetings,] the whole department talks about different strategies... So, not only is the coach saying, "Well, why don't you try this," (but a teacher) can actually back him up and say, "I did try that and it worked or it didn't work." As a whole department with the coaches, we meet and

²⁷ DuFour R. & Eaker, R. (1998). *Professional Learning Communities at Work: Best Practices for Enhancing Student Achievement*. Alexandria, VA: National Education Service. (xi)

²⁸ McLaughlin, M. W. & Talbert, J. E. (2001). *Professional communities and the work of high school teaching*. Chicago: University of Chicago Press.

²⁶ Arbuckle, M. (2000). Triangle of Design, Circle of Culture. In Senge, P., Cambron-McCabe, N., Lucas, T., Smith, B., Dutton, J., & Kleiner, A. Eds. New York: Doubleday. (326)

we talk and we discuss which strategies worked best.
—Math Teacher

PAHSCI's Year One Report identified changes in communication among teachers and the development of shared terminology and strategies as an early outcome of the Initiative.²⁹ In Year Three, teachers continued to name the importance of the development of a common instructional language and of the way it supported collaborating across content areas.

I think PLN has helped us to open up with communication and dialogue. After school, I do a tutoring program and one of the teachers I tutor with, she's [also] in PLN. Even though she's language and I'm math, we still talk about the strategies.
—Math Teacher

When we are sharing about things at a faculty meeting or at a departmental meeting, there is a common language because most of us have taken it [PLN]. That helps a lot.
—English Teacher

What PLN has been able to do for us is to refine and make better many of those strategies, but also to allow us to talk across campus in terms of what works within one classroom.
—Math Teacher

Strengthening Leadership in Schools and Districts

Coaches took on a range of leadership roles in their schools and, as PAHSCI progressed, in their districts and across the Initiative. Overtime, many coaches participated actively in their school leadership teams. Many had responsibility for schoolwide leadership development. Coaches moved into leadership roles at PAHSCI networking sessions, facilitating workshops for their peers. Coaches presented to school boards and led district informational sessions on instructional coaching.

Questionnaires completed by PAHSCI administrators at the end of Year Two provide confirmation of this change. When asked

²⁹ Brown, D., Reumann-Moore, R., Hugh, R., Du Plessis, P. & Christman, J.B. (2006). *Promising Inroads: Year One Report of the Pennsylvania High School Coaching Initiative*. Philadelphia: Research for Action.

about the development of coaches in their school, administrators' most frequent response was that coaches are becoming empowered as instructional leaders. In Year Three, coaches were part of some type of leadership team in all six districts visited. These teams varied in intensity; some were relatively informal and did not meet frequently. They also had a range of foci, including the school as a whole and school-wide issues, the coaching Initiative, strategic planning, and instructional support. Commenting on the role played by coaches at the school level, one school administrator noted:

On the leadership committee, the coaches are the ones with the ideas. They have become so respected by their peers that their peers look to them to say, "[What] would be a good way to organize this?" They look to them as leaders. They've now become leaders of leaders. They trust their judgment and they respect their knowledge level.
—Principal

As coaches have moved into leadership roles, they have also been able to create contexts for teachers to develop as leaders. Coaches were able to draw on their own experiences as learners and leaders to both facilitate teachers' learning and help teachers take on instructional leadership. In Year Three interviews, coaches in two different districts describe this phenomenon:

In one district, coaches ask teachers to lead discussion of sharing strategies: We actually have teachers getting up each week explaining what worked for them — a certain strategy they were happy with — and sharing that with the group.

Teacher-leaders are emerging. Some of them have been here for a long time and are continually being relied upon, but there are some new teachers in our building who are stepping up and emerging as leaders.

Seeing the Big Picture: Linking Educators to Each Other within a School Change Framework

As PAHSCI coaches took on leadership roles, they were able to exercise their leadership to support broader school improvement and change. Literature indicates that principals can play a critical role in helping schools be learn-

ing organizations in which educators together can make sense of competing priorities, sift through important data, and deflect pressures not related to instructional improvement.³⁰

While principals are key in the quality of a school's educational program, some researchers argue the importance of leadership that is distributed more widely, i.e., across the roles of principal, teachers and parents/community members.³¹ Marsh, et al., note that coaching has "been seen as an avenue for developing more distributed leadership in schools, particularly around instruction."³²

One coach explained how she now sees the school as a whole as well as the interrelationship among different aspects of work in the school.

Overall, I can see the big picture now. In the classroom, that was my world, but as a coach, I see how everything contributes to the classroom. A lot of things that were taken for granted before — professional development, a test, etc. — I see how it all fits in. I see how decisions are made. I have a big picture of what my role is in a way that I never did before.

This kind of shift enables coaches to bring a school change perspective to their one-on-one work with individual teachers, making the school change process more coherent. The PDE paper on coaching states that as part of their school leadership work, coaches need to be able to "facilitate alignment of individual goals and school goals."³³ The big picture view that PAHSCI coaches reported makes such a task much easier.

³⁰ Smylie, M. A. & Hart, A. W. (1999). Leadership for teacher learning and change: A social and human capital development perspective. In J. Murphy and K. S. Louis (Eds.), *Handbook of Research on Educational Administration* (2nd ed.): 421-442. San Francisco: Jossey-Bass.; Hallinger, P. & Heck, R. (1998). Exploring the principal's contribution to school effectiveness: 1980-1995. *School Effectiveness and School Improvement*, 9(2), 157-91; Bryk, A.S., Easton, J. Q., Kerbow, D., Rollow, S. G., & Sebring, P. B. (1998). *A View from the Elementary Schools: The State of the Reform in Chicago*. Chicago: Consortium on Chicago School Research.

³¹ (Spillane, et al., 2001, 23-28)

³² (Marsh et al., 2008, 8)

³³ (Pennsylvania Department of Education, 2007, 4)

Teachers saw coaches creating links for learning between different classrooms and people in the school.

They [the coaches] come in and work with me and they get to share with me what they've also observed in other classrooms. They're helping to bring those pieces of reflection into the classrooms that I would normally not see or hear about if it weren't for this linking piece...because they're going around and working with different teachers.

—English Teacher

One important aspect of coaches' leadership for school change involved working with individuals and groups to analyze data to shape instruction and school priorities. The job description for PAHSCI coaches highlighted the need for skills in collecting, analyzing, and using data. Their analysis of data was to inform the professional development they provided teachers through individual coaching and in groups. They were also to work with principals and teachers to support them in data analysis, problem-solving, and decision-making based on data.

Throughout PAHSCI, coaches both affirmed the importance of their role in helping educators use data to strengthen instruction and noted the challenges in implementing it. In questionnaires completed at a December 2006 (Year Two) networking session, 36 percent of coaches said that connecting benchmark data to lesson planning was a new leadership role they had assumed through PAHSCI. At the same time, coaches felt the need to improve their skills for doing this work; in these same questionnaires, using data to drive instruction was the most frequently requested topic for future professional development. In interviews with coaches in the spring of Year Three, coaches in all six sites RFA visited named their role in facilitating data analysis as key to reaching the goals of PAHSCI.

The Professional Growth of Coaches

Both research about and practitioner materials on the coach's role often stress the importance of interpersonal skills for coaching. For example, RAND's report on coaching in Florida stated: "Studies have found that supportiveness, respectfulness, approachability, accessibility, flexibility, tactfulness, and the ability to build

relationships are key characteristics of successful coaches.”³⁴ The development of coaching behaviors is linked to heightening such interpersonal skills but also goes beyond them to new knowledge about and skills in the processes of coaching and the coach’s role as change agent.

Evolving Skills and New Perspectives as Change Agents

In both one-on-one and group settings, PAHSCI coaches learned how to focus their work effectively and how to be a facilitator supporting learning rather than an expert imparting knowledge. These coaching skills helped to keep teachers more engaged in the coaching process. Below, two coaches describe how their approach to coaching changed over time.

I came directly from the classroom so my natural tendency [in the beginning] was if I did a demonstration, I’d want to teach the whole lesson....We were teaching a lot — and the teachers liked it. But that’s not why we’re here; we’re here to demonstrate a particular strategy and the teacher was supposed to observe that and [then they] were supposed to try it.

Our professional developments were very one-sided when we first started; it would be that “chalk and talk.” Basically, I would get up there and say, “This is what you have to do,” ...Now...we’ve had teachers say, “I really like your professional development” and that’s because it’s been much more creative, collaborative, teacher friendly — trying to listen to the teachers, what is their concern?

Mentors often played a role in helping coaches refine their approach. For example, with input from her mentor, this coach realized that narrowing her focus would expedite the change process.

She [the mentor] taught me to look at the positives about the teacher, to pick one thing at a time, where I probably would have gone in there and said, “You’ve got all these things wrong, we need to fix all these things,” which would have killed the whole coaching thing right away.

Having mentors model behaviors and approaches helped coaches to learn these

new skills. In their work with mentors, as well as in courses and networking sessions, coaches were positioned as learners, which in turn supported their evolution as teacher/coach with staff in their own schools. One coach articulated this as follows:

In the beginning, I thought there was a specific set of steps you had to do in order to improve practice — there was some type of magic formula. The mentors helped me see the importance of working individually with each teacher and creating that bond of trust. They modeled that to us and then they told us to model that to others.

Another change involved learning to depersonalize the coaching situation, entering as a professional who can collaborate with a teacher. This enables going deeper into instruction and “getting to the heart of the matter.”

It’s much more natural for me now to approach a teacher, talk to a teacher, etc. I feel a lot more confident about getting to the heart of the matter with a teacher and not worry if I’m going to hurt someone’s feeling. I can look at teaching in an objective fashion rather than a personal fashion.

New Knowledge and Perspectives on Teaching and Learning

Not surprisingly, coaches’ intensive professional development and extensive work with teachers and other coaches across classrooms led many to report new knowledge of and changed perspectives on instructional practice. Coaches developed shared understanding of what good instruction looks like, as well as of how to support teachers in getting there.

I’ve absolutely seen changes in my understanding of instructional practice. One example is formative assessment: using ongoing assessment to make decisions to adjust what you’re doing as an instructor, or even using it so that students can adjust their practices. Embedding that formative assessment to constantly judge how things are going.
—Coach

I’ve seen monumental growth [in coaches’ understanding of instructional practice]... They’ve [moved beyond] the “pass the chalk” and are now promoting the idea of student-centered, student involvement practices.
—Mentor

³⁴ (Marsh et al., 2008, 13)

Growth in Confidence and View of Self

As time went on, coaches' sense of confidence and efficacy increased. Administrators affirmed this ongoing evolution at the end of Year Two; the most frequent response to a question about changes in coaching practice at their school was that coaches were becoming more focused and confident in their role.

In Year Three interviews, coaches articulated the depth of this change:

[I've] definitely [seen] changes in my coaching practice. I'm very confident; I can go into any classroom now and model the PLN [Penn Literacy Network] strategies. We can do [professional development]. Definitely, from the first year to the third, we're more confident in what we're doing.

By Year Three, many coaches reported new kinds of relationships with mentors. As coaches matured into their role, they felt less in need of mentors' ongoing assistance and repositioned themselves as peers. Looking ahead to a fourth year as a coach, one person said:

As far as the mentors' role, I never want to give the idea that we know it all, but we have come a long way and as far as support from the mentors, given my choice I really would like to continue to work [with a mentor]...a couple times a year visiting or...[by] email. That's what I would see as the support needed for the fourth year.

Challenges

From Year One through Year Three, some of the same challenges to full implementation of PAHSCI were named every year, though emphases changed, i.e., the challenges

evolved as coaching evolved. The continuing nature of some of these challenges reflects ongoing issues within high school structures. Especially in high-need high schools, there is often frequent turnover of school leaders and ongoing arrival of new teachers. Thus there were constantly new people to be socialized into the Initiative. However, the data showed that strong school or district leadership is an important resource for ameliorating the challenges.

How did some of the key challenges faced by PAHSCI coaches play out over the three years?

Initial Confusion about the Coach's Role

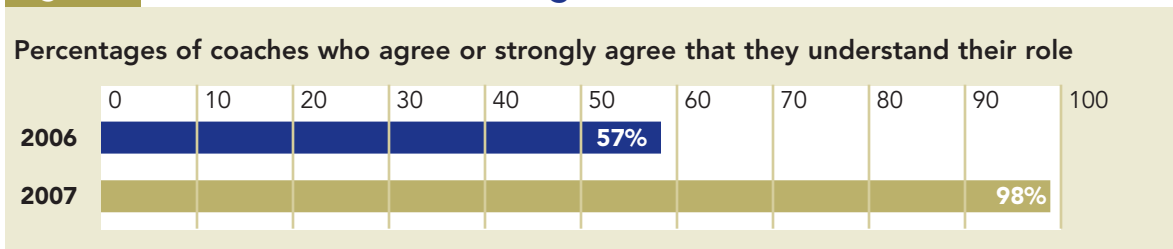
When PAHSCI began, a major challenge for many coaches was confusion about their role. According to the Year One report, "Coaches reported on questionnaires and in interviews that they struggled mightily with the ambiguity of their new assignment and with conflicting messages about what they were supposed to do."³⁵ This was exacerbated by the fact that many districts were not able to hire their full complement of coaches before the start of the school year. Thus, about half of Year One coaches were not able to participate in the summer training before they started work.

In the Year One PAHSCI coach survey, only 57 percent of coaches agreed or strongly agreed that they understood their role as a coach. By the Year Two survey, the picture looked very different. Ninety-eight percent of coaches reported that they understood their role, as indicated in Figure 2.

In Year Three interviews, newly hired coaches still talked about the questions they faced in understanding the coaching role, but this

³⁵ Brown, et al., 2006, 21)

Figure 2 Coaches' Understanding of Their Role



challenge looked very different in the context of joining an already existing team with experienced coaches in a program that had already done a lot of learning about the coach's role. New coaches' learning was also supported by the mentors and, in most cases, by administrators who were engaged in PAHSCI. The vignette that follows describes the experience of one new coach in Year Three.

A Vignette

A New Coach in Year Three: Joining a Smooth-running Team

Janice was hired as a coach in January of Year Three and there was no formal training scheduled until the following summer. Although she described challenges as she acclimated to this new role, her experience was very different from that of coaches beginning in Year One, in large part because she was able to draw on the support of an experienced coaching team and of mentors who had been working with the Initiative for three years.

Janice's more experienced fellow coaches were her primary supports. "Some of the other coaches were instrumental in just being a listening ear for me. I'd present the lesson or resources...and they would help me adapt them." She was impressed by how the coaching team functioned. "I've never seen an operation like this run as a team so smoothly. We feel like a family. There's a trust factor established through all the coaches here. Everyone has a strength and everyone has a weakness. If I had a question about geometry, I know exactly which coach to go to. If I go to a literacy coach and ask for assistance, I know they're providing the best quality." While Janice was aware of gaps in her knowledge as compared to other coaches, including the cognitive coaching training they had received, she knew which coach to turn to when she had questions.

In addition to her fellow coaches, Janice saw her mentor as a resource. She noted that because she did not fully understand the mentor's role, it was more difficult to take advantage of the mentor's knowledge and skills. Despite her questions about the mentor's role, however, Janice was able to call on her mentor for support. "We've had three or four phone conversations about my role when I was unsure. Whenever I needed her, I could depend on her." Janice would ask for feedback about how she had worked with a teacher, describing what she had said and discussing how she might have done things differently. The mentor also shared resources on coaching and introduced her to concrete skills needed for coaching, e.g., how to use the coach logs. Janice felt the mentor was "open and I could speak to her and know that what I said was going to be confidential."

Gaps in Skills and Training

As noted above, the skill set and areas of knowledge needed for coaching is vast. As the Initiative developed and coaches worked in schools, they became aware of their own skill and knowledge gaps. Fortunately, PAHSCI also had mechanisms in place that helped to identify what coaches needed. Through interaction with mentors and researchers (surveys, event evaluations, site visits), coaches voiced their needs and identified what training or supports were missing in the structure of the Initiative.

Across content areas, coaches asked for more training about *how* to coach. In addition, many math coaches struggled to develop their role and strongly indicated their need for more focus on math and more clarity about the integration of literacy and math. Coaches also saw needs in classrooms and wanted more training to better assist teachers with classroom management and with English language and special needs learners.

The ability of PAHSCI partners to respond flexibly to these concerns and to make mid-course adjustments was an important strength of the Initiative and key to supporting the development of coaches. In response to these identified needs, PAHSCI's academic partners (PLN and Foundations, Inc.) and the Initiative Executive Director collaborated to address the coaches' concerns in a variety of ways, including revising the content of centralized training, shaping the content and processes of networking sessions and regional trainings, and responding to needs through the mentoring process itself. They reshaped the foci of networking sessions and brought in experts in areas such as coaching, ELL literacy, and classroom management to lead training sessions.

In spring 2008 interviews with over 30 coaches about the mentors' role, a strong theme was that mentors do for coaches what coaches do for teachers, i.e., mentors model the processes and approaches that coaches also use with teachers. Coaches especially appreciated mentors role-playing coaching scenarios and conducting study groups with them. Content mentors also shared subject-area materials with coaches. Mentors were able to address coaches' concerns and questions in these and other ways.

Resistant Teachers

Coaches cited teacher resistance to change or collaborating with a coach as one of their challenges; however, the strength and impact of this resistance declined significantly from Year One to Year Two, as evidenced by both site visits and the teacher survey.

Coaches learned the importance of building relationships and trust with teachers. Sometimes, simply sharing resources was important as a way to initiate contact with reluctant teachers. Coaches also provided a “listening ear” for teachers, with 79 percent of coaches in Year One reporting that they did this at least once each week. Over time, as more teachers worked with coaches, word-of-mouth from other teachers influenced the perception that it was “okay” to work with coaches.

In Year Three interviews, although coaches in every district mentioned the phenomenon of teacher resistance, it was not an urgent issue for most coaches. While coaches were not able to engage every teacher, they had developed strategies to gently engage many of those initially resistant to change. They had developed more sophisticated ways of understanding different types of resistance and learned how to best introduce the PLN framework to teachers with differing needs and questions. One coach described her work with a reluctant math teacher:

[This teacher] wants to have someone have it work first and prove to her that it works, because it's different from what she's been doing in the past — and then maybe she'll try it...It's very difficult for her to change. So, I've started slow, working with Do Nows and some basic strategies. One of the biggest accomplishments that I've had with her is getting her to rearrange her desks out of straight rows, thinking about grouping the students differently and talking to her about doing Pair/Shares and actually allowing her students to talk a little bit in class.

Varying Levels of Administrative Leadership and Support

The coach's role can be limited or enhanced by the level of school administrators' commitment, knowledge of PLN, and practical support. Anticipating the administrators' key role, PAHSCI's design involved administrators, both

by including them in trainings and networking sessions and by creating the position of the leadership mentor to support administrators in implementing PAHSCI.

Coaches described the impact of administrative support. One coach said of a math department head, “She's gone to [three years of PLN trainings]. She tries anything that we ask her...[she has a] student-centered classroom... she's encouraging of the other teachers...to follow along and stay” with the PLN framework.

Lack of administrative support and leadership took various forms. Even though coaches were part of a leadership team, this did not always translate to input into important decisions. When there was a lack of communication and shared decision-making between coaches and administrators, coaches felt undermined:

The demands of increasing test scores and achievement in the building have led to decisions being made without [leadership] teams at any level. A couple things have occurred this year that the coaches have recommended against, and then we had to facilitate the process of moving into that without our support.

At some schools, frequent changes in administrative staff also undermined administrative leadership of PAHSCI. Coaches sometimes were pulled out of work in the classroom for other tasks not really in their purview. Lack of administrative understanding of how to use coaches also was an obstacle. One coach said, “We didn't have strong administrative presence...that had a vision of how to use coaches to improve what needed to be improved.”

Mentors often served as bridges between administration and coaches to help resolve these conflicts. One mentor argued that PAHSCI could have been even more explicit in what it required of participating administrators: “The initiative should have certain things in place that they said to the administrators... ‘These are guidelines, these are parameters and these are a must.’ If the Initiative had clearly stated which guidelines and supports were non-negotiables, that would have made it easier for me to advocate for these supports when they were not in place.”

Time

Time for teacher planning and collaboration is often a challenge in high schools and this issue arose throughout PAHSCI. For example, at the end of Year Two, 42 percent of teachers interviewed said that insufficient time for PAHSCI activities was a challenge. Coaches echoed this concern, with 74 percent of coaches surveyed naming lack of teacher planning time in the school day as an obstacle. Time continued to be an issue in Year Three; in fall 2007 interviews, lack of time was named as a challenge by coaches in five out of the eight districts RFA visited. Teachers also talked about not having time during the day to meet with coaches.

PLN courses require collaboration with coaches and sometimes with other teachers, and this requirement helped support making time available. Some districts and schools were also able to create time for these activities in other ways. Their strategies included:

- Math coaches at one school offered planning and study groups both during and after school.
- One district dedicated a half-hour at the start of every school day for teacher meetings, including department meeting and professional development. Asked about opportunities for collegial learning, a teacher from this district said, "Staff development has helped...it gives us time to meet together and do study group activities....I have a meeting pretty much every day. There's tons of opportunities....I've already presented to the entire staff."
- Content area teachers who did not have common prep times observed each other during teaching. A teacher said, "Team teaching works really well for these kids and that's something we do have the opportunity to do because of the way our schedules work."
- At one school, coaches offered a study group during every lunch period so that all teachers could participate.

Teachers who did not have these opportunities described their collaboration happening "on the fly," in places such as carpools, or not at all.

Summary

Coaches are at the center of the PAHSCI model. The PAHSCI Theory of Change positions coaches as catalysts for change at the district, school, and classroom level. High quality teachers are one of the most important factors for student success; coaches provide job-embedded professional development to help teachers improve their practice.

PAHSCI coaches evolved in their understanding of, and confidence in, enacting their coaching role in both one-on-one and group settings. Coaches learned how to focus their work to facilitate learning and change for teachers. Coaches developed shared understanding of good instruction and how to support teachers in moving towards that goal.

Mentors played a key role in helping coaches develop their coaching skills and negotiate challenges. Mentors modeled behaviors and practices, helping coaches refine their work. With mentors and in courses, coaches were positioned as learners, which complemented and supported their development as teacher-facilitators supporting learning for other staff. As coaches matured into their roles, they described a gradual lessening of the need for mentor support.

In Year Three, teachers and coaches in many districts reported stronger professional communities with a shared focus on instruction and a common language to talk about it. Professional community can play a pivotal role in supporting school change; PAHSCI participants indicated that the Initiative was successfully minimizing teacher isolation and supporting collaboration. In particular, development of a shared instructional language facilitated collaboration across content areas.

Coaches assumed increasing leadership roles. Over the course of the Initiative, coaches took on a range of leadership roles in their schools and districts, and within PAHSCI itself. Coaches provided instructional leadership on their schools' leadership teams and on other significant committees. They facilitated workshops at PAHSCI-wide networking sessions and led informational sessions for school boards and district staff. In addition, as the Initiative progressed, coaches supported the leadership development of teachers.

Coaches were able to create learning linkages in service of the big picture goals of school improvement. The PAHSCI coaches' role and training uniquely positioned them to connect work at the classroom level to larger school goals and to use classroom and school-level data to support this effort.

Over the course of the three years, challenges for coaches were identified. These included initial confusion about the coaching role, gaps in skill sets and training, teacher resistance, lack of administrative support, and inadequate time for teachers and coaches to collaborate. These challenges evolved and changed during the course of the Initiative as coaches, mentors, partners, and the Initiative as a whole developed.

The ability of PAHSCI partners to respond flexibly to coaches' concerns and to make mid-course adjustments was an important strength of the Initiative. These adjustments were key to supporting the development of coaches and of their role within PAHSCI and their schools.

The next section examines students' perspectives on quality teaching, what instructional practices the coaches and PLN framework promote, and what practices can best be linked to student engagement and learning.

Section 3 **Linking Teacher Practice to Student Engagement and Learning**

With the coaches and the whole PLN framework, things have changed. Incorporating the Do Nows, looking for strategies that get the students engaged more, a whole lot less teacher-centered, much more student-centered. That's been the biggest change — trying to get it to be more student-centered. —Building Administrator

It was kind of weird when we first started working together, because we're not used to talking to each other. Usually, we get in trouble for talking to each other. We're used to mostly listening to the teacher talk. Now, we do our work together and help each other.

—9th Grade Student Focus Group Participant

- **What do students say about quality teaching?**
- **What teacher practices are promoted by PAHSCI instructional coaches and the PLN framework?**
- **Which practices can best be linked to student engagement and learning?**

The critical intersection of teacher practice, student engagement, and learning creates a dynamic relationship that allows us to describe teachers' instructional practices in PAHSCI classrooms in relationship to students' actions and reactions. At the heart of the professional learning in PAHSCI is the will to improve the role that public school secondary education plays in connecting the lives and cultural identities of today's youth to high quality teaching and learning.

High quality "constructivist" teaching and learning follows the tenets of meaning-oriented instruction. Knapp, Shields, and Turnbull describe meaning-oriented instruction as "teaching for meaning" and list it as an alternative to conventional practice by:

- 1) instructing to help students perceive the relationships of "parts" (e.g., discrete skills) to wholes (e.g., the application of skills to communicate, comprehend, or reason);
- 2) instruction that provides students with the tools to construct meaning in their encounters with academic tasks and in the world in which they live; and
- 3) instruction that makes explicit connections between one subject area and the next and between what is learned in school and children's home lives.³⁶

Quality Teaching Practice and Student Engagement

It is generally accepted that effective teachers rely on their knowledge of their students and their subject matter to identify the most appropriate instructional strategies, given student skill levels as well as the content

standards mandating what students should know and be able to do. In a recent online editorial, Fishman oversimplifies but gives a helpful statement of contemporary thinking on teacher quality. He writes, "There are three basic ways to improve a school's faculty: take greater care in selecting good teachers upfront, throw out the bad ones who are already teaching, and provide training to make current teachers better."³⁷

For the purpose of this section exploring teacher practices and student engagement, we focus on Fishman's third tactic, helping current teachers improve. Research has identified one key to changing classroom practices: *provide teachers with professional learning that encourages ongoing discussion and reflection on their instruction and students' learning.* Methodologies that provide teachers with these chances for collaboration change teacher practice.³⁸

Drilling deeper into *what happens* in classrooms and focusing on specific instructional practices increases teachers' use of those practices in the classroom. Job-embedded professional development that provides active learning opportunities — teachers actually doing the activities that they will later implement in their classrooms — also increases the effect of the professional development on

³⁷ www.slate.com/id/2195147

³⁸ Foltos, L. (n.d.). Peer Coaching: Changing classroom practice and enhancing student achievement. Puget Sound Center for Teaching, Learning, and Technology. Retrieved from www.psctl.org/edLAB/resources/peercoachinglf.pdf on 08/26/2008.

³⁹ Desimone et al., 2002, 81-112.

³⁶ (Knapp, et al., 1995)

teacher's instruction.³⁹ Recently, the focus has been on working closely with a colleague practitioner whom one trusts and respects as another vehicle for teachers' growth.

Student Engagement

There are multi-layered and sometimes confusing definitions of student engagement; however, one straightforward perspective that is helpful in defining this concept describes it as "the student's psychological investment in and effort directed toward, learning, understanding, or mastering the knowledge, skills, or crafts that academic work is intended to promote."⁴⁰ Students, according to the Schlechty Center's Theory of Engagement, show five different levels of involvement in classroom tasks and activities:

- 1 Engagement, the student sees the activity as personally meaningful;
- 2 Strategic Compliance, the official reason for the work is not the reason the student does the work — he/she substitutes his/her own goals for the goals of the work, i.e., grades, class rank, college acceptance, parental approval;
- 3 Ritual Compliance, the work has no meaning to the student and is not connected to what does have meaning, the emphasis is on minimums and exit requirements;
- 4 Retreatism, the student is disengaged from current classroom activities and goals, the student sees little that is relevant to life in the academic work;
- 5 Rebellion, the student is disengaged from current classroom activities and goals, and the student's rebellion is usually seen in acting out — and often in encouraging others to rebel.⁴¹

In comparing and contrasting these types of involvement, the Schlechty model makes visible the assumptions that "students decisions regarding the personal consequences of doing the task assigned or participating in the activity produced" can be influenced by both students' internal locus of control and motivation as well

as the degree that the tasks assigned meet the standards of students' cognitive, social, and emotional needs and capabilities.

Research has shown that under favorable conditions, emotional and intellectual growth go hand in hand, as thoughtful techniques aimed at increasing students' social and emotional well-being also have a positive impact on learning.⁴²

To that end, in PAHSCI classrooms, teachers are encouraged to design engaging tasks and activities for students that help them to learn. The PLN framework described below helps to guide instructional practices across the

Penn Literacy Network's Framework

PLN's framework is based on four interrelated "lenses" from which instructional strategies are derived that promote student engagement, problem solving, and critical thinking. These lenses are central to learning and good teaching and the framework encourages teachers to use the lenses as they work with their students.

The lenses are:

- 1 *meaning-centered (relating new information to existing prior knowledge);*
- 2 *social (learning in a collaborative, social context);*
- 3 *language-based (reading, writing, and talking for authentic purposes); and*
- 4 *human (self-reflecting to increase awareness of one's own unique learning styles).*

Also integral to the framework are five critical experiences:

- 1 *transacting with text,*
- 2 *composing texts,*
- 3 *extending reading and writing,*
- 4 *investigating language, and*
- 5 *learning to learn.*

The training also includes strategies aligned with state and national content standards that connect disciplinary content to the real world.

⁴⁰ (Newmann, 1992)

⁴¹ Retrieved from www.slechtycenter.org.

⁴² Greenleaf, C., Schoenbach, R., Cziko, C. & Mueller, F. (2001). Apprenticing adolescent readers to academic literacy. *Harvard Educational Review* 71(1), 79-129.

content areas in PAHSCI classrooms. The PLN framework provides broad principles for high quality literacy instruction that are applicable across the curriculum. In high-implementation classrooms, teachers incorporate literacy strategies in all elements of instruction. Students have opportunities for choice and collaboration. They are encouraged to translate and transfer what they are learning. Their ideas are listened to by their peers and the teacher.

RFA Visits to PAHSCI Schools and Classrooms

Over the course of three years, RFA staff visited more than 200 classrooms in 21 of the PAHSCI schools. The sampling of schools covered the range in each of the following indicators: size, location, student demographics and status in making AYP. We interviewed students, teachers, coaches, administrators, and mentors. We observed professional learning events and observed school openings, traveled the hallways, and followed an observation protocol that help us to describe the overall context and climate operating at the school and in the surrounding community.

Students’ Voices: What Students Say about “Quality Teaching”

During our school visits in 2006 we interviewed students. The focus group protocol was geared towards understanding what students thought were the characteristics of high quality teachers. In addition, we wanted to determine if students were noticing any differences in teacher practices as a result of the implementation of instructional coaching and teachers’ use of PLN Strategies. Between April and June 2006, RFA visited 11 schools across the Commonwealth and conducted 16 student focus groups.

Students identified three major characteristics shared by the teachers students described as superior teachers:

- **Informative:** Providing key background information and presenting a clear rationale for “why” this information was important.
- **Fair:** Treating all students with respect (“not just his/her favorites”).
- **Fun:** Making learning fun, inspiring, and challenging, (“not just reading about how to dissect a frog, but donning aprons, working in the lab, and recording the steps as we dissect a frog”).

Students emphasized that the “best” teachers do not simply repeat or read what is in the text; “they put things into words that we can understand and relate to.” Students stressed that their favorite teachers gave students opportunities to work together. Another important component, according to students, was that teachers should help students “learn better” by providing helpful feedback that lets a student “know what he is doing right and what he needs to improve.”

Students reported that several of their teachers were using similar strategies, in particular, Do Nows and Pair/Share, two PLN strategies. As the student in the opening quote reflected, students liked opportunities to work with and talk to their classmates.

Year Three Visits: Classroom Observations and Teacher Interviews

In the fall and winter of 2007-2008, RFA visited 102 classrooms and interviewed English and math teachers in 9 of the 24 schools. The schools selected for more focused observation in Year Three represented the mix of large and small, urban and rural high schools involved in PAHSCI. The RFA team observed students’ actions, comments, and involvement in the lesson. However, we are not able to analyze students’ rationale and personal motivation as described earlier in the Schlechty Center’s Theory of Engagement. The remainder of this section reports on data from these visits and interviews.

School:	#1	#2	#3	#4	#5	#6	#7	#8	#9	Total
# English Teachers	4	2	6	7	9	2	8	6	8	52
# Math Teachers	4	5	5	6	7	3	6	7	7	50

In addition to classroom visits of approximately 42 to 90 minutes, RFA conducted structured interviews with teachers and separate interviews with their coaches. At the conclusion of the teacher interviews we gave each teacher a list with explanations of the 38 PLN strategies.⁴³ Teachers provided a self-report by checking which PLN strategies they had tried at least once and which they had incorporated into their weekly lesson planning. Some teachers reported that they were already familiar with some of the PLN strategies which could be placed under the umbrella term, cooperative learning.⁴⁴ This prior knowledge of cooperative learning provided important background understandings of the importance of peer-to-peer interactions and learning.

Evaluating a PLN Framework Classroom

Revisiting the model of a PLN classroom helps shape an understanding of RFA's classroom visit instrument and the analysis of data collected during classroom visits and interviews.⁴⁵

⁴³ See Appendix D, Penn Literacy Network Strategies.

⁴⁴ Cooperative learning refers to a family of instructional practices in which the teacher gives various directions to groups of pupils about how to work together. Used best with groups of two to six students, cooperative learning strategies can increase pupils' performance on academic tasks as pupils teach and coach each other and succeed as a group. Downloaded from www.schlechtycenter.org.

⁴⁵ See Appendix E for a full description of the classroom visit instrument.

Implementing the PLN Framework: Teachers' Preferred PLN Strategies

PLN's general model for structuring a classroom lesson includes moving from independent student work (such as Do Now), to a shared activity (such as Pair/Share), to a period of whole-class instruction, to a mini-lesson, and back to a shared activity.

An analysis of teachers' self-reported use of PLN strategies points to a few commonalities and differences that one might expect to see, as well as a few surprises. As in our Year Two classroom visits and interviews, we found that while there were both English and math teachers who were successfully implementing the PLN strategies, a greater percentage of English teachers than math teachers showed deep knowledge of multiple strategies.⁴⁶ English teachers averaged 18 strategies they used weekly and math teachers averaged 10 strategies. English teachers averaged using 28 strategies at least once. Math teachers averaged using 15 strategies at least once.⁴⁷

Math teachers reported Do Nows, Pair/Share, Rubrics, and Read Aloud Think Along as their

⁴⁶ Brown, D., Reumann-Moore, R., Hugh, R., Christman, J.B., Riffer, M., du Plessis, P. & Maluk, H.P. (2007). *Making a Difference: Year Two Report of the Pennsylvania High School Coaching Initiative*. Philadelphia: Research for Action.

⁴⁷ Appendix F shows strategies used at least weekly by English teachers, math teachers, and both English and math teachers.

Look Fors in a PAHSCI Classroom

	Category	Questions
Lens 1	Social	Whose voices are heard in the classroom? Are students provided the opportunity to share their reactions, ideas, beliefs, opinions? Do they work with peers to share and refine their thinking?
Lens 2	Language-based	Are students reading and writing for various purposes? Are students generating original text (i.e., not parroting someone else's answers, but giving their own), when talking or writing?
Lens 3	Meaning-based	Are students able to find meaning in the material with which they are engaged? Are they able to connect the topic at hand with their own lives?
Lens 4	Human	Does each student have an opportunity to respond (i.e., talk, write, design a project, complete an assignment) in a way that will be unique to him/her?

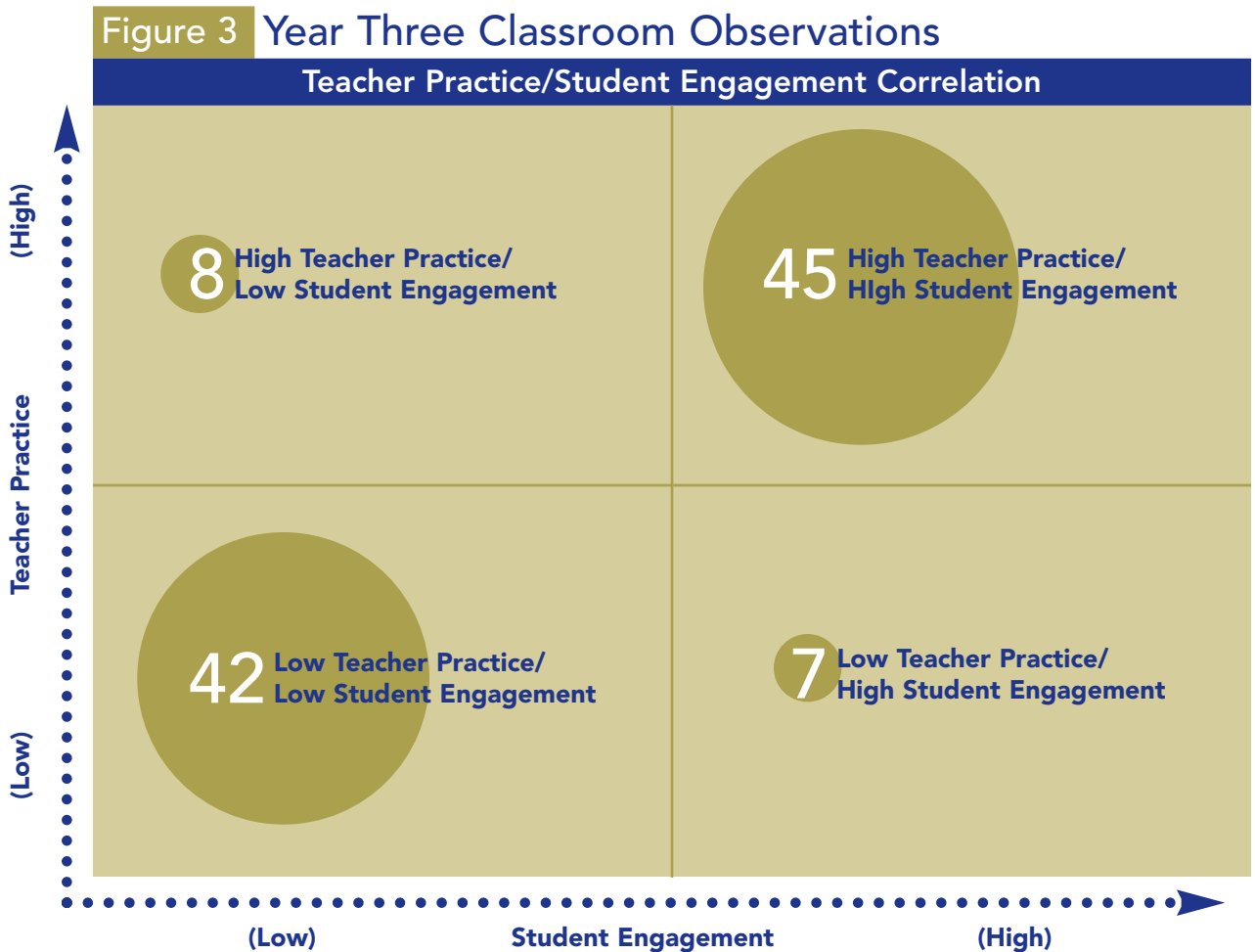
most frequently used strategies. In comparison, English teachers reported Do Nows, Pair/Share, Text Rendering, and Previewing and Predicting as their most frequently used strategies. Given many math teachers’ initial resistance to taking the time to develop and implement literacy strategies, it is noteworthy that Read Aloud Think Along was the fourth most frequently used weekly strategy at 50 percent. In addition, the high use of Rubrics on a weekly basis encouraged students to think about the process of mathematical operations and points to teachers’ recognition that students need a range of exemplars to better understand what is expected of them.

The majority of PAHSCI schools had included in their priorities the goal to increase student writing in all content area subjects. Although not reported in equal numbers to English teachers, it is encouraging that 42 percent of the math teachers report that they have their students do Reflective Writing weekly,

and that 28 percent of math teachers report that they have their students engage in summarizing their work on a weekly basis.

How Teacher Practices and Student Engagement Align

Among the 102 teachers represented in the Teacher Practice/Student Engagement Correlation (Figure 3), a slight majority, 52 percent of the teachers observed, were in the upper two quadrants which indicated that they were moving toward significant changes in how they shaped classroom learning. Contributing to the triangulation of the data, teachers self-reported and the coaches confirmed that these quadrant one and two teachers were implementing PLN strategies and incorporating lesson planning principles that they had not previously employed. It is significant that 44 percent show the marked influence of one-on-one coaching on both teacher practice and student engagement.



Year Three teacher practice/student engagement observations in 102 classrooms (52 English/50 math)

High Teacher Practice Indicators

- Students are given opportunities to apply what was taught and to produce authentic work; activity is appropriately challenging.
- Teacher connects and builds on students' prior knowledge; teacher-centered direct instruction is no more than 15–20 minutes.
- Teacher behavior is responsive and respectful to students; teacher demonstrates appropriate responses to problematic behavior; teacher uses high-level questioning.
- Classroom processes show well-developed routines, clear directions, and smooth transitions; evidence of student-to-student and student-to-teacher cooperation 80–100% of the time.
- Students are given opportunities to report out; teacher highlights aspects of student work to reinforce or extend learning.

High Student Engagement Indicators

- Students display perseverance to complete the instructional tasks.
- Students explain and ask questions about reasoning or thinking in solving a problem.
- Students work in small groups/pairs and students present their work.
- Students engage in different levels of writing.

Low Teacher Practice Indicators

- Extended teacher-centered direct instruction.
- Lesson content is not appropriately challenging.
- The purpose of the activity is not aligned with the lesson.
- Teacher does not use high-level questioning.
- Classroom lacks clear routines, directions, and smooth transitions.
- Teacher responds inappropriately to problematic behavior.

Low Student Engagement Indicators

- Students do not complete instructional tasks.
- Several students sleep, talk, listen to music, or otherwise ignore the lesson.
- Students do not ask questions to refine their understanding.
- Students do not spend any time during the lesson working in small groups or pairs.

High Teacher Practice/High Student Engagement Vignettes

The two vignettes that follow are summaries of observations of two High Teacher Practice/High Student Engagement teachers' lessons. In both examples, students received clear directions for activities and time was

spent with the teacher directly instructing the class. In addition, students were given a pathway to use the knowledge and resources to produce a product. Finally, the classroom promoted collaboration and offered feedback either from students' peers or the teacher.

A Vignette

Mr. James (Math): Creating 'Habits of Mind'

"Wow, Mr. J, you can really highlight things with that Smart board!"⁴⁸

"Yeah, isn't it just wonderful?" laughs Mr. James, as he highlights the key vocabulary words students suggest are critical to understanding the explanatory text from their math books. Students have a copy open at their seats and the text is also displayed on the Smart board. Clearly an ongoing repartee between this African American male student and Mr. James, the student continues, "Would you say it [the highlighting] is in the realm of greatness?" "Well," quips Mr. James, "Mr. Thomas, there are many realms of greatness — would you like to come to the board and show us what a great mind you have?" "Don't mind if I do, don't mind if I do." And the student, Mr. Thomas, proceeds to "ace" the equation Mr. James has placed on the board for him to solve.

It is fifteen minutes into this class and students have had time to unwind and socialize after lunch as they: circulate and help one another complete the following Do Now: *Evaluate and explain the meaning $V(3)$ for the following function $V(x)=25-9.8x$* ; incorporate six students from another class (the teacher had an emergency and the class had to be divided) into their table seating configurations; distribute textbooks; pass their homework to the corner of their tables; and conduct Text-Rendering of the math text with which they are now interacting.⁴⁹

Working in groups of three to five, the 28 students experience what an RFA staff member wrote in her field notes was "an almost picture perfect model of a PLN literacy-based math lesson." They read, interpret, and locate clues to guide the math operations they are about to perform. It is important to note that this racially mixed group of predominately African American and a scattering of Latino and white youth communicate with one another with a blend of urban street language and academia. For example, one female student's careful explanation of how to solve a math operation was followed by a gentle slap on the back of the male student's head and a playful, "Do you get it now, fool?"

Later in the lesson, the group solves several math problems. Students go to the Smart board, and Mr. James, along with their classmates, provides feedback and encouragement. They become entrepreneurs in real-life role-playing scenarios as they predict (using scientific calculators to guide their estimates) the profit margin they might realize as new Rap music executives producing their first CD. Table talk among this group of 10 males and 18 females is actually about: *Which rules express how to determine the profit margin in the most helpful ways? How many CDs must be sold for the band to break even?*

Mr. James, a thirty-plus African American math teacher in this large minority-dominated inner city high school, migrated from the corporate world into teaching. In his third year as a teacher, he has worked with the math coach "at least once every two weeks." Stylish, affable, and demonstrating a zealous sincerity, but deeply saddened by what he calls "the conditions that many of our youth are living under," he honestly admits, "I only try to integrate the things from PLN that I think are going to be most beneficial to my students. I don't follow a protocol just to satisfy others. I focus on issues I observe as students are taking the PSSA test, and I'm trying to impact their way of thinking and writing about math, so they have 'habits of mind' that will hold up during standardized testing."

⁴⁸ Smart board: Interactive white board system that uses integrated computer and projector systems.

⁴⁹ Text-Rendering: PLN strategy that requires students to evaluate and choose key sentences, phrases, and words, to express the main idea or make connections. This can be done orally in a large or small group and/or in writing.

A Vignette

Ms. Jones (English): Accountability and Engagement

Nineteen tenth graders, 10 males and 9 females with heads bent and pencils and pens intermittently in use, are independently formulating their responses to the Do Now question: "How is Giles Corey executed? Explain." The school is in a semi-rural central section of the state, and in this class, the same as most across the school, all of the students are white. Well-established classroom norms are evident in the ease with which they work together. The students share from their responses to the Do Now and then smoothly transition into five expert Jigsaw groups. Each group is assigned one of the following questions: *What were the causes of the Salem Witch Trial? Contrast Abigail and John Porter. Explain how John Porter is a hero. Explain the lives of the children in this play. Why is this play called "The Crucible"?* Within each small group, they appoint a recorder, a facilitator, and a spokesperson. Volunteers take responsibility for translating the group's ideas into a visual (a poster board) which will be a component of their Share/Report to the whole group in about 20 minutes. They refer to their plot maps, character maps, the text, and additional resources as they discuss their proposed responses to their group's guiding question.

Groups brainstorm ideas and sketch out rough drafts on loose-leaf paper, then transfer their responses to the posters. Ms. Jones brings the class back together and each group presents their poster. After each presentation there is time for classmates to contribute and build upon what the group has said.

After everyone has presented, students write a Ticket out the Door as a closing activity. Today it was "Give me three reasons for the Salem witch trials." As the bell rings, students hand Ms. Jones their responses and move to their next class.

Ms. Jones, a ten-year veteran, clearly enjoys this class. During the interview, which followed class, she states that this session met her expectations because, "I wanted them to interact in a group. I wanted them to bounce their ideas off each other and then come to a consensus and be able to articulate that during the whole group discussion."

Having completed PLN 1 and now enrolled in PLN 2, Ms. Jones reports, "I think the PLN strategies keep them engaged and on task... Starting with the Do Now and then ending with the Ticket out the Door adds to their accountability to be engaged in their own learning."

She continues, "Talking with my peers, working with John [pseudonym for her literacy coach] has definitely improved my teaching abilities. Before, I would tell them all this information. Now, they are getting a lot of it for themselves and it's making it more meaning-centered to them. I like that."

High-practice teachers are a slight majority of the total numbers observed. However, a significant number of teachers, based on RFA's observations, were slow to change their routine practices of delivering instruction. Evans provides an insightful explanation of why teachers don't make the changes that they are encouraged to: "Change immediately threatens people's sense of competence, frustrating their wish to feel effective and valuable. Alterations in practices, procedures, and routines hamper people's ability to perform their jobs confidently and successfully making them feel inadequate and insecure, especially if they have exercised their skill in a particular way for a long time (and even more if they have seen their performance as exemplary)."⁵⁰ PAHSCI coaches and administrators, in assessing their staff's progress in implementing best practices, are cognizant that resistant teachers who show little sustainable progress in changing their daily practices can impede widespread adoption of high teacher practice behaviors. It is important in these situations for the High Teacher Practice/High Student Engagement quadrant one teachers' work be visible and modeled throughout the school setting.

Summary

Sustainable instructional change involves a shift in teachers' classroom norms and routines. In PAHSCI, this is manifested as a change from a teacher-centered classroom to a student-centered classroom that places a high priority on student engagement, a cornerstone of the PLN framework. Additionally, the true test of how strongly teachers have adopted these beliefs is whether the prominence of student engagement is seen not just in occasional class sessions, but in their ongoing daily classroom practice.

The link of teacher practice to students' actions and reactions was clearly in evidence in PAHSCI classrooms.

What teachers *did* and *how* they communicated influenced what students did and how they responded. Actively incorporating students'

knowledge into the lesson and acknowledging students' growing skills and abilities contributed to relational trust between teachers and students.

High Teacher Practice/High Student Engagement teachers used a variety of methods to engage their students.

These teachers, we argue, provided high quality teaching. A core common practice among these high functioning teachers was involving students in their own learning. They incorporated multiple PLN strategies to reinforce their content lesson goals. These teachers intentionally created the norms and promoted skills and habits of mind to socialize high standards and intelligence. In contrast, some of the Low Teacher Practice teachers we visited, unfortunately, were simply applying a few isolated PLN strategies such as Do Nows and Pair/Shares that were unconnected to the remainder of the lesson.

Change takes time. Low Teacher Practice/Low Student Engagement ("quadrant four") teachers represented slightly less than 50 percent of observed teachers in Year Three. Upon examining the interviews with these quadrant four teachers, the fairly obvious finding is that that moving from surface-level to more in-depth change takes time. Evans thoughtfully points out that "The impact of any particular innovation depends on many factors, including among others, our individual characteristics (personality, history), the kind of organization we work in, the nature of the change, and the way it is presented to us."⁵¹

Sources of teacher resistance.

Some teachers who were assessed low on our instrument had years of "exemplary ratings" from administrators and subscribed to the "If it's not broken, don't fix it" theory regarding their own teaching. Some agreed that "a few strategies here and there" might be useful; however, they had good discipline and their students were achieving, so why change?

How do instructional coaches, colleagues, and school leaders spread teacher practices that link well to student engagement and learning to low teacher practice individuals? And how can change that has occurred be sustained? We examine these questions in the next section.

⁵⁰ Evans, R. (2001). *The Human Side of School Change: Reform Resistance, and the Real-Life Problems of Innovation*. Jossey-Bass A Wiley Company San Francisco, 36.

⁵¹ (Ibid, 28)

Section 4 Sustaining Instructional Change

The climate that you experience when you walk through the faculty room and hallways — that's changed. People are talking more about education instead of just the weekend. You hear people using the PLN lingo. They get that dialogue is the most important thing; raise the questions and let students answer them. That I've seen change a lot.

—Literacy Coach

- **How does the combination of coaching and the PLN framework create the momentum for implementing and sustaining change?**
- **What other factors support or impede the sustainability of change?**

RFA's Year Two Report focused on how instructional change played out in the implementation stage: that is, understanding the factors that encouraged teachers simply to try the PLN strategies. In this year's report, attention is turned to the sustainability of instructional change. Rogers calls this the confirmation stage — the stage that is critical to determining whether an innovation will be discontinued or maintained.⁵²

Many bygone school reform efforts have shown the challenge of reaching deep into a teacher's classroom and creating lasting change. Far too frequently teachers tend to "focus on surface manifestations...rather than deeper pedagogical principles."⁵³

In two important ways, the design of PAHSCI attempts to interrupt teachers' inclination toward superficial change, and to move them toward transforming fundamental classroom norms and routines. First, the strategies and philosophy of the PLN framework confront teachers' long-held beliefs about the role of students in the classroom. More specifically, the PLN strategies and philosophy address "the escalating literacy needs of adolescent readers in an increasingly complex communication age."⁵⁴ Second, acting as change agents, instructional coaches

work to convince teachers of the efficacy of the PLN framework and its underlying philosophy. In addition, coaches help teachers thoughtfully apply the framework to their ongoing daily routines, and offer constructive feedback, thus creating the conditions for sustainable instructional change.

Indicators of Sustainability: Changes in Classroom Practices

According to the Year Two Report chart entitled "Comparison of Integration Levels," the level of priority a teacher places on student engagement can be judged by whether four characteristics are found in the classroom:⁵⁵

- 1 Extended opportunities for students to read, write, listen, and talk;
- 2 A focus on students performing tasks, problems, and activities;
- 3 Assessment of student learning; and
- 4 Students taking risks and having opportunities to be successful.

The following case study provides an illustrative example of how teachers are interpreting and implementing these four characteristics in a classroom.

⁵² Rogers, E. M. (2003). *Diffusion of Innovations*. (5th ed.) New York: The Free Press, 1-512.

⁵³ (Spillane, 2000; Coburn, 2003, 4)

⁵⁴ (Greenleaf, et al., 2001).

⁵⁵ (Brown et al., 2007, 15)

Sustainable Instructional Change:

Renewing a Veteran Teacher's Commitment to Students

(Teacher and Coach Reflections)

Mrs. Thomas had been teaching English for more than 10 years when the Pennsylvania High School Coaching Initiative came to her school. She credits her participation in the PLN course and working with a coach for her renewed energy in teaching. She shares, "It's just transformed my way of teaching, and I'm less tired than I used to be."

In her brightly lit classroom, desks are arranged in clusters of four to facilitate group work. The walls are adorned with student work and resource posters created from past lessons. In reflecting on what her teaching would have been like had she not participated in PAHSCI, Mrs. Thomas admits, "I would have probably found a worksheet online — that just sounds so awful now, but years ago that's how I used to do it. We would have done it together as a class, and it is just so ineffective doing it that way because it means half or more than half the class doesn't have to pay attention." In contrast, using the PLN framework and working with the coach, "I'm not trying to think of what I should be saying and doing for 50 minutes. [Instead, I think] — how can I grab their attention, give them an activity and see them run with it?" Mrs. Thomas' preoccupation with getting her students actively engaged in the lesson exhibits a shift in her belief about the role that students play in the classroom.

"[In general,] I do a lot of scaffolding and total participation — in fact, my goal as a teacher is to have my students speak more than I do during a class period... [So first] I always try, in the Do Now, to grab them with something... [Then] I just spend a little time teaching the concept. [Next] I have activities for them to do, and I usually like to have them spend a couple minutes by themselves just to see what they know...then I have them get in pairs."

"[Right now] I'm introducing Anne Frank. I will have quotes all around the wall. I call it my gallery quote walk. [The assignment may

be to] make inferences about what kind of person you think Anne is. This is my introduction before they know anything about Anne...right away I think of how I can get them up and going around and doing things. That's the first thing I think of — total participation — how can I get everybody involved? Then how can I break it down? Then I always think of what do I want at the end? What's the product? What do I want them to be able to do?"

Ms. Hess, the instructional coach, uses a different example to convey the same idea about Mrs. Thomas's instructional approach. "[She did an I-Search project and] the whole idea of reading-writing-listening-speaking being woven through was just really good... She thinks things through...You often hear her saying, 'I want my students to be able to do [XYZ]' or 'They're not doing this well enough — how can they do it better?' She's constantly analyzing herself and her lesson plans."

Mrs. Thomas's coordinated and thoughtful approach reflects a deep understanding of the PLN framework and how to best integrate that framework into her daily routine. She notices a big difference in the impact it has had on her students.

Giving an example of the impact on a student, she explains: "Josh came to my class about two months ago and he was a total mess...When he first came in, he didn't want to sit — he was just out of control... He's still wiggly and squirmy, but now he's really engaged. If I would teach the way I used to teach, he'd be a mess — he'd be walking out of my room...Teaching with these strategies, everybody gets engaged... He came in yesterday and they were writing a poem. Josh actually sat down and he wrote a poem and he read it aloud to the class. Total amazement! I think he was just sort of drawn into it — and it has to do with the PLN strategies! It's truly transformed my way of teaching and the way I feel about teaching."

Indicators of Sustainability: New Levels of Understanding about 'Engagement'

How are teachers internalizing new and emerging concepts of student engagement and learning? In addition to shifting their classroom practice to focus on student-centered engagement, many PAHSCI teachers are rethinking the significance of engagement.

They are grasping the need to “create environments that allow students to engage in critical examinations of texts as they dissect, deconstruct, and reconstruct in an effort to engage in meaning-making and comprehension processes.”⁵⁶

Year Three interviews with teachers and coaches revealed new levels of understanding about what engagement can mean, such as:

1 Letting students struggle with the material

One of the things we sat down and talked about was, she wanted to know “How long do I let them go before I step in?” And we had a real rich discussion on that because the veteran teacher that she is, this is new — not just stepping in and showing them as soon as they ask; letting them struggle with it. That has been something that I think coaching has added to what she does well.

—Math Coach

2 Viewing engagement as collaboration and student “ownership”

I pull kids and talk to them about test scores — which is hugely instructional because the kids have to know where they are...to engage them more in their instruction.

—Math Teacher

3 Having a better assessment of students' needs

I had a vocabulary test and [my coach and I] talked about how to improve those vocabulary tests so they are even/fair to all the students, how I could improve them for each level of student, how to make sure that I'm asking the right kind of questions so that I'm getting a good assessment about what the kids actually know.

—English Teacher

4 Aligning instruction more closely to students' needs

I've become more observant of the varied learning styles of my classroom...And working with [my coach], it was sort of “Okay Devon, are you sure they know? Have you modeled what ‘concise’ means or have you shared with them how to write a thesis sentence?” And I hadn't because I assumed, well they should know this... She made me more contextually aware.

—English Teacher

5 Encouraging deeper engagement in reading and extended opportunities for writing

Now I think much more in terms of having the kids really go into the texts that they're using for their [I-Search] paper. They always work with highlighters and I check to see how they're doing at really getting at the meat of the information that they'll need for their papers.

—English Teacher

Evidence that teachers are thinking at more sophisticated levels about creating engaged, student-centered classroom environments — and are seeing the results in the behavior and achievements of their students — is a positive indicator that these new practices will be sustained.

Coaching + PLN Framework: Keys to Sustainable Instructional Change

In the Year Two Report on PAHSCI, we found that instructional coaching combined with the PLN framework produced a synergy that created momentum for instructional change. Here we find that the merger between coaching and PLN is not only useful in the implementation stage, but also essential to sustaining instructional change.

Given the important role that this merger plays, it warrants further exploration — what dynamics of PLN and instructional coaching helped sustain instructional change? Using teacher and coach interviews to answer this question, we identify two significant combinations that facilitated lasting change in teachers' beliefs and practices: 1) one-on-one coaching combined with teachers enrolled in the off-site regional PLN course; and 2) one-on-one coaching combined with a school-based PLN professional development facilitated by coaches.

⁵⁶ National Council of Teachers of English (2004). Position Paper/Guidelines. A Call to Action: What we know about adolescent literacy and ways to support teachers in meeting students' needs.

In addition, we describe the interplay between coaching and PLN that occurs in these settings.

One-on-One Coaching + Regional PLN Courses

Instances in which instructional change was sustained occurred when teachers were engaged in a PLN regional course as they simultaneously worked with coaches. Enrollment in PLN regional courses was encouraged, however, there were quotas dictating how many teachers could enroll. It is noteworthy that in Year Three classroom observations, 70 percent of the high teacher practice/high student engagement teachers had taken at least one regional PLN course and worked regularly with a coach. Several factors make the combination of regional courses and coaching a significant contributor to sustaining professional learning and instructional change.

First, the joint learning that occurs when coaches attend the PLN regional course with their teachers helps to build closer, more effective coaching relationships.

Usually, the professional training and social status that goes along with being a change agent creates a social distance between the change agents (i.e., coaches) and their clients (teachers). This “pos[es] problems for effective communication about the innovation they are promoting.”⁵⁷ The design of PAHSCI addresses this issue by “leveling the playing field” between coaches and teachers. Essentially, it positions coaches as both teacher and learner. One math teacher speaks to this dynamic:

I talk to her [at the PLN trainings]. When we come back to the high school, we [say], “Hey, do you remember that one?” “Yeah, I remember that because we were both there.” I think that helps. It’s not just — “go over here and we’ll talk about it later.”

Having teachers and coaches “both there” decreases the likelihood that only a few isolated strategies will be implemented in the classroom once the teacher returns to school. Instead, as coaches remind teachers of other strategies and follow up with them, it increases the likelihood that PLN strategies will be infused into the daily routines of teachers — an indicator of sustained instructional change.

Second, there is ongoing accountability for integrating the strategies into a teacher’s daily practice. An English teacher elaborated on this, saying:

I think the [PLN] class...was very helpful. But working with [my coach], it holds me accountable because I see her on a daily basis, so she’s going to want to know if I did what I said I was going to do.

In traditional professional development models where teachers’ learning occurs off-site, there are few mechanisms for ensuring that what is learned gets applied once they return to school. In the PAHSCI model, with coaches attending PLN trainings with teachers and returning to the school with them, teachers, coaches, and mentors reported a high degree of accountability that the strategies will be applied more faithfully and consistently.

Third, PLN training and working with a coach acts as reinforcement of the learning, application, and maintenance of strategies.

Through PLN training, teachers are presented with a comprehensive overview of the framework, philosophy, and strategies. But, as one English teacher put it:

It is only through the combination of both PLN training and coaching that you get the fullness of the strategies.

The high quality of PLN trainings usually prompts teachers to at least try out the strategies. Then coaches, acting as change agents, “stabilize new behavior through reinforcing messages to clients who have adopted, thus helping to freeze the new behavior.” This “freezing” of new behavior was echoed in teacher interviews, as in the comment of another English teacher who said:

Once I started talking with the coaches and I started attending the classes, it really cemented things for me.

Coaching + School-Based PLN Professional Development

As described in Section Two, coaches used a range of venues to teach and review the PLN framework with the instructional staff in their schools. These ranged from one-on-ones with individual teachers, to small group meetings

⁵⁷ (Rogers, 2003, 28)

(e.g., study groups or subject department meetings), to all-staff events during staff development days.

In the Year Two Report we state, “Coaches were effective in guiding teachers to deeper levels of implementation when they used the BDA [Before/During/After] Consultation Cycle in their work with teachers.”⁵⁹ Importantly, the school-based follow-up to the PLN 2 regional course formalized the way coaches worked with teachers, so that teachers were expected to go through the BDA Consultation Cycle.⁶⁰

Combining coaching with site-based training, in particular the PLN 2 course follow-up component, had several advantages in reinforcing sustainable change.

High level of teacher commitment to BDA coaching. Having the BDA Consultation Cycle embedded in a school-based PLN course that granted Act 48 credits necessarily implies that teachers agree to planning lessons with a coach (before), having a coach visit their classroom (during), and reflecting on the lesson afterward (after).

⁵⁹ (Brown et al., 2007, 26)

⁶⁰ The Regional PLN 2 course required teachers to work 15 hours at their school sites.

More attention given to teacher reflection.

In the Year Two Report we also found that the “after” portion of the BDA Consultation Cycle was most often sacrificed, though this is an important phase because it is through reflection that the “seeds of instructional change are planted.”⁶¹ Having a school-based PLN course that is structured around the BDA Consultation Cycle means that the “after” portion is institutionalized into coaches’ work with teachers.

Year-long involvement and accountability.

Since the school-based courses occur throughout the year there is greater assurance and accountability that the framework is getting embedded into the ongoing daily routines of teachers.

Opportunity to reach a broader network of teachers.

Up to this point we have focused on sustainability in terms of *depth*, because this element is so often overlooked. However, sustainability is also important to look at in terms of *breadth* and *reach*. Having a school-based PLN course allows more teachers to get involved and enables teachers who have not enrolled in PLN regional courses to learn about the PLN framework.

⁶¹ Brown et al., 2007, 25)

Mini-Case

An Innovative Approach to a School-Based PLN Course

One innovative way in which sustainable instructional change was encouraged took place at a school where coaches designed and led a credit-bearing PLN course for their teachers.

First, through negotiations with the intermediate unit, coaches and school leaders ensured that teachers who attended the course during their prep period would receive Act 48 credit.

The coaches designed the course to meet real-time classroom needs of teachers in their school while introducing them to the PLN framework and strategies. They structured the course around the teacher-coach Before/During/After (BDA) Consultation Cycle, in which the “before” segment involves planning with a teacher; the “during” segment involves visiting the classroom and observing the lesson being taught and, in some cases, helping to teach the lesson; and the “after” piece is where coaches debrief with teachers and help them reflect on the lesson taught.

During each course session, the focus was either on developing the lesson (the “before”), or debriefing and reflecting on the lesson taught (the “after” portion of the BDA cycle).

Through this course, teachers who rarely had conversations with one another around instruction were now sharing instructional strategies and helping each other plan lessons.

Looking Ahead: Challenges to Sustainability

As teachers move to institutionalize the new practices, the possibility looms that without the resources provided by PAHSCI, there will be no school-based instructional coaches in place and the instructional changes that have taken place will be difficult to sustain.

PAHSCI coaches, mentors, teachers, and administrators prioritize the implementation of literacy-rich, student-centered instruction as most likely to be sustained. In addition, participants report that they believe schools and districts can continue to grow as a professional community — building on new leadership capacities that have been created across all levels — to discuss and develop strategies to sustain these new instructional practices and customize strategies to specific school contexts.

Summary

The PAHSCI model attempts to interrupt teachers' inclination toward superficial change, and to move them toward transforming fundamental classroom norms and routines.

- Evidence of sustainable instructional change was seen in teachers visited in Year Three, both in their classroom practices and in the more sophisticated levels of understanding they had about the nature of student engagement.

- The combination of coaching and PLN training, whether in regional or school-based courses, appears to be central to PAHSCI's role in sustainable change.
- When coaches and teachers attend PLN regional courses together, a key benefit is the shared teacher/learner experience, which helps reduce the "social distance" and build closer working relationships between coaches and teachers.
- Benefits of PLN school-based courses include a more formalized and ongoing commitment to the Before/During/After (BDA) Consulting Cycle and the opportunity to reach a wider network of teachers.
- While a major challenge will be the availability of continued training and resources for PAHSCI coaches and teachers, the seeds of sustainability have been planted: changed perspectives and practices, a common vision and instructional language, and a growing professional community.

One of the goals of PAHSCI is not only to sustain and expand this instructional coaching model, but also to develop professional learning communities in schools, within districts, and across districts in Pennsylvania. In the next section, we look at how individuals, organizations, and the state have "linked together" in collaborative learning, building leadership capacity, and laying the foundation for sustainability.

Section 5 PAHSCI Learning, Leadership, and Sustainability

We're blazing a new frontier here, especially in breaking down walls that have been built in high schools over the years.

—Building Administrator

- **What types of learning and leadership developed through the Initiative at the individual, organization, and state level?**
- **How has PAHSCI succeeded in shifting from “external” to “internal” ownership?**
- **What challenges impede PAHSCI’s sustainability?**

In the PAHSCI model, the image of networking or linking (people, resources, and sets of practices) to form a statewide chain of learning is complex. As one member of a partner organization commented during a retreat, “*The scope and magnitude of this project is daunting.*” The process of introducing a compelling, coherent, and efficient set of practices across the local contexts of participating districts and schools is both ambitious and important. Further, establishing the optimum learning space (social and emotional, cognitive, and physical)⁶² for instructional coaching and mentoring to flourish in all of the participating sites involves ongoing awareness of how a school’s structural characteristics, resources, and school processes influence its ability to improve and sustain the improvement.

Most public schools have little control over structural configurations, funding decisions and other limiting conditions and components; the PAHSCI model sought to influence the instructional components that schools could control and improve.

In this section we discuss PAHSCI participants’ connecting lessons learned and building leadership capacity. We highlight some of the challenges to sustaining the changes occurring in teaching and learning.

Individuals: New Opportunities for Learning and Leadership

Teachers

High school teachers often report that they work in isolation and, consequently, they don’t experience high levels of trust and collaboration. Although some school structures provide opportunities for teachers to meet in interdisciplinary teams working with the same students, more often than not, high school teachers’ professional interactions are only with teachers who teach the same content. On the 2007 teacher survey, 65 percent of teachers agree or strongly agree that coaches were a catalyst for overall staff learning. One English teacher we interviewed described a coach working simultaneously with her and a history teacher:

I’m working on a project for PLN2. We’re going to do Julius Caesar, but I’m going to do it in connection with the AP history teacher. She [the coach] has sat down with the two of us on several occasions. We talked about the various lessons and how to incorporate a web-streaming video program, and she pulled up some Caesar historical documents that we could play. And [we met] just to discuss the types of activities to use in the Before/During/After format, how we could make the flow work better.

⁶² www.learning-space.org.uk/about-learning-space
Social and emotional: learning as a social process, giving attention to group dynamics, safety, trust, support, and emotional needs.

Cognitive: respecting, valuing and working with the different intelligences (Gardner), learning styles (Honey and Mumford) and cultural and cognitive diversity.

Physical: the type, size, quality and organization of learning spaces, and the movement and activities of people within their physical environment.

Coaches were able to open avenues for discussion among teachers across content areas by organizing and facilitating study groups. In Year Two we found 77 percent of coaches' reported conducting at least six study groups with teachers, compared to only 26 percent in Year One.⁶³ Teachers reported a heightened level of professional camaraderie with their colleagues and administrators who joined in the study groups.

Building Leadership through Reflection.

Traditionally, teachers are only observed for purposes of evaluation; coaches, on the other hand, observe teachers in order to help them and give feedback so that they can be better, more reflective practitioners (and often in the process, the changes and different strategies make their job easier). Over 85 percent of the teachers we interviewed in the fall/winter 2007-2008 reported that their coaches had provided helpful, non-judgmental feedback, and this encouraged them to try new things without fear and trepidation. One teacher summarized her feelings about this changing paradigm at her school by sharing:

And it's [working with coaches] great, because the staff members, we don't want to see administrators. We want to see people who have that knowledge, have used it. Not necessarily that the administrators aren't effective, but the literacy coaches and the math coaches are inside the classroom.

Expanding Leadership Skills and Roles.

PAHSCI's direct focus on the world of teachers — their classrooms — built the capacity for teachers' leadership to develop. Teachers' classrooms are the environment they understand best and this increases the likelihood for them to fully participate in learning about this environment. Instructional coaches are a catalyst for constructivist learning, or learning that features reflective practices. Lambert theorizes "that expanding [teacher] leadership roles takes two forms: (1) taking on additional tasks or functions and (2) behaving more skillfully in daily interactions (e.g., asking questions, listening, provoking, giving feedback)."

In Year Two we reported: "Over 50 percent of the teachers we observed and interviewed

indicated that PAHSCI gave them opportunities to learn and practice new ideas and strategies."⁶⁴ In Year Three RFA interviews with teachers, they report taking on new and additional tasks, e.g., as members of study groups, spearheading peer-to-peer collaborations, and leading professional development. A broadening range of what Lambert refers to as leadership skills, or participation in decision-making, having a shared sense of purpose, engaging in collaborative work, and accepting joint responsibility for the outcomes is evident in the vignettes of teachers described throughout this report.⁶⁵

Coaches

As described in depth in Section Two, coaches had many opportunities and significant support for growing into their roles and continuously honing their knowledge, as well as their delivery of support and training. Coaches were encouraged to participate in off-site professional development opportunities such as national meetings and then share this knowledge with their team of coaches, administrators, and in some cases, district leadership.

We offer three examples to illustrate how PAHSCI supported coaches' learning their craft and moving into more visible leadership roles:

Cross-Site Visitations.

Coaches shadowed coaches at other PAHSCI schools and most rated these shared opportunities as extremely helpful and informative.

Presentations at Networking Sessions.

By the 2007-2008 series of networking sessions, the majority of the presenters were PAHSCI coaches. Participants had requested this shift and the coaches' ratings were consistently very high. (Ninety-two percent or higher strongly agree or agree that the sessions were excellent and coaches presented realistic and informative content.)

Coaches' Advancement along "Career Ladder."

Some coaches were also asked to work (usually on weekends) as trainers and PLN facilitators. Several coaches are slated to move into building and district administrator vacancies.

⁶⁴ Brown et al., (2007).

⁶⁵ (Lambert, 1995).

⁶³ (Brown et al., 2007)

Mentors

In spring 2008, RFA interviewed coaches, building administrators, and district administrators in eight schools regarding the role of the mentors. Their feedback points to the significance of the distinctive role that three-person mentor teams played in PAHSCI.⁶⁶

Similar to coaches, the mentors' roles were not clearly defined at the onset of the Initiative. Basically, mentors began with the open-ended charge that they were: *to provide needs-based support to schools and districts.* In summarizing the key role that mentors played in contributing to learning and building leadership, one district superintendent shared:

You have an overall idea of what [instructional coaching] is supposed to look like, but really the mentors took us through that journey through the trainings and the practical implementation of the literacy strategies that we were taught. When we came to roadblocks, because they've worked with so many other districts, they had solutions to offer us. They played an integral part as a guide through this journey. ...When you run into those bumps in the road, you need someone else to have a separate set of eyes to look at it and give you constructive feedback on it, and they've been able to do that for us. As a result, it's made our coaches and administrative team stronger leaders with the Initiative.

Although we did not find this in every school, some building administrators credited the mentor team with assisting them in implementing PAHSCI well and thus increasing the groundwork for sustainability. One building administrator reflected:

The mentors have really had a hand in provoking us to find ways to sustain it on our own. Every environment is different and every staff has a different personality, and we used several approaches with the mentors' support and help. They were good at helping us to find our own ways rather than saying, "This

⁶⁶ The three-person mentor team, one leadership, one literacy and one math mentor, was a distinctive component of PAHSCI. PAHSCI has contracted a report that will be issued later this fall that specifically examines the role of the mentors. In addition, Foundations, Inc. will be publishing tool kits and additional resources on the mentor role.

is what I think you should do." They were very experienced and skilled at communicating ways that other people have approached similar situations but allowing us to adjust it to our staff and circumstances.

We should point out that not all coaches and building and district leadership report that they found the mentors contributed a significant part to their growth and development.

Some mentor teams were a better match than others, and some were more flexible in meeting the needs of individual coaches and administrators. In addition, many mentors report that outside of strong relationships they had *no power* to enforce the application of PAHSCI principles. Most participants that we interviewed, and in particular the coaches, acknowledge that the mentors were a distinctive feature and an important contribution to the PAHSCI model.

District Points of Contact

Early in the initial process, PAHSCI leadership asked each district to designate a point of contact. Again, this individual's level of participation varied. Earlier interviews with them during the first year confirmed that this task was added on top of many existing assignments. In some examples, the district-level curriculum administrator was the point of contact; in others, assistant superintendents served this role. There were a few extraordinarily effective points of contacts who were highly responsive, communicated well with school and district PAHSCI participants, and attended all of the training events. In these exemplary instances, the points of contact positively influenced levels of learning, implementation, and their districts' participation in PAHSCI.

Administrators: District and Building Leaders

It is important to state that the designers of PAHSCI understood how critical a role district and building leaders play in supporting, monitoring, and evaluating classroom instruction. School leaders who telegraph support for a new initiative and put the structures in place for implementation demonstrate a critical component — buy-in. Again, the original designers and stakeholders had negotiated potential buy-in from many of the districts; however, by the end of the first

year, those original stakeholders and their subsequent existing relationships were no longer in place. Therefore, during the course of the Initiative, new commitments of buy-in had to be negotiated.

At a Partner Strategic Retreat in 2006, the group brainstormed on the topic, “What We Have Been Learning.” One of the points emphatically cited was: *the power the administrators have to constructively influence what happens*. Research often shows that as Kral explains:

*Teachers watch for principal reaction to and involvement in the work of the coach at their school. A distant relationship between the principal and the coach sends a message of low priority, which results in teachers’ opting out of the intended reform.*⁶⁷

Before describing how administrators viewed their own participation and growth in the Initiative, it is worth noting an initial concern of some administrators regarding the PAHSCI teacher/coach evaluation paradigm and how it was resolved. This issue is illustrative of how critically some administrators view their role as evaluator. In some instances, administrators were anxious to establish how to evaluate coaches. During Year One trainings and networking sessions, administrators met separately with leadership mentors to examine their union contracts, as some administrators wanted PDE to establish an evaluation system that distinguished the coach separately from teacher classifications. Our observations and field notes suggests that this was problematic to some administrators, and in these examples issues of control and power were at play. Eventually, consensus was established and it was agreed that coaches were still teachers, and although they had additional responsibilities, they would be evaluated using the existing teacher evaluation format. There were instances of administrators assessing their coaches as unproductive, and in those few examples, coaches were usually moved to other positions or decided on their own to return to the classroom.

While close to 95 percent of school and district administrators attended the initial meetings to participate in PAHSCI, their

attendance varied throughout the next two years and so did their level of active participation and buy-in. Over a three-year period at PAHSCI events, the average attendance of building administrators ranged from 40 to 85 percent.

The 2007 administrator survey reveals that two-thirds of the administrators self-report that they personally experienced a positive outcome from participation in PAHSCI. There was a connection between their attendance at trainings, their level of partnering with their coaches and the mentor team to focus on classroom instruction, and their perception of leading high implementation of the PAHSCI components. Interestingly, some reported they were not always sure how to support full implementation of this reform. However, concrete strategies such as Walk-Throughs contributed to their ability to assess the scope of implementation in their sites.⁶⁸ In addition, as high school administrators, many acknowledged that coaches’ one-on-one work with teachers met a need that they were not able to successfully fulfill as administrators.

Building administrators were twice as likely to rate their personal growth in PAHSCI as significant if they also reported the following:

- Synergy of working with coach team and active involvement in distributed leadership and developing teacher leaders;
- Coaches becoming empowered instructional leaders;
- Understanding and support from the district.

How Individuals Rated Their PAHSCI Experience

It is interesting to note that individuals (teachers, coaches, mentors, and administrators) report a strong sense of accomplishment

⁶⁸ Walk-Throughs: *Instructional walk-throughs*: A team of observers, usually a building administrator and teachers, however, sometimes parents, visits several classrooms where they look for very specific things. In most walk-throughs, the teaching continues and the visitors sit in the back or walk quietly around the room looking for evidence of the particular goal/classroom strategies they would expect to find. Narrowing the focus to specific instructional activities, the team assembles the information from their notes, and they share what they have learned with the teachers whose rooms have been observed.

⁶⁷ Kral, C. *Principal Support for Literacy Coaching*, www.literacycoachingonline.org

associated with their participation in PAHSCI. Significantly, nearly all of those individuals we categorize as the core PAHSCI front-line implementers — coaches, mentors, building and district level administrators, partner organization staff, and PAHSCI leadership — report on an anonymous May 2008 evaluation that PAHSCI was highly successful (97 percent strongly agree or agree) “in providing meaningful opportunities to learn from one another; grow and sustain the growth.”

Organizations: New Partnering, New Capacities

Partner Organizations

The Annenberg Foundation and the Pennsylvania Department of Education understand the value of a strong partnership and resolved during PAHSCI’s inception to contract with partner organizations that were both committed to public education and experts in their fields. In addition to PDE, partner organizations included: Foundations, Inc., Penn Literacy Network, Research for Action, and The Philadelphia Foundation.

According to OERI research, successful partners identify, agree upon, accept compatible goals and strategies, and share a common vision. Participants in successful partnerships identify and solve problems and adapt plan-

ning to fit the needs of the particular project. Partnerships are most successful when partners “respect the differences in each other’s culture and style, striving to apply the best of both worlds to achieve established goals.”⁶⁹

At a midpoint of the three-year Initiative, PAHSCI partners responded to an anonymous questionnaire about the PAHSCI partnership. RFA reported that:

Each partner organization brings to the partnership an established identity, positive reputation, and history of accomplishment. Each partner’s identity influenced how it has integrated into the branding and overall work of PAHSCI. Each partner has made adjustments and adaptations since the project began, and all respondents felt it was important to acknowledge how hard each has worked to do this. Leadership in each partner organization has listened to the formative feedback and responded by translating the issues and challenges presented to the organization’s staff for review and to guide changes. Partner organizations have redeployed individuals and redesigned trainings and curriculum. They have allocated additional resources and, in some cases, made substantial adjustments. Appropriately, some

⁶⁹ OERI, 1993, www.ed.gov/pubs/PromPract/prom4.html, accessed December 22, 2006.

Partner Organizations

Foundations, Inc. brings deep knowledge of school improvement processes and the role of school leadership in promoting professional learning. It provides leadership and content mentors who visit districts four times each month to help train coaches and school leaders in instructional coaching; offer ongoing technical support; and provide both coaches and administrators with opportunities to problem-solve, reflect upon their work, and refine their coaching skills.

The Penn Literacy Network (PLN) offers a research-based framework and practical strategies for establishing literacy-rich classrooms across all subject areas. PLN provides training in its framework for coaches, mentors, administrators, and teachers through intensive summer institutes and in regional courses throughout the school year. The training also includes strategies aligned with state and national content standards that connect disciplinary content to the real world.

Research for Action brings extensive experience in connecting evaluation research to the refinement of reform initiatives. RFA is evaluating the Initiative and providing ongoing feedback to the partners so that mid-course corrections can be made to enhance the effectiveness of the reform as it unfolds. RFA is also creating a knowledge base that can be used by other education reformers around the nation as they adopt coaching as a model for professional development.

The Philadelphia Foundation brings capacity in managing large grant amounts, and in statewide monitoring and reporting of the grant money. As fiscal agent, it oversees the distribution of funds, the accounting for those funds, and all financial reports. The Philadelphia Foundation serves as the one point of contact for the management of funds both centrally and at the district level.

of the problem-solving occurred within individual partner organizations. However, each partner acknowledges the responsibility to contribute to the thinking and problem-solving process of the collective partnership.⁷⁰

At the conclusion of Year Three, the PAHSCI partners agree that they have worked well together. Clearly, there have been tensions and a few would argue varying degrees of program integration among the partners; however, all agreed that they worked collaboratively to meet the Action Plan goals restated below.

PAHSCI Partners' Action Plan Goals

1 Student Achievement:

Improving Teaching and Learning

By Year Three we see our schools using instructional coaching, curriculum back-mapping (described later in this section), and various configurations of professional learning opportunities, as well as administrator evaluations, as vehicles for embedding and institutionalizing best practices in literacy-rich classroom instruction. PAHSCI schools will support high quality instructional practices through documented increases in student-centered activities focused on reading, writing, and verbal interaction, as measured by observations, lesson plans content, curriculum revisions, assessment practices, Walk-Throughs, and surveys.

2 Sustainability:

Internal and External Ownership

Internal: Schools demonstrate a commitment to institutionalizing best practices learned by participation in instructional coaching and differentiated professional learning opportunities as evidenced by the provision of time and resources, goal orientation specified in their School Improvement Plan (SIP), and Action Plans that show a clear articulation of expectations how to implement, monitor, and assess the goals.

External: Establish the channels, distribution, methods, and content necessary to influence the educational and legislative communities, so that the core ideas and practices of the initiative garner the support needed to ensure institutionalization.

3 Leadership

District and school-based administrators will demonstrate knowledge of PAHSCI and commitment to its goals, and will provide concrete support for those goals. Project goals will be integrated and visible in protocols administrators use to evaluate teachers, in school planning documents, and in content curriculums. Multiple opportunities are made available to teachers and administrators to collaborate around teaching and learning on a monthly basis. Administrators will oversee the implementation of school schedules to facilitate the core work of the Initiative and provide venues for leadership, i.e., study groups, cross-school/district visitation, teacher-coach planning, and coach-led professional learning opportunities.

These three action plan goals guided the work of the PAHSCI leadership and partners. Reaching out to individuals, schools, the district, and the state was a critical component of PAHSCI's plan to achieve these goals. Overall, partners report that PAHSCI schools were successful in taking the learning from the Initiative, making the "interconnections" from interacting across the PAHSCI sites, all the while, making the model their own.

Schools

To varying degrees, all PAHSCI schools were experiencing challenges. These challenges included: students' poor performance on state achievement tests; achievement gaps among sub-groups, which in some examples represent the changing demographics of the student population and surrounding communities; diminishing graduation rates; and a lack of resources and social capital to tap into new waves of technology and progressive thinking about 21st-century curriculum content. In some cases, staff were aging and set in the traditional mode of teacher-centered instruction; at the other end of the experience spectrum, new staff were struggling to manage classrooms of adolescents very much disengaged from their own education. While some issues were newly minted, others were historically intractable problems reflecting achievement gaps endemic to minority populations.

⁷⁰ Internal Memo.

Demographic Differences among Schools

There are significant demographic differences among the participating schools and districts. Some serve all-minority student groupings and have ongoing historical levels of underachievement. Other schools are in rural locations that are not immune to deescalating academic achievement and students increasingly at odds with persevering to earn a high school diploma.

Range of School Focus Areas and Priorities

In Appendix G we show the focus areas that schools selected for their first-year plans.⁷¹ While many of the schools had a similar focus on increasing literacy-rich classroom instruction, there was a wide range of individual priorities. These differences in priorities presented challenges in developing collaborative learning across the participating districts. Analysis of training evaluations show that while most schools had central focus areas they wanted professional learning to concentrate on, they differed in the perceived needs regarding such areas as classroom management and data-driven instruction.

PAHSCI schools began their participation in PAHSCI with differing expectations. Prior to PAHSCI, most operated fairly autonomously, and historically were used to receiving grants and subsequently implementing them as they deemed appropriate, with or without close monitoring. PAHSCI's design — with school-based instructional coaches reinforced by content and leadership mentors who visited monthly and were expected to hold the school accountable to the model — was new to many of the schools. The depth of implementation at any particular school was influenced by its openness to change and the climate and level of the professional community.

School and District Venues for Learning

Professional Community

PAHSCI seeks to create multiple sites of learning within a school. This includes individual, small group, department-wide, and whole school settings for learning. Significantly, when well implemented, PAHSCI influenced a school's professional community for the better. As we reported in Year Two, "In many schools, PAHSCI is supporting

development of professional communities by changing professional development, creating new school-based leaders, and creating and broadening networks of support and learning within participating schools."⁷²

Overall — in interviews, surveys, and questionnaires — teachers, coaches, mentors, and administrators described increased collaboration, greater agreement on beliefs about instruction, and deeper engagement in professional learning among educators in their context.

Leadership Teams

The majority of PAHSCI participants, coaches, mentors, and administrators participated in learning together as members of a school leadership team. Several coaches report that leadership teams met more regularly during the first two years of the Initiative; however, 60 percent report that they meet regularly with both mentors and administrators using a format they characterized as leadership sessions. Frequently, coaches were participants in additional instructionally-focused planning and monitoring formats. When functional and regularly planned (which occurred regularly in 50 percent of the schools we visited), leadership teams, in the words of one coach, "provided weekly opportunities to debrief, build knowledge, and review data together."

Districts

District administrations are a vital link to schools and to the state. Kral, director of literacy coaching in the Boston public schools, shares that school and district leaders "need to deepen their knowledge, know what teachers are learning and what support they will need as they implement what they have learned in their classrooms."⁷³ Building principals take their cue from district administration and justifiably expect support from the district to put the structure and supports in place to effectively implement a new agenda. District administrators who attended PAHSCI events often worked side by side with principals and coaches, and coaches, in significant numbers, reported that this was a significant change and important to their work.

⁷² (Brown et al., 2007, 29)

⁷³ Kral, C. *Principal Support for Literacy Coaching*, www.literacycoachingonline.org

⁷¹ See Appendix G.

State-Level Leadership: Buy-In, Collaboration, Advice

PDE and PAHSCI Designers

Describing PAHSCI's progress in building leadership at the individual, school, district, and state levels, we revisit for a moment its beginning and the subsequent stages of implementation. While some of these conditions are specific to PAHSCI, they represent issues of implementation that are instructive for initiatives of this scale and scope. As the PAHSCI Theory of Change (see p. 9) indicates, the Pennsylvania Department of Education was to be the central partner, as well as the beneficiary of emerging knowledge about high school reform and instructional coaching and mentoring.

The original designers of PAHSCI reached out to key district and state stakeholders to help garner buy-in and support. However, by the end of PAHSCI's first year, few members of this original group were still in place. Two had moved across the country, and others had taken new roles that were unconnected to PAHSCI. As one of the consequences of these changes, no designated representative from PDE attended monthly partner meetings and PDE's role during the initial year was not as viable or visible as the designers intended. Understanding the importance of PDE's role, PAHSCI's leadership refocused efforts to link with PDE in Year Two, and they ultimately secured the active involvement of key personnel from PDE.

Moving beyond their ongoing responsibility for setting requirements for teachers in terms of degrees, coursework, and eligibility requirements in increasing numbers, state policy makers have been "evaluating the academic rigor required to earn a high school diploma, as well as the alignment between those expectations and the skills and knowledge needed for success in college and the workplace."⁷⁴ Pennsylvania's political leaders and educators, similar to other states across the nation, are joining forces to examine the current status of high school education. They are

asking: What does it take to graduate literate young adults ready to pursue college and/or additional post-secondary life opportunities?

The academic literacy crisis facing the nation's adolescents is well documented and it has become increasingly clear that "performing below grade level in reading and writing carries increasingly higher stakes for retention and ultimately withholding of high school diplomas."⁷⁵

PAHSCI's plan to use instructional coaching and mentoring and embedded professional learning to improve instruction in high schools across the Commonwealth complemented the growing interest in creating norms and commonalities from the existing coaching models, where appropriate. To that end, PAHSCI leadership was a vital contributor to the newly established Collaborative Coaching Board and to the development and application of learning about coaching statewide.

Collaborative Coaching Board

Starting in 2006, PAHSCI, along with other existing coaching initiatives, met monthly in Harrisburg and helped to shape a new statewide Collaborative Coaching Board which, after less than a year in operation, successfully:

- introduced common language for job descriptions and assurances for instructional coaching;
- aligned statewide initiatives with coaching components;
- created consistency among initiatives;
- developed a shared language and understanding of instructional coaching;
- standardized the roles and responsibilities for instructional coaching.

Another important board that PAHSCI leadership and consultants worked intently to form and then learn from was an advisory board of individuals from the public and private sectors.

PAHSCI Advisory Board

In October 2006, and at two subsequent meetings in 2007, PAHSCI leadership and the Annenberg Foundation convened a cross-section of public and private representatives from education, foundations, the state

⁷⁴ Lloyd, S.C. (2008, June 5). States Notch Slow, Steady Progress Toward Consistent Graduation Goals [online]. Retrieved on June 9, 2008 from <http://edweek.org/ew/articles/2008/06/05/40research.h27.html>.

⁷⁵ National Center for Educational Statistics, 2003.

legislature, and private corporations. The goals for this advisory group as outlined at the first convening included:

- Contribute to improving student achievement in preparing Pennsylvania students for their careers in the 21st century.
- Provide guidance and direction on sustainability and expansion.
- Offer suggestions and ideas on school reform.
- Support this coaching/mentoring model and help change the landscape of public education by promoting the professional development of teacher leaders.
- Optimize a public/private partnership to support public education with public funding.

PAHSCI's Theory of Change addresses the importance of ownership. Soliciting the buy-in and support of public and private advisors by establishing a board of interested individuals convinced of the value of PAHSCI was another vital link in PAHSCI's plan for sustainability. Securing political support and budgetary commitments to sustain and grow instructional coaching was an important outcome for PAHSCI. The Initiative views the state's commitment to increase funding for instructional coaching in the 2008-2009 school year as a positive sign of accomplishment.

Sustainability: Moving from External to Internal Ownership

Research on how education innovations are sustained over time shows that ownership of the reform must change hands from external actors to internal actors (i.e., district and school practitioners). Ownership requires deep knowledge of the reform and the authority to perpetuate it.⁷⁶

Recently core implementers, including coaches, mentors, and administrators, listed the following as important to sustaining the PAHSCI learning:

- Literacy practices across the content areas
- BDA lesson planning
- PLN regional and school-based trainings
- Enhanced professional community

⁷⁶ (Coburn, 2003)

- Student-centered teaching
- Collaboration across content area subject teachers

The following examples cited by partner organizations and PAHSCI leadership are also promising signs of steps to sustainability:

*Curriculum Backmapping*⁷⁷

During Year Three courses, PLN facilitators helped coaches and selected teacher leaders to write curriculum that the staff would use in the years to come. Titled PLN 20, these customized courses brought coaches, teacher leaders, and administrators together to write and update their curriculum and interject the best practices of the PLN framework. A number of groups focused on the "back-mapping" of units within existing curricula. These efforts during Year Three were extremely successful and provided a way for teachers to "open up" the curriculum and take ownership in a creative and meaningful way. The PLN leaders report that more than 50 participants across the school sites developed grades 9-12 benchmarks for writing, math, research requirements, and other subject areas. Feedback from participants was very positive, as most reported that this was a missing part of existing practices and collaboration in their schools. Participants described the process of backmapping as a practical, viable, and creative way both to address standards in the context of instruction and instructional activities and to integrate PLN frameworks and best practices into the curriculum.

Online Coach Reporting System

During Year Three, the Foundations, Inc. mentor group designed an online coach reporting system. Coaches were able to log in their schedule and use this data to reflect on their productivity. This process implemented a vehicle for mentors and coaches to communicate electronically about coaches' work. It also provides a

⁷⁷ Backmapping: Designing a program, course or unit with the end in mind. The process includes asking: What overarching understandings are desired by the end? What are the overarching essential questions? What formative and summative evidence will show that students understand? What knowledge and skills are needed to demonstrate understanding?

level of accountability, which helps administrators lobby for instructional coach funding using this record of their productivity.

Leadership Development

The learning in PAHSCI schools contributed to building leadership capacity. The work together — dialogue, action, reflection, and processes such as BDA — helped shape new perspectives on teaching and learning. Central to these various processes was well-designed communication from PAHSCI leadership and the partner organizations.

Communication

Throughout the stages of PAHSCI, communication by PAHSCI leadership and among the PAHSCI partner organizations has played a vital role in successfully launching and implementing this initiative. Communication vehicles PAHSCI leadership identified as especially valuable included:

- Monthly partner meetings
- Monthly newsletter and articles in selected publications
- Presentations (to District Boards of Education, at educational conferences)
- Lobbying efforts

Challenges to Sustainability

Impediments at School and District Level

Staff and leadership turnover, vacancies on coaching teams, rigid school structures, and inadequate time for planning and reflection, as well as fiscal and political turmoil, all contributed to less than ideal conditions for implementing this reform. Drilling down the information of a district's initial questions and enabling conditions upon joining the Initiative, one can identify early indicators of tension between the Initiative's goals and district goals. For example, one school district that opted out at the end of the second year began with very bounded ideas of *how* to participate, *what* would be the role of coaches, and *who* the school and district leadership would listen to and collaborate with. This district's main reason for participating was to improve its students' math achievement scores on the state testing, and they had a set of beliefs regarding what the coaches

needed to do to make that happen. After repeated attempts at compromise and efforts to negotiate a more expanded leadership role for their coaches failed, it was determined that the two schools and the district would not continue into Year Three.

Funding and Other Key Challenges

From PAHSCI's inception, evaluation events were replete with individuals asking: *What happens when the funding runs out?* Indeed, funding heads the list of factors cited by participants as the greatest challenges to sustainability. These include:

- Funding and resources
- Change in leadership or attrition of the central implementers
- Technical assistance
- Expanding the ownership
- Administrative buy-in and accompanying support for instructional coaching
- Time (i.e., time built into the schedule for one-on-one work with a coach that includes the full BDA Consultation Cycle)
- Honing the skills of coaches: helping coaches grow in the later stages of implementation and meet any new and unanticipated challenges.

Participant Enthusiasm

Some participants were as positive as the building administrator quoted at the beginning of this section:

We're blazing a new frontier here, especially in breaking down walls that have been built in high schools over the years. We are getting teachers to interact more with other teachers and to get students to become more engaged with what they are learning. Trying new practices in education — you don't usually have that in high schools. We need to get away from just sit and lecture.

Others, however, were less enthusiastic as they are significantly influenced by the ongoing challenges of finding funding for coaches, improving achievement of disengaged urban learners, teacher resistance to sustainable change, and district leadership who, for a complex set of causes, do not place

PAHSCI high on their priority list. Nonetheless, it is a striking outcome that to an individual, participation in PAHSCI is overwhelmingly given high marks by front-line implementers.

On the Move: Fourth Year Transitions

As this report goes to press, the Initiative is forging ahead and providing a much requested transitional fourth year. With continued support from the Annenberg Foundation and state budget funding, PAHSCI will sponsor a State-wide Coaching Institute to help train and support existing and new participants. PAHSCI will partially fund coaches at 12 of the existing PAHSCI sites and four new sites, and provide professional learning events and learning tools to several new schools and districts. Significantly, PLN and Foundations, Inc. leadership report that many of the lessons learned during these three years are being put to use in this next strategic stage of instructional coaching and mentoring.

Summary

In this section we discussed how the components of the PAHSCI design worked to influence the leadership and learning of individuals, organizations, and the state.

- **The concept of linking people, resources, and practices is at the heart of the PAHSCI model and a key element in its success. Linking will also be important in sustaining the Initiative.**
- **For individuals — teachers, coaches, mentors, points of contact, administrators — PAHSCI participation offered new opportunities for collaboration, as well as new leadership roles.**
- **For organizations — partners, schools, leadership teams, districts, advisory boards, and the Pennsylvania Department of Education — PAHSCI in many ways represented a new paradigm of partnering.**
- **“Ownership” of the reform needs to shift from external to internal stakeholders, and there are signs that this is happening.**
- **Participants cite the greatest challenges to sustainability as funding and change in leadership or attrition of central implementers.**

In the final section, we highlight the four developmental stages of implementation, revisit the Theory of Change, and provide lessons from PAHSCI.

Section 6 Lessons from PAHSCI

PAHSCI has been successful in helping us to support teachers in terms of eventually getting the best possible classroom instruction. That support comes in many ways — use of data, understanding effective instructional strategies, and just helping people develop into the best possible teachers that they can be.

—Building Administrator

- **What lessons does the PAHSCI story reveal about efforts to change high school instruction?**
- **What were critical components of PAHSCI’s developmental stages?**
- **What are the large-scale and small-scale lessons from PAHSCI about instructional coaching in a statewide effort?**

Against the backdrop of disappointing academic achievement in Pennsylvania high schools, as well as failure to make Adequate Yearly Progress (AYP) as mandated by the federal *No Child Left Behind*, the PAHSCI project set out to meet the challenges of inadequate student performance by improving teacher quality. Prioritizing the need for high school teachers to “show, demonstrate, and make visible to students how literacy operates within the various academic disciplines,” the PAHSCI model features instructional coaching, mentoring, and job-embedded professional learning to support teachers across the content areas in creating literacy-rich classrooms and student-centered instruction.⁷⁸

As RFA has noted in three years of reports, participating PAHSCI schools began this Initiative at different points along a continuum of challenges and needs. In all of the sites, however, there was a need to involve students more in their own learning and to shape a more coherent set of tasks and activities that students performed throughout their day. Significantly, most of the front-line implementers (coaches, mentors, administrators) we interviewed and teachers we observed and interviewed cite improvements in the professional culture and daily aspects of how teachers teach and students learn. Teacher leaders emerged who helped to spread best practices and contribute to a professional community more focused on sharing and discussing how to improve student performance.

Although no school can claim that these changes have touched 100 percent of staff and students, most schools can point to a critical mass of teachers who have improved and show every intention to continue the progress they have made — especially in crafting les-

sons that increase student engagement. Also highly significant, administrators, coaches, and mentors report “the opportunity to share and learn with professional colleagues” as one of the most beneficial components of PAHSCI.

PAHSCI is a rich case study of a statewide high school reform initiative. In this final section we highlight key lessons that educators and policy makers contemplating investments in instructional coaching can take away from the PAHSCI model. We start by briefly reviewing the developmental stages of PAHSCI and key questions that the Initiative sought to ask and answer at each stage.

The Developmental Stages of PAHSCI

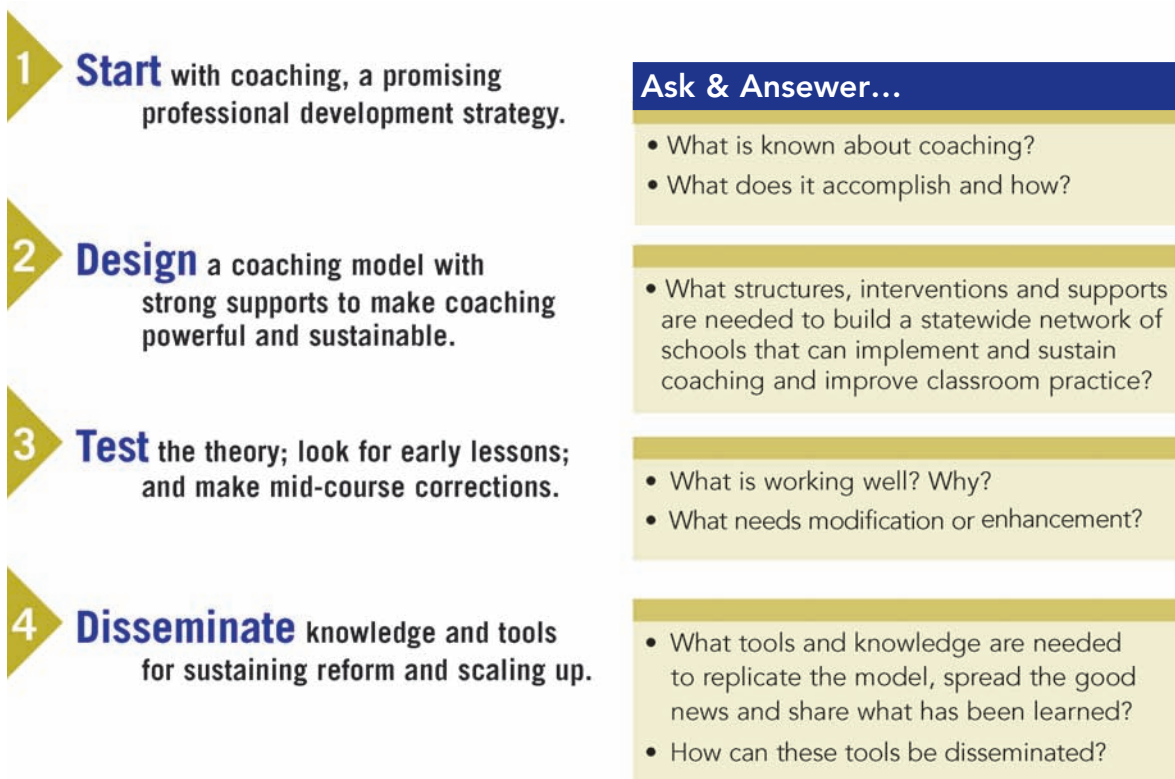
The PAHSCI model met a need to immerse students in literacy-rich, student-centered instruction to improve their ability to speak, think, and ask questions using high-level skills. In order to meet this need, teachers received professional development training as they worked with coaches and colleagues to hone their own instructional skills and enhance their understanding of student engagement and learning. Figure 4 outlines the four broad developmental stages involved in this research-based, statewide coaching model.

As the four stages depict, PAHSCI started by researching and clarifying the potential of coaching to meet the outcomes sought. A second critical stage was designing a coaching model that adequately addressed identified needs; in this case, those needs included not only improving classroom practice, but building a statewide network of schools that could more powerfully implement and sustain change. Implicit in this stage was also the development of the “theory of change” at the heart of the model, identifying inputs, processes, and expected outcomes (see the PAHSCI Theory of Change, p. 9). In the third stage, the model

⁷⁸ (National Council of Teachers of English, 2004)

Figure 4 The Four Development Stages of the Pennsylvania High School Coaching Initiative

A Research-Based, Statewide Coaching Model



and its Theory of Change were tested during implementation by gathering formative data and making mid-course adjustments as needed. Finally, the knowledge gleaned from the Initiative is being used to craft and disseminate tools and protocols for both sustaining the reform and scaling up the practices.

Revisiting the PAHSCI 2008 Theory of Change

The PAHSCI 2008 Theory of Change illustrates the basic hypothesis that training and supporting a cohort of coaches to provide school-based job-embedded professional learning featuring research-based literacy practices and data analysis will improve student achievement. An essential component of the coaches' role was to provide one-on-one coaching and leadership in helping to shape teachers' professional learning as well as contribute via participation on leadership teams to the overall examination of and support for learning and achievement throughout the school.

In this Year Three Report RFA's analysis highlights the Initiative's progress in moving in a positive direction towards the Intermediate Outcomes, in particular: strengthened professional community, leadership development and changes in teachers' use of literacy-rich strategies for student engagement. However, it is difficult to establish a quantitative evidence-based link to the long term outcome of improved student achievement.

Among the many reasons it is difficult to establish an evidence-based link from coaching to improved student achievement the following two are most salient:

- Flexible implementation, in other words, participating schools directed coaching support to particular groups, i.e., 9th-grade academies, new or struggling teachers, and not school-wide to every teacher.
- The Research Design was redirected and the commissioned quantitative research does not show a significant relationship between coached teachers and improved student achievement.

There is an underlying assumption that improved student engagement will lead to improved student achievement and while we were able to document increased student engagement related to teacher practice, i.e., the use of research-based literacy strategies, we do not have evidence to make the leap to claim that this increased student engagement will result in improved student achievement.

We should point out that some PAHSCI schools showed improvement in state assessments and in those examples, administrators report that having the coaching teams influenced these gains in achievement.

Next, we want to pinpoint three positive findings connected to the Theory of Change.

PAHSCI was successful in linking learning and contributing to a statewide model informed by best practices of coaching at the secondary level.

Connecting educators across the state and providing numerous opportunities for individuals who work with diverse student populations to build leadership capacity as they learned together using a set of research-based literacy strategies that could span the content areas contributed to strong growth towards the Intermediate Outcomes.

Strong partner collaboration and Initiative support resulted in strong affirmation from the front-line implementers, coaches, mentors and administrators that this Initiative met their needs to improve teaching and learning.

And finally, we want to emphasize that the PAHSCI model was well-designed, however, the flexibility allowed to schools in how to target the work of coaches makes it difficult to measure outcomes. Going forward, a strategy to address effective and consistent implementation, a research design well-matched to the components of the Initiative, establishing clearly measurable outcomes are highly recommended.

Key Lessons

Lesson One

PAHSCI's plan — to take on large-scale change across diverse statewide sites with an eye to sustainability — was a huge and complex undertaking.

The well-conceptualized design and ongoing reflection and adaptations of PAHSCI leadership and partners were crucial to its success. However, PAHSCI's ability to fully achieve the impact it sought was influenced by the enormity of the task.

Establishing a shared vision and goals, and "branding" PAHSCI across its multiple partners and stakeholders, were important components of its implementation. Partner organizations, well respected in their own fields, were strongly encouraged to operate under the PAHSCI brand or umbrella as they provided training and support.

Negotiating buy-in was an ongoing process, as participants changed but the principles and goals did not. The frequent opportunities for participants to come together and learn about one another's work helped individuals stay connected to PAHSCI's goals and to each other. The three-person mentor teams helped to orient new participants and negotiate ongoing buy-in.

It was important to continuously clarify that the focus of PAHSCI was classroom instruction. The mentor teams and PAHSCI leadership were frequently able to intercede when coaches were overloaded with administrative tasks not related to classroom instruction.

PAHSCI has significantly contributed to a statewide agenda to align coaching models. The Collaborative Coaching Board, chaired by a representative from PDE, is actively shaping how instructional coaching is implemented and monitored across the Commonwealth.

Lesson Two

Instructional coaching requires coaches to utilize a complex set of skills, talents, and abilities as they work within a specific school and district context.

PAHSCI partners helped coaches keep learning how to be a coach and as a result, both partners and coaches built their own capacity to adapt, adjust, and learn as challenges emerged. PAHSCI's use of the PLN framework, a concrete set of literacy-rich, student-centered strategies, contributed to a shared vision among coaches and the partners who supported them.

Relationships are important and must be negotiated and renegotiated across the stages of implementation. Key relationships include those among coaches, administrators, teachers, and mentors, as well as within the coaching team.

Because they work across traditional high school boundaries (content area, administrator-teacher, grade level) coaches are well positioned to help catalyze schoolwide change. As coaches help foster a common instructional language and shared literacy practices, they also help develop greater intellectual coherence across the school. Coaches can help connect differently positioned educators to the common goal of student achievement, can help connect work at the classroom level to larger school goals, and can support educators in using classroom and school level data in this effort.

Lesson Three

The PLN framework as a set of strategies to address adolescent literacy and student performance was applicable across content areas.

It was significant that instructional coaches worked with teachers across the content areas using a common instructional language and set of research-based best practices. More often than not, high school content area teachers do not agree on a set of best practices to increase student performance. The research-based literacy-rich strategies represented by the PLN framework were open-ended and able to influence how teachers planned and delivered instruction across PAHSCI classrooms.

Student needs and how to address them became the norm of professional work together. Staff and administrators' professional behaviors that focused on instructional practice increased as they learned and used the PLN framework to deliver, and monitor the delivery of, instruction.

Teachers working collaboratively with coaches and peers are connecting which practices increase students' engagement and involvement in their own learning. In a number of schools, teacher interaction and planning across content areas was enhanced by the common language and strategies they shared through the PLN framework.

Lesson Four

There are identifiable factors which support and impede sustainability.

The PAHSCI model attempts to interrupt teachers' inclination toward superficial change, and to move them toward transforming fundamental classroom norms and routines. The effort to transform rather than simply improve requires deeper personal engagement of teachers, thereby generating the potential for more lasting change.

The combination of coaching and PLN training appears to be central to PAHSCI's role in supporting sustainable change. Whether the PLN training takes place in a regional or site-based context (and optimally when teachers experience both), it is the combination of high quality training with ongoing coaching that enables the changes in instructional practice to take hold at the classroom, department, and school level.

Participants cite the greatest challenges to sustainability as funding and change in leadership or attrition of central implementers. Other ongoing challenges to sustainability include providing adequate time for training, coaching, and new instructional preparation; some teacher resistance to change; and district leadership that, for a complex set of causes, do not place PAHSCI high on their priority list.

Lesson Five

PAHSCI front-line implementers (teachers, coaches, partner organizations, and mentors) adopted innovative strategies to cope with contextual difficulties and diverse needs.

The high degree of interaction among participants, as well as ongoing observation and feedback mechanisms, helped identify issues early. Contextual difficulties such as time constraints, teachers' aversion to change, and the possibility of contrived collegiality and surface-level implementation, were able to be acknowledged and addressed. Even when issues could not be fully resolved, their recognition and attention helped prevent them from becoming more significant impediments.

When the issues were training-related (e.g., skills gaps in coach), PAHSCI partnering organizations were highly responsive. By making mid-course corrections to address challenges coaches experienced (such as literacy in math classrooms and special needs

learners), the PLN facilitators and Foundations mentors continuously revamped the training to meet gaps in skills and support the school-based coaches.

Designing the Initiative to include players on the inside (teachers, coaches, administrators) and outside (mentors, PLN facilitators, RFA researchers) contributed to the possibility for homegrown contextual adjustments, while at the same time providing broader insights and greater accountability. Inside participants traveled to other sites, for example, and mentors shared stories that insiders were eager to hear about “how they handle these challenges at another PAHSCI site.”

Lesson Six

The development of a stronger professional community and new leadership opportunities were significant outcomes of PAHSCI — for individuals, organizations, and at the statewide level.

PAHSCI has created a more cohesive professional community within and among participating individuals and organizations — and this, in turn, has helped create and sustain the successes of the Initiative. Shared vision and goals, a common language developed by the PLN framework, and the high degree of collaboration and communication built into the model all have contributed to building professional community.

The emergence of new leaders and leadership roles, especially among coaches and teachers, has proven an added positive outcome. As a result of their engagement with PAHSCI, coaches, teachers, mentors, and others have developed new skills and discovered new opportunities to exercise personal leadership — in classrooms, departments, schools, and districts. For many, PAHSCI has renewed their enthusiasm for teaching and given new direction to their careers.

Educators and policy makers can turn to PAHSCI as a model for regional and statewide efforts and to PAHSCI participants as experienced resources. The knowledge gained over the past three years can and should be harvested and shared, to the advantage of PAHSCI and other educational initiatives across the state — and to the ultimate benefit of all current and future students.

Concluding Notes

In education, the persistence of the same old problem is famous. Successive waves of school reform, though not nearly as ineffectual as they are often portrayed, have failed to fully realize the improvements they promised, and many staff development programs have developed teachers’ cynicism more than their expertise. The typical pattern when reforms fail has been to blame teachers rather than designers; it now appears, however, that the designers’ assumptions are often at the core of the chronic failure of change efforts.⁷⁹

The PAHSCI model was designed to respect the enormously challenging role that teachers shoulder; to improve student learning by improving instructional practice through supportive teacher training and coaching; and to be responsive to differences in individuals and situations. We believe that it bodes well for the upcoming transitional year that such a large percent of the front-line implementers and teachers we met say that they “think that this PLN thing works!”

Lambert reflects in *Building Leadership Capacity in Schools*: “We need to know each other as whole individuals: as colleagues, friends, parents, and citizens. It is through these relationships that we can understand and respect each other’s experiences, values, and aspirations. Within such authentic relationships, our self-concepts and world views nestle and evolve.⁸⁰”

This Year Three Report highlights PAHSCI teachers and coaches building trust and collaboration, and demonstrating their ability to make substantive changes in their own instructional practices by placing student engagement and achievement at the center of the learning. The reflective practices built into PAHSCI — of reviewing and fortifying what has been learned — will now go far in helping them continue to dismantle the silos of isolation and engage adolescents across the public high schools in the Commonwealth of Pennsylvania.

⁷⁹ Evans, p.9

⁸⁰ This strategy appeared in classroom observations and teacher interviews; it was not on the survey given to teachers.

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Appendix A Participating Districts and Schools 2007-2008

District	High School	Student Population
Bellwood Antis	Bellwood Antis	Medium
Erie City	Central	Medium
	East	Medium
	Strong Vincent	Small
Harrisburg	Harrisburg	Medium
	SciTech	Small
	William Penn	Small
	Career and Technical Academy	Small
Hazleton	Hazleton Area	Large
Intermediate Unit 1	Burgettstown Area	Small
	Charleroi	Small
	Jefferson Morgan	Small
	McGuffey	Small
	Mapletown	Medium
	Uniontown Area	Medium
	Albert Gallatin Senior	Medium
Keystone Central	Central Mountain	Medium
Lancaster	J. P. McCaskey	Large
	McCaskey East	Medium
Philadelphia	Germantown	Large
	Simon Gratz	Large
	Abraham Lincoln	Large
	William Penn	Medium
Reading	Reading	Large
		<i>Small = 900 or less</i> <i>Medium = 1,800 or less</i> <i>Large = over 1,800</i>

Appendix B Research Methodology

In Year Three of PAHSCI, Research for Action made major departures from its original research design in response to the Initiative staff's need for a qualitative research effort that would be aligned with a quantitative analysis conducted by Success for All. The goal of this combined research effort was to link student achievement gains to qualitatively derived "treatment dosage" and "level of implementation" scores for individual teachers in PAHSCI schools. In addition, Initiative staff believed that an in-depth focus on the PAHSCI mentoring process was needed to establish the contribution of mentoring to the overall goals of the Initiative.

In order to pursue these goals within existing resources, it was necessary for RFA to abandon the teacher survey that it had conducted in the first two years of the project in order to observe in a sufficient number of classrooms for the quantitative analysis. These major shifts are in the tradition of Patton's caution to evaluators, "...there are no perfect research designs. There are always trade-offs. Limited resources, limited time and limits on the human ability to grasp the complex nature of social reality necessitate trade-offs."⁸¹

Below, the major qualitative data collection and analysis activities of the Year Three research are discussed.

School Site Visits

Fall/Winter 2007-2008

In Fall/Winter 2007-2008, RFA researchers conducted fieldwork in nine schools to establish the "treatment dosage" and "implementation level" scores of tenth and eleventh grade English and math teachers. During the site visit at each school, researchers observed a lesson by each of the teachers in the designated grades and subjects and conducted a 20-45 minute follow-up interview with each teacher. RFA staff also collected and reviewed documents collected at school sites including sample lesson plans and curriculum materials from the teachers. In total, we observed 102 classrooms and interviewed 109 teachers. In addition, we interviewed the instructional coaches who had worked with those teachers about their work with each teacher.

The data from the Fall round of research is reported primarily in Sections Two, Three and Four.

Spring, 2008

In Spring, 2008, RFA researchers conducted fieldwork in eight schools to document and assess the mentoring process. In each of these schools, researchers interviewed the instructional coaches, school administrators, district administrators, and the PAHSCI mentors. The interviews were semi-structured and lasted from 45 to 90 minutes.

For this report, RFA created analytic codes for transcribed interviews and the software program Atlas.ti. was used to create a series of analytic themes or descriptive families. Data within the descriptive families were then analyzed to further identify patterns and themes. The data from the Spring round of research is reported primarily in Sections Two and Five. Future reports on mentoring by other research groups will also draw from the data collected by RFA.

Documentation and Evaluation of PAHSCI Project-Wide Events

RFA attended all project-wide PAHSCI professional development sessions including the June 2007 centralized course sessions, the October statewide Networking, the November 2007 Administrator Retreat, and the December 2007 and May 2008 Networking sessions. RFA staff attended large and small group sessions and wrote up fieldnotes from their observations.

RFA administered written evaluations at the centralized trainings and at the networking sessions. The evaluations asked participants to rate the usefulness of various sessions and gave them the opportunity, through open-ended questions, to provide further feedback, including suggestions for future sessions. Evaluation responses were scanned; scaled responses were calculated through SPSS software; and themes in the open-ended responses were identified and coded. The participant feedback was analyzed immediately and shared with partner organizations to inform the planning of future events.

The following is a list of the events documented by RFA researchers:

- June 2007 Centralized Training
- October 2007 Networking
- November 2007 Administrator Retreat
- December 2007 Networking
- Collaborative Coaching Board Sessions 2007
- Fall and Winter 2007-2008 Site Visits
- Spring 2008 Site Visits

⁸¹ Patton, M. (2002). *Qualitative Research & Evaluation Methods* (Ed) 3. Sage Publications. Thousand Oaks, London, New Delhi

Appendix C Highlights from Year One

Promising InRoads: Year One of the Pennsylvania High School Coaching Initiative

September, 2006

The Need: School districts around the nation are searching for ways to improve student achievement as they strive to meet the ambitious goals of No Child Left Behind and help all students reach high standards. Nowhere is this task more daunting than in high schools where significant numbers of students live in poverty, come to school with special learning needs and are disaffected and disengaged.

The Initiative: The Pennsylvania High School Coaching Initiative (PAHSCI) uses instructional coaching to address the literacy and math needs of adolescents in high-need high schools in Pennsylvania. Coaching has been identified by researchers as a promising professional development strategy because it embeds professional learning in the daily work that teachers do in their classrooms. The PAHSCI design places one literacy and one math coach for every 600 students in 26 high schools across the Commonwealth.

Findings

The Coaches: PAHSCI coaches were, by and large, veteran teachers with an average of 17.5 years of teaching experience. Notably, two-thirds of the coaches came to their new role directly from classroom teaching. Site-based hiring, recent classroom experience and veteran status earned coaches credibility with their teacher colleagues. Teachers expressed admiration for coaches' knowledge. Seventy-one percent agreed or strongly agreed that "My coach has a strong understanding of the needs of the school," and 71 percent agreed that "My coach has a strong understanding of the PLN framework."

Building Rapport and Trust: Coaches understood that their work was very much about building relationships and that establishing rapport is a precursor to facilitating instructional change.

Changing the Mind Set about Professional Development: School leaders began to see the value of more intensive and focused professional development. As a result, they created more time for professional development and for coaches to meet with teachers.

Struggling with Role Ambiguity: Not surprisingly, in the first year of implementation, PAHSCI coaches struggled to define their role and articulate that role to others. Numerous coaches reported that their administrators and, consequently, the entire staff did not understand their role. However, coach/teacher interactions increased in frequency over the course of the year, as did coaches' facilitation of study groups and professional development sessions — both encouraging trends. Coaches reported that their partner coaches were their strongest source of support.

Professional development around the PLN framework with related instructional activities and follow-up conversations with an instructional coach were correlated with teachers' adoption of new instructional strategies that engaged students in rigorous literacy activities. Teachers who participated in professional development sessions or worked with a coach were significantly more likely to use PLN strategies for integrating reading, writing and oral communication into the content areas and actively engaging students in their learning.

Recommendations

Extend and deepen changes in classroom practice:

- Help teachers examine data (including student work) and reflect on their implications for changes in classroom practice.
- Implement study groups that bring teachers together to examine classroom practice by focusing on student work.
- Develop a comprehensive strategy for promoting writing in the content areas.
- Attend to the specific needs of math coaches and math teachers within the Initiative, as well as the needs of specific students, e.g., ELL and special needs.

Build the enabling conditions:

Provide professional development for administrators to strengthen leadership for change and opportunities for administrative problem solving across districts about common challenges.

Focus the work of the leadership mentors on the alignment of classroom practices with the PLN framework.

Appendix C Highlights from Year Two

Making A Difference: Year Two Report of the Pennsylvania High School Coaching Initiative

September, 2007

The Initiative's Theory of Change:

The PAHSCI design is comprised of three components working within a Theory of Change to improve instruction and student achievement. The three components are:

- instructional coaching for teachers with leadership and content mentoring for coaches and school administrators;
- the PLN framework, a research-based framework for incorporating literacy instruction across the disciplines; and
- professional development for coaches, administrators, and teachers.

Together these three components work together to affect three school level intermediate outcomes: leadership development, stronger professional communities, and deep ownership of PAHSCI by external and internal actors. At the classroom level, three additional intermediate outcomes occur: literacy-rich student-centered instruction, actively engaged students, and teachers skilled in research-based instructional strategies. The long term outcome of improved student achievement occurs when the program components create the intermediate outcomes needed to accomplish this ultimate goal.

Findings

Changing Instructional Practice:

PAHSCI is making a difference. Participating teachers across the subject areas are working with coaches and using PLN strategies, offering more opportunities for students to read, write, and speak as a way of more deeply engaging them in the ideas and skills of the subject content. Not surprisingly, the more highly involved a teacher, the more competently (s)he implements the strategies and incorporates the principles of the framework into his practice. In-depth professional development on the PLN framework combined with the side-by-side support offered by instructional coaches are catalyzing teacher change in the very ways intended by program designers.

Increasing Student Engagement In and Responsibility For Their Learning:

When teachers adopt the PLN strategies, their students are taking more active roles in the classroom and assuming more responsibility for their own and their peers' learning — quite an accomplishment, given statistics on adolescents' disengagement, especially the dismal data on high school drop-out rates in schools with large numbers of low-income students. Increased student engagement is also promising as an early indicator that may lead to improved student achievement.

Improving School Professional Culture:

In many schools, PAHSCI is supporting development of professional communities by influencing how teachers learn together, creating new school-based leaders, and broadening networks of support and learning within schools. Because of PAHSCI, many school leaders are rethinking their conceptions of professional development. They value the job-embedded professional learning model provided by instructional coaching and they are offering increasing numbers of participating teachers the opportunity to lead professional development about PLN strategies. The PLN framework is providing a common language and set of principles for planning and reflecting on instruction. Advocates for instructional coaching and the PLN framework are increasing.

Challenges

In order for PAHSCI's program goals to be achieved, all stakeholders must work together to overcome the challenges that can impede progress towards sustainability. These challenges included:

- inadequate time for coaching;
- the critical importance of strong administrative support for instructional coaching;
- the need for continued resources; and
- a statewide commitment to instructional coaching beyond Year Three.

Recommendations

District and School Leaders must encourage teachers, especially math teachers, to participate in PLN courses and one-on-one coaching, the surest pathway to improved instructional practices. They must find the time

necessary for coaches to work with teachers in the meaningful ways described in the *BDA consultation cycle*.

Coaches must continue to hone their skills in order to address teachers' concerns about: 1) meeting the needs of all students especially those with special learning needs and 2) strategies for classroom management when using PLN learning activities. They must also make full implementation of the *BDA consultation cycle* a priority.

Mentors must support coaches in their learning and work with school leaders (including coaches) to remove the persistent obstacles that undercut coaches' work and teachers' continued learning. Mentors should reinforce PAHSCI's belief that all high school teachers are teachers of literacy. An important focus should be the *BDA consultation cycle*. Mentors are uniquely positioned to align the work of administrators and coaches with the goals of PAHSCI and to address the tensions that arise among key players and that can stymie momentum for change.

Lessons:

- Tie the work of coaches to helping teachers adopt research-based instructional strategies.
- Make one-on-one work with teachers a high priority and use a consultative process that involves conferencing before and after a classroom visit.
- Make certain that there is a clear, shared understanding about the role and responsibilities of coaches.
- Assign more than one coach to a school and intentionally build a coaching team.

Appendix D Penn Literacy Network Strategies

Brief Descriptions from Penn Literacy Network copyrighted material

- 1 **BACK TO TEXT:**
(see SUMMARIZING)
- 2 **CHOICE IN ASSIGNMENTS:**
Provide choices for students; negotiated choices for writing.
- 3 **CHUNKING:**
Taking apart pieces of any text and grouping them into manageable learning segments. All are strategies to improve comprehension of text.
- 4 **CRITICAL READING:**
Rereading activities/going back to the text, enabling students to infer correctly; strategic reading.
- 5 **DO NOWS:**
Type 1/Type 2 writings — often used to model and guide student responses; usually stimulate interest.
- 6 **DOCUMENT REVIEW:**
Activity to celebrate, understand and instruct using student writing samples.
- 7 **FCA'S:**
Focus Correction Areas used to simplify quality feedback and focus student writing. (Specific areas to be corrected: For example — punctuation, varied sentence structure, spelling.)
- 8 **GUIDED LECTURE PROCEDURE:**
Before/During/After experiences using structured overviews, Cornell note-making, processing of key words, and questions to guide and understand lectures.
- 9 **I-SEARCH:**
Personalized, streamlined research across content areas.
- 10 **JIGSAW/EXPERT JIGSAW:**
Cooperative Learning Task — Chunking text in expert groups and home-group/sharing teams. Students become expert in one area and share their knowledge with home group. This is a complete BDA experience.
- 11 **JOURNALISM/FREE WRITING:**
Connecting students' ideas to classroom contexts.
- 12 **KEY TERM:**
Before reading — choose one key term from the reading. This requires students to write and connect their feeling about term. This is a predictive/reflective type of writing experience.
- 13 **KWL:**
Structure/graphic organizer for connecting the new to the known through an active learning process.
- 14 **LITERATURE CIRCLES:**
Activity to provide motivation and choice in student reading by assigning roles to individual members of cooperative groups. This activity enhances comprehension of a novel through group dynamics.
- 15 **MENTAL IMAGING:**
Making a "mind picture" using verbal clues as a descriptive tool.
- 16 **NOTE-MAKING:**
Double entry/Cornell note-making — requires students to connect, question, and interact with text. (For example — Key terms on left. Main ideas and questions on right)
- 17 **ON DEMAND PROMPTS:**
Type 3 writing assignments tied to instruction.
- 18 **PAIR/SHARE:**
This during activity requires students to read (together) and discuss their understanding of the text. They share their understanding of the text (during the paired reading) and go back and forth in their discussion, stopping to discuss and make connections with the text.
- 19 **PARAGRAPH FRAMES:**
A type of model and checklist used to assure that all components of a well-written paragraph are present.
- 20 **PARAPHRASING:**
(see SUMMARIZING)
- 21 **PERFORMANCE ASSESSMENT:**
A method of assessing student understanding and application of material. It requires students to demonstrate that they have mastered specific skills and competencies by performing or producing something.
- 22 **POINT OF VIEW REWRITE:**
Rewritten retellings from a particular character's point of view.
- 23 **PREVIEWING AND PREDICTING:**
For all content areas — using student's prior knowledge to focus, motivate, and provide interest.
- 24 **READ ALOUD THINK ALONG:**
Teacher and student modeling, oral reading of questions and connections about text.

25 REFLECTIVE WRITING:

This is a before activity which asks students to connect with the text before they transact with text, enabling students to tap prior knowledge.

26 REVISION AND PEER REVISION:

Used in Type 3, 4, and 5 writing assignments and includes one-foot voice, partner read-alouds, as well as individual revision.

27 RUBRICS:

Criteria for assessment and teaching. Can include teacher-made or student-made assessment; benchmarks for scoring.

28 SELF-QUESTIONING:

BDA activity, with students creating questions that may be answered from text.

29 SUMMARIZING:

(Strategies 1, 20 & 25) After reading activities to improve comprehension, understanding and connection to materials.

30 TEMPLATES:

(Same things) These are used to model and guide student responses.

31 TEXT RENDERING:

During activity requiring students to go back to text, evaluate and choose key sentences, phrases, and words to express the main idea or make connections. This can be done orally in a large/small group and/or in writing.

32 TICKET OUT THE DOOR:⁸²

Type 1/Type 2 writings — often used to model and guide student responses; usually summarizing or reflecting. Students turn in as they leave the classroom.

33 TRANSACTING WITH TEXT:

Constructing meaning from text and applying student-text-context interactions.

34 WORD SPLASH:

Choose keywords and phrases from a story; requires students to use these words in a creative writing piece before reading the text. Key issue: Limit the number of words; this is a prediction task also.

TYPE 1-5 WRITING:**35 Type 1: Capture Ideas**

Writing that has no correct answer — or, if there is a correct answer, it's okay to guess. One draft.

36 Type 2: Respond Correctly

Writing that makes a point — has correct answer or content. One draft.

37 Type 3: Edit for FCAs

Writing that is read aloud and reviewed by the author who then asks three critical questions: Does it complete the assignment? Is it easy to read? Does it fulfill the focus correction areas? One draft.

38 Type 4: Peer Edit for FCAs

Writing that is Type 3 writing and has been read aloud and critiqued by another. Two drafts.

39 Type 5: Publish

Writing that is publishable, that can go outside the classroom without explanation or qualification. Multiple drafts.

⁸² This strategy appeared in classroom observations and teacher interviews; it was not on the survey given to teachers.

Appendix E Visitation Rubric

PAHSCI Classroom Visitation Rubric, Fall 2007

District _____ School _____ Teacher _____ <i>Race</i> _____ <i>Years of Teaching</i> _____ Grade & Subject _____	TOTAL # of STUDENTS <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Female</td> <td style="width: 50%;">Male</td> </tr> <tr> <td>_____ African</td> <td>_____ African</td> </tr> <tr> <td>_____ American</td> <td>_____ American</td> </tr> <tr> <td>_____ Asian American</td> <td>_____ Asian American</td> </tr> <tr> <td>_____ Caucasian</td> <td>_____ Caucasian</td> </tr> <tr> <td>_____ Latina</td> <td>_____ Latino</td> </tr> <tr> <td>_____ Other</td> <td>_____ Other</td> </tr> </table>	Female	Male	_____ African	_____ African	_____ American	_____ American	_____ Asian American	_____ Asian American	_____ Caucasian	_____ Caucasian	_____ Latina	_____ Latino	_____ Other	_____ Other
Female	Male														
_____ African	_____ African														
_____ American	_____ American														
_____ Asian American	_____ Asian American														
_____ Caucasian	_____ Caucasian														
_____ Latina	_____ Latino														
_____ Other	_____ Other														

Physical Description of Classroom	
Arrangement of Desks	_____
Student Work/Visual Aids	_____
Decorations	_____
Other	_____

PLN Strategies Observed in Lesson (Please List)

PEDAGOGY	LEVEL ONE (Low)	LEVEL TWO (Mid)	LEVEL THREE (High)
<i>Circle all of the criteria you observed.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Teacher-Centered Direct Instruction</i>	Evidence of 0-2 criteria	Evidence of 3-5 criteria	Evidence of 6-7 criteria: 1. Communicates a clear lesson objective 2. Connects & builds on prior knowledge including students' cultural knowledge 3. Teacher-centered direct instruction is no more than 15 - 20mins. 4. Gives students opportunity to clarify understanding 5. Lesson content is appropriately challenging 6. Utilizes various modes of teaching to address students with different learning styles (e.g. use of graphic organizers and other resources) 7. Models and demonstrates
<i>Instructional Activities</i>	Evidence of 0-1 criteria	Evidence of 2-3 criteria	Evidence of 4 criteria: 1. Students given opportunity to apply what was taught & to produce authentic work 2. Purpose of activity is aligned with lesson 3. Opportunity for student-to-student interaction with material/text 4. Activity is appropriately challenging
<i>Assessment/Reflection</i>	Evidence of 0-1 criteria	Evidence of 2-3 criteria	Evidence of 4 criteria: 1. Students given opportunity to report out 2. Students respond to one another's reflections 3. Teacher highlights an aspect of student work to reinforce or extend learning 4. Assessment of student knowledge informs instructional planning (use as follow-up interview question)

FACILITATION OF LEARNING <i>Circle all of the criteria you observed</i>	LEVEL ONE (Low) <input type="checkbox"/>	LEVEL TWO (Mid) <input type="checkbox"/>	LEVEL THREE (High) <input type="checkbox"/>
<i>Classroom Management</i>	Evidence of 0-2 criteria	Evidence of 3-4 criteria	Evidence of 5 criteria: 1. Teacher sets a tone that is highly supportive of student learning (teacher affect & expectations) 2. Classroom processes show well developed routines, clear directions, and smooth transitions 3. Evidence of student-to-student; student-to-teacher cooperation 80-100% of the time 4. Support for elaboration of student thinking 5. Students are encouraged to listen and learn from one another
<i>Teacher Behaviors</i>	Evidence of 0-2 criteria	Evidence of 3-4 criteria	Evidence of 5 criteria 1. Teacher uses scaffolding to build on and extend student knowledge 2. Teacher finds way to engage students at all levels 3. Teacher behavior is responsive and respectful to students 4. Teacher actively models and shares the value of learning the content 5. Teacher demonstrates appropriate response to problematic behavior
STUDENT ENGAGEMENT <i>Circle all of the criteria you observed</i>	LEVEL ONE (Low) <input type="checkbox"/>	LEVEL TWO (Mid) <input type="checkbox"/>	LEVEL THREE (High) <input type="checkbox"/>
<i>Student Activities</i>	Evidence of 0-2 criteria	Evidence of 3-6 criteria	Evidence of 7-8 criteria 1. Students read text/material 2. Students engage in different levels of writing 3. Students use manipulatives 4. Students lead conversations 5. Students do individual/seat work 6. Students work in small groups/pairs 7. Students participate in whole group discussions/Q&A sessions 8. Students present their work and draw on the work of others
<i>Student Behaviors</i>	Evidence of 0-2 criteria	Evidence of 3-5 criteria	Evidence of 6-7 criteria 1. Students display perseverance and energy to complete the instructional tasks 2. Students explain and ask questions about reasoning or thinking in solving a problem/completing an assigned task (cognitive engagement) 3. Students are collaborating with classmates about the work in order to achieve the lesson's objectives (interactive engagement) 4. Students are respectful of themselves and their peers 5. Students display an authentic interest in the content 6. Students are the primary "meaning-makers" during the lesson 7. Student voices are dominant and focused on task

Appendix G Participants' List of Focus Areas

School	Focus Areas Listed
School #1*	<p>PLN strategies to support literacy in each content area.</p> <p>PLN strategies to support writing throughout the curriculum.</p> <p>PLN strategies to support math problem-solving.</p>
School #2	<p>PLN strategies to support literacy in each content area.</p>
School #3	<p>New Teacher Induction Programs supported by coaches.</p> <p>PLN strategies to model and reinforce for teachers in each content area/trades.</p> <p>Developing a framework for data to be collected and analyzed.</p>
School #4	<p>PLN strategies to support instruction in the four core academic disciplines: language arts, mathematics, science, and social studies.</p> <p>PLN strategies to support reading, writing and applications of mathematics across these curricular areas.</p> <p>PLN strategies to support faculty in the fine and practical arts, if time allows.</p>
School #5	<p>PLN strategies to support the instructional focus areas identified in math and reading.</p>
School #6	<p>Data analysis to identify staff and/or content areas to be addressed.</p> <p>The reading and math coach supporting approximately eight teachers.</p>
School #7	<p>Data analysis to identify staff and/or content areas to be addressed.</p> <p>The reading and math coach supporting approximately eight teachers.</p>
School #8	<p>On-site professional development for language arts and mathematics teachers.</p> <p>Training teachers to study student data and design instruction according to identified needs.</p>
School #9	<p>To encourage progressive growth in reading, writing, and problem solving with PLN strategies.</p>
School #10	<p>Implementation of the instructional focus areas identified in math and reading.</p>

*Randomly ordered

School	Focus Areas Listed
School #11	<p>Data analysis to identify staff and/or content areas to be addressed.</p> <p>The reading and math coach supporting approximately eight teachers.</p>
School #12	<p>To meet the SLC goals with PLN strategies in math, literacy, and PSSA's.</p> <p>Creation of a pacing guide to incorporate PSSA eligible content, subject specific curriculum, and assessments.</p>
School #13	<p>PLN strategies to support reading and writing across the curriculum with a concentration on measurement.</p> <p>Data statistics and probability, and algebraic concepts in math.</p> <p>Understanding, analyzing, and interpreting nonfiction text in English.</p>
School #14	<p>The implementation of PLN Strategies to increase literacy and numeracy in all content areas.</p>
School #15	<p>Providing students with more opportunities to speak, to read, and to write about what they are learning in all content areas.</p> <p>Use of oral language to explore and deepen their understanding of various disciplines.</p>
School #16	<p>PLN strategies to support teachers in all subject areas.</p> <p>Incorporating literacy, writing, and talking strategies into content area instruction.</p> <p>Monitoring standardized test data including PSSA scores, Terra Nova scores, Benchmark tests, and student portfolios.</p>
School #17	<p>PLN strategies to support student engagement in the 9th Grade Academy.</p> <p>The 9th grade math, English, and Team Leaders will be the focus group.</p> <p>A resource center that will be created for teachers to access to integrate new methods into their lessons.</p>
School #18	<p>PLN strategies to focus learning across all disciplines.</p> <p>A bell-to-bell classroom structure utilizing the PLN framework aligned with math and reading assessment anchors that are designed to integrate mathematics and literacy into the educational curriculum</p>

About the Authors



Diane Brown, Ed.D., is team leader of the Pennsylvania High School Coaching Initiative and a thirty-year veteran educator, retired from the Philadelphia School District. She has extensive experience at RFA with youth action research programs — as the Director of RFA's Sisters Together in Action Research (STAR), a leadership and literacy development program for low-income, adolescent girls of color (1998-2004) and as the team leader of RFA's Action Research Camp, a summer program for teaching action research skills (2004-2005).



Rebecca Reumann-Moore, Ph.D., has worked in a range of educational settings, particularly adult literacy programs. She is co-team leader of the Carnegie-funded project, Going Small, which is looking at the transition to small high schools in Philadelphia. At RFA, she has worked on a range of projects with many overlapping themes including using professional development as part of a larger change initiative; building effective partnerships between non-profit organizations and schools; and building community in large educational institutions.



Roseann Hugh entered the educational landscape with the motivation to provide quality learning opportunities to urban children and youth. Working towards those goals she received her M.Ed. from Teachers College in educational leadership and policy. In addition, she taught in a New York City charter school and public school, as well as worked at the New York State Education Department where she wrote a policy brief entitled, *The Path to Charter Renewal*.



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