

Beyond Hammers Versus Hugs: Leveraging Educator Evaluation and Professional Learning Communities Into Job-Embedded Professional Development

NASSP Bulletin
2015, Vol. 99(1) 5–25
© 2015 SAGE Publications
Reprints and permissions:
sagepub.com/journalsPermissions.nav
DOI: 10.1177/0192636515571934
bul.sagepub.com


Rebecca H. Woodland¹ and Rebecca Mazur²

Abstract

Educational evaluation (Ed Eval) and professional learning communities (PLCs) are two of the nation's most predominant approaches to widespread instructional improvement. Yet key attributes of these reform initiatives are too often experienced by teachers as burdensome, or even detrimental, rather than helpful. The authors of this article contend that school leaders will be more successful in their school improvement efforts when they integrate the most promising elements of PLCs (disciplined collaboration, deprivatization of practice, and classroom-based assessment) and Ed Eval (use of professional performance standards, observation and feedback, and a focus on results) into a tiered system of job-embedded professional development. The authors articulate the promises and pitfalls of Ed Eval and PLCs and envision how they could be integrated into a system through which subpar teaching is systemically addressed, acceptable teaching is improved upon, and outstanding teaching is sustained and replicated. The authors showcase elements of integrated system using vignettes based on the experiences of an actual high school-level English language arts teacher team.

Keywords

educator evaluation, professional learning communities, school leadership, job-embedded professional development

¹University of Massachusetts Amherst, MA, USA

²South Hadley High School, South Hadley, MA, USA

Corresponding Author:

Rebecca H. Woodland, Department of Educational Policy, Research, and Administration, University of Massachusetts Amherst, 111 Thatcher Way, 267 Hills House South, Amherst, MA 01003, USA.

Email: rebecca.woodland@educ.umass.edu

Ruth, Maria, Clara, and Jaden are all English teachers at the same high school, and they are members of the same PLC.¹ It meets a few times a month during common planning time, and the group typically spends their first 15 minutes or so talking about how their classes are going, what they are teaching and sharing stories about students. Inevitably, there is some griping—sometimes about the school schedule, sometimes about how difficult it is to get technology to work consistently—and they always share some collegial banter about their personal lives. Lately, the group has been talking about the state's new teacher evaluation system. Clara and Ruth, both newer teachers, are intimidated by all the paperwork involved and the district's new online reporting system, and wonder when they'll find the time between grading essays and planning lessons. Jaden and Maria, more seasoned veterans, tell them not to worry too much and explain that the new requirements are likely just another in a long line of attempts by outsiders to make it hard on all of us in order to get rid of a few. They tell Clara and Ruth to do their best to fulfill the basic requirements and assure them that all will be well. The bell rings, their conversation concludes, and the teachers agree that they all have more pressing things to do than spend their time dealing with the mundane aspects of educator evaluation. Common planning time has ended and they each head to their respective classrooms, and shut the doors behind them. . . .

Increased pressure on schools to collect data, show student growth, and measure instructional quality has resulted in the implementation of various reform measures that aim to raise the caliber of classroom teaching. For policy makers, rigorous educator evaluation—what we refer to as the “hammer” because of its mandatory and high-stakes nature—is a predominant approach to improve teaching at the secondary school level (Firestone, 2014). Federal policies that stress school and teacher accountability for student achievement (usually as measured by standardized test scores) have resulted in systems of educator evaluation that are, to varying degrees, designed to remove ineffective or “bad” teachers (Hazi & Rucinski, 2014; Marzano, 2012) and ensure that teachers who remain in the classroom provide evidence of their continued effectiveness (Darling-Hammond, 2013). Some of these systems, especially in large districts, also include the controversial use of so-called “value-added measures” that purport to isolate and quantify the effect that a given teacher has on his or her students. So far though, despite decades of research, there is no widespread agreement about how to fairly and accurately measure teachers' effectiveness (Lavigne, 2014). Despite that challenge, however, educational evaluation (Ed Eval) has emerged as a dominant force on the secondary school improvement landscape. Many teachers are spending a large portion of their nonteaching time complying with evaluation mandates; administrators, too, are frequently overburdened by carrying out the various observation, meeting, and paperwork requirements of evaluation (Crum & Sherman, 2008; Lavigne, 2014).

Moreover, in addition to Ed Eval, school leaders are increasingly looking to institute a professional learning community model in their schools to support job-embedded adult learning and instructional improvement (Yendol-Hoppey & Dana, 2010). We consider professional learning communities (PLCs), commonly referred to as “PLCs,” to be more of a “hug”—in contrast to Ed Eval, PLCs are typically low stakes, nonmandatory, and predicated on collegial relationships (DuFour, DuFour, & Eaker, 2008;

DuFour, Eaker, & DuFour, 2005; Giles & Hargreaves, 2006; Hord, 2004; Schmoker, 2004). Secondary schools that adopt PLCs reserve space and time for collaborative teaming that enable teachers to jointly assess and find solutions to problems of practice related to what and how students are learning (or not) through a continuous cycle of improvement (Curry, 2008; McLaughlin & Talbert, 2006; Nelson & Slavit, 2008; Newmann, 1996). Unlike Ed Eval, which is required by federal mandate (U.S. Department of Education, 2010), there are no powerful federal or state-level legislative mandates that ensure comprehensive enactment of PLCs; as a result, educators are not necessarily accountable for the quality of process or outcomes of their collaboration through PLCs, nor are PLCs allocated the resources they need to work effectively (Darling-Hammond, 2013; Talbert, 2010; Vescio, Ross, & Adams, 2008). Similarly to Ed Eval, PLCs can elicit eye rolls from secondary school teachers who see them as another passing initiative, or who understand their value, but are frustrated by their already crushing workload and the cumbersome, overly administrative ways that PLCs are often instituted (Gajda & Koliba, 2008).

Educator evaluation and PLCs are arguably the two most powerful ideas related to professional development at work in modern education theory. We contend that if they persist as separate strategies in competition with one another for time and resources, no one stands to gain—least of all teachers, their instructional quality and their students' learning. In this article, we examine the core attributes of both PLCs and educator evaluation—those elements of each system that together will prevent the employment of teachers who perform at subpar levels, will continuously improve acceptable teaching, and will sustain and replicate outstanding teaching. Furthermore, we explore the pitfalls of PLCs and Ed Eval—those pieces of each reform approach that undermine capacity to create conditions for excellent teaching at the middle school and high school levels. The promises, key attributes, and pitfalls of each approach are summarized in Figure 1. Ultimately, we propose a model for a *tiered system of job-embedded professional development* (JEPD) that leverages the strengths of both PLCs and educator evaluation as they are currently implemented, minimizes their respective weaknesses, and treats them as a coherent approach. We will describe possibilities for how teachers and leaders could work together to leverage the best of Ed Eval and PLCs, and showcase elements of the system using vignettes based on the experiences of an actual high school-level English Language Arts (ELA) teacher team.

The Promises and Pitfalls of Professional Learning Communities

PLCs have gained widespread popularity among educators over the past decade (Anrig, 2013; Curry, 2008; Hargreaves, 2007; Talbert, 2010). PLCs have taken root in secondary schools across the country for good reason; their benefits are numerous and profound. Studies show that PLCs enhance everything from teacher satisfaction to student achievement (see Vescio et al., 2008). They are purported to positively impact school culture, improve teacher self-efficacy, reduce teacher isolation, boost an organization's overall capacity, and build a shared culture of high-quality instructional

	The Promise	High Leverage Attributes	Reality
Professional Learning Communities	The ongoing work of collaborative teacher teams builds a shared culture of high quality instructional practice and student learning.	Deprivatizes practice; stimulates teachers' intrinsic desire to increase competence and solve problems of practice; enables teacher access to knowledge resources; leverages the notion that the expertise is in the room (City, et al., 2009; Datnow 2011; Horn & Little, 2010; Schmoker, 2005).	Inadequate time and lack of sophisticated dialogue necessary for instructional improvement.
		Disciplined cycles of inquiry around the questions "What should students learn and how will we know that they have learned? What will we do when students don't learn, and what will we do when they do learn?" (DuFour, et al., 2008; National School Reform Faculty, 2014; Allen & Blythe, 2004; Little & Curry, 2008).	Few powerful federal, state, or local level proponents or policy mandates related to PLCs.
		Use of teacher generated classroom-based, real-time formative and summative assessment data about student learning. (Talbert, 2010; Stiggins, 2005; Sutton, 2010).	Teams not externally accountable for group or individual performance or impact on student learning.
Educator Evaluation	Systematic use of data enables the identification and removal of ineffective teachers, and rewarding teachers with continued tenure or advancement	Predicated on accepted standards of professional performance, i.e. Framework for Teaching (Danielson, 2013; Darling-Hammond, 2013; National Board for Professional Teaching Standards, 2015).	Vast resources allocated to policies that address the performance of relatively few educators.
		Incorporates cycles of pre-observation, observation of practice, and post-observation conferencing and feedback (Glickman, 2002; Darling-Hammond, 2013).	Relies on administrators who lack the time and training to provide frequent, accurate and constructive feedback
		Requires regular identification and monitoring of student learning goals and evidence of student achievement (Doherty & Jacobs, 2013).	Use of invalid, unreliable student growth measures for judging performance and personnel decision-making

Figure I. Promises, attributes, and realities of professional learning communities and educational evaluation.

practice (Caprara et al., 2006; DuFour et al., 2008; Talbert, 2010). When done well, they significantly reduce teacher isolation and markedly increase teachers' ability to examine—and make sense of—multiple types of student data. That is, in fact, their hallmark; by working together with people who deeply understand the same content, or the same students, or even simply the shared language of pedagogy, teachers are able to use evidence about student performance as the center of structured dialogue, to make decisions about how to change their teaching method, and to then take actions in the classroom that lead to new heights of achievement for learners (Gajda & Koliba, 2008). PLCs are the intellectual playground of the instructional force, and schools that operate as PLCs are often uniquely able to weather the challenges of regime changes and initiative shifts while keeping a sustained focus on the core work of teaching and learning. At the same time as they deprivatize practice and lessen the “egg crate” phenomenon endemic to secondary schools, PLCs engage teachers in the most critical questions that exist for educators: What should students learn? How should we teach them and how will we know when they have learned? What will we do when students do not learn, and what will we do when they *do* learn? (DuFour et al., 2008). Furthermore, they allow schools to recognize and harness the talent that exists within their organizations; they treat teachers as the generators of knowledge instead of seeing them merely as people who need improvement to happen *to* them. As explained by Talbert (2010), “When teachers jointly assess the performance of their students—using disaggregated test data, formative assessments, student work, and low-inference classroom observations—they are able to more effectively craft interventions to meet all students' learning needs” (p. 558). The fact that ideal PLCs are predicated on the use of teacher-generated, classroom-based, real-time formative and summative assessment data about student learning (DuFour, 2004) means that teachers use the most current and meaningful data that exist in schools.

Ultimately, PLCs have emerged as the most promising approach that we have to keep middle and high school teachers learning and improving throughout their careers (DuFour et al., 2008; McLaughlin & Talbert, 2001).

But the rhetoric championing PLCs has fallen far short of reality and as a professional development strategy, PLCs have many pitfalls. Even in secondary schools where long-term concerted efforts to enact PLCs exist, it is not uncommon to find that not all teachers have access to teams, especially teachers in the “specials” such as art, music, PE, and so on. And those teams that do exist rarely, if ever, have enough time (either in frequency or duration) to engage in the type of meaningful reflection and collaboration that can impact the quality of instructional practice in a positive way (Gajda & Koliba, 2008). If teacher teams are to improve instruction and enhance student learning, a significant amount of time must be allocated for teacher teaming. Currently, the amount of time currently available to U.S. teachers for collaboration is quite low; a third spend less than 8 hours per year, and only 2% are allotted 33 or more hours of collaborative time annually (Wei, Darling-Hammond, & Adamson, 2010). While there is no rule that dictates how much time teams need to be productive, recent research indicates that any professional development endeavor in which teachers are engaged for less than an average of 8 hours *per month* will likely have little or no

impact on instructional practice and student learning (Wei et al., 2010; Yoon, Duncan, Lee, Scarloss, & Shapley, 2007).

In addition to lack of time, poor team processes also undermine improvement. Too often, PLC time ends up looking like “coblaboration” (Trotman, 2009) and is devoid of the sophisticated discourse necessary for instructional improvement. PLCs can tend toward fostering dialogue that confirms preexisting instructional practices without determining their worth (Hord, 2004; Little, 1990; McLaughlin & Talbert, 2006). Teachers may avoid issues of pedagogical importance, and team time may “deteriorate into inappropriate ‘nitpicking’ or ‘trash-talking’” (Datnow, 2011, p. 152). These habits can result in the entrenchment of existing and largely unexamined instructional practices. Last, there are few powerful federal or state-level policy proponents or mandates related to the enactment of structures that support PLCs (Hazi & Rucinski, 2014), and teachers may not be held accountable for team performance or the impact of their PLC work on student learning.

Promises and Pitfalls of Educator Evaluation

The history of American schooling is replete with various approaches to Ed Eval. Industrial models, clinical supervisory models, and teacher-centered models (just to name a few) have at different times fallen in and out of favor. The most recent incarnation, though, has the notable benefit of being grounded in standards that are unique to the teaching profession (Darling-Hammond, 2013). Historically, the lack of shared standards has meant that teaching has been “a profession without a practice” (Elmore, 2004). Now, though, several excellent sets of standards exist (with a high degree of overlap between them), one of the most popular being Charlotte Danielson’s (2013) *Framework for Teaching* (FfT) that officially undergirds the Ed Eval systems in a number of states including New York, New Jersey, Florida, Pennsylvania, and Washington. The FfT was one of the validated models used in the Measures of Effective Teaching project (Kane, McCaffrey, Miller, & Staiger, 2013) that examined how evaluation methods predicated on standards of professional performance could increase teacher instructional skills and help school leaders identify and develop high-quality teaching. Modern systems of educator evaluation predicated on validated professional performance standards such as the FfT may provide an impetus for teachers to actively engage with the fundamental tenets of the teaching profession that can get easily lost among the demands of everyday work. Therefore, a core attribute of educator evaluation is the primacy of professional performance standards (Darling-Hammond, 2013).

A second core attribute of modern Ed Eval is the focus on student learning as the most essential outcome of schooling. It is clear that after many decades of legislative-level waffling, policies like No Child Left Behind and Race to the Top—whatever else their shortcomings may be—have put a stake in the ground to declare that student learning is a critical component of educator evaluation, and that evidence about student learning must be considered when trying to determine whether a teacher is effective. Another core attribute of educator evaluation systems is that they incorporate cycles of direct observation of instruction and feedback that is critical for teacher

self-reflection and improvement. Results of the original Measures of Effective Teaching project demonstrated that rigorous classroom observations and feedback based on established professional performance standards can improve quality of instructional practice and student learning outcomes (Taylor & Tyler, 2012). The elements of professional performance standards, evidence of student learning, and cycle of direct observation and feedback are the most promising aspects of educator evaluation. And crucially, educator evaluation has emerged as the primary, and perhaps only, reform strategy that is designed to be able to remove ineffective teachers from the classroom.

Although widely enacted and supported through strong federal and state policy measures, deep flaws have emerged in state-enacted Ed Eval systems. In spite of rhetoric that touts a focus on professional growth and improvement, the day-to-day reality of educator evaluation is that it operates more as an instrument of accountability than as a vehicle for teacher development (Marzano, 2012). Structures of teacher evaluation are largely designed to provide administrators with necessary information to make personnel decisions (i.e., retain effective teachers and remove ineffective/nonperforming teachers) and not as a tool for fostering systematic instructional improvement and professional growth (Firestone, 2014). As Firestone (2014) attests, current educator evaluation schemes “focus disproportionately on economics-based theories of motivation” and are designed to “distribute rewards and punishments through continued tenure and financial incentives” (pp. 100-101). Early results from states where high-stakes evaluations are happening indicate that a small percentage of teachers are in fact “weeded out” via most new and rigorous systems of educator evaluation (Bakeman, 2013; Massachusetts Department of Elementary and Secondary Education, 2013). Hence, the vast majority of secondary school educators (i.e., all those who are deemed “acceptable” or better) are unserved or underserved by the educator evaluation system to which they are subject (Darling-Hammond, 2013). As a result, many teachers, like those in our opening scenario, perceive Ed Eval as a hollow, compliance-oriented, top-down initiative that has little to do with teaching and learning. Or they may honestly (and with a great investment of time) try to write instructional goals (against standards for performance), come up with student learning goals (that are “SMART”), and submit evidence and documents to their principal (increasingly via a centralized electronic online system) through various formats. For the acceptable and better teacher, these tasks have historically existed as perfunctory in nature and are largely undertaken in the absence of any actual or perceived short or long-term benefit (Lavigne & Good, 2014). It is not surprising then that educator evaluation can breed frustration and cynicism among administrators and teachers—its hallmark is the use of quantitative data to reward or sanction teachers at the expense of leveraging conditions for professional growth.

A second major pitfall of educator evaluation is its reliance on the actions and talents of building-based administrators. Secondary school principals and assistant principals, aside from having far too little time to carry out the requisite (and numerous) cycles of observation and feedback, are often not well positioned to be the best evaluators of teacher performance for reasons that are both pedagogical and sociological.

According to Darling-Hammond (2013), “Lack of knowledge and training has been a major problem for the validity, fairness, and utility of many evaluation systems” (p. 116). Administrators’ ability to differentiate between effective and ineffective instructional practices is highly variable (see Harris & Sass, 2010; Jacob & Lefgren, 2008; Strong, Gargani, & Hacifazlioglu, 2011). And because of lack of training and inadequate time, principals too often give vague, unsubstantiated, infrequent, and inaccurate feedback (see Lavigne & Good, 2014). At best, there is wide variability across educator evaluation systems in their capacity to enable teachers to receive the type of timely, targeted, frequent observation and feedback that increases competence and improves performance—at worst, administrator time spent on conducting classroom observations is negatively associated with student achievement (Grissom, Loeb, & Master, 2013).

The promises and pitfall of PLCs and educator evaluation are depicted in Figure 1.

It is universally understood that effective teaching is the key to student learning (Darling-Hammond, 2013). Hence, school leaders desire to create conditions in which ineffective teachers are removed from the workforce, effective teachers continuously strengthen their existing skills, and outstanding teachers are recognized and their innovative practices are sustained and spread throughout a school’s system. PLCs help school leaders create those conditions by providing a mechanism for “good” teachers to improve their skills throughout their careers and, to a limited extent, by allowing “excellent” teachers to diffuse their knowledge in a team and perhaps across a school. And the system of Ed Eval enables school leaders to recognize ineffective teaching and take steps toward dismissal of “bad” teachers from the classroom (Firestone, 2014). But neither approach is a panacea. It is in the symbiotic combination of the best attributes and the strategic elimination of the persistent drawbacks of both systems, however, that we see secondary schools’ best hope for real and lasting improvement. The remainder of this article will explore how school leaders might envision PLCs and Ed Eval as a tiered system of JEPD.

Toward a Tiered System of Job-Embedded Professional Development

A framework for envisioning an integrated system of JEPD is presented in Figure 2.

The tiered system of JEPD is based on three tiers of professional work: Tier 1 encompasses a school’s entire instructional force and is based on teams of teachers (e.g., the high school ELA team in the vignettes) continuously engaging in disciplined cycles of dialogue, decision making, action taking, and evaluation of their instructional practice. Tier 2 exists for teachers, or teams of teachers, who need short-term, specific support around a particular problem of practice or who need training in some kind of new skill or program. Tier 3 is reserved for those few teachers who either need intense, targeted remediation, or whose exceptional teaching requires additional recognition or opportunities for professional growth beyond what the school can regularly provide. We encourage school leaders to consider how they might integrate one or more aspects of the tiered system of JEPD into their own efforts in school

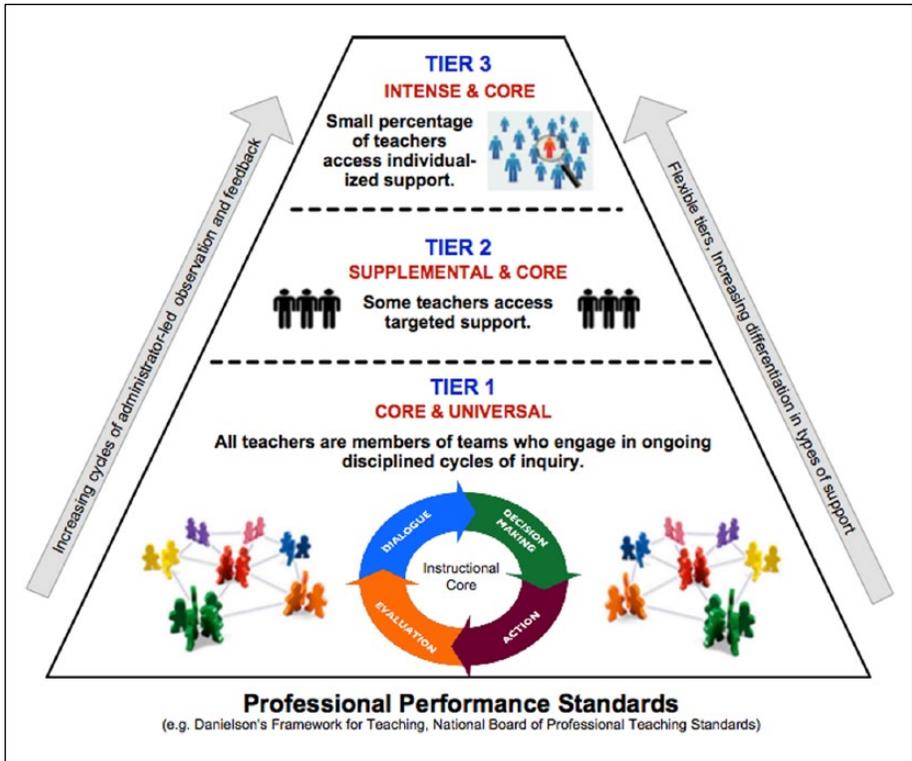


Figure 2. Tiered system of job-embedded professional development.

improvement efforts, and provide some concrete examples of how to do so via the case study vignettes.

Tier 1 in Action

Ruth, Maria, Clara, and Jaden comprise the membership of the PLC team of high school English teachers that meets for an hour and half once a week and for a half day every quarter. They teach in a school that uses Danielson's *Framework for Teaching* for its professional performance standards as part of their educator evaluation system, which is model for professional standards endorsed by the state. Together, the team chose which pieces of the FFT that they want to focus on this year. From Domain 1 (planning and preparation) they chose Standard 1F, "designing student assessments"; from Domain 3 (instruction) they chose Standard 3b, "using questioning and discussion techniques," because they agree that high-quality discussions about literature are at the core of many of their lessons. Each teacher has also determined an individual problem of practice that he or she feels students need particular help with—Ruth and Clara both want to focus on helping students write better introductory paragraphs; Myra wants to see her students learn to annotate books and articles; Jaden notices that students in many of his classes

can't get beyond basic interpretation of text to more sophisticated inferences. All of their team meetings this year will have one of these issues as their focus. The team will document its work using Oasys online (their school's PD management system), and those documents will constitute a large portion of their professional evaluation materials. The school principal, Anne, has reviewed and approved the team's plan for professional development.

It's October and Ruth, Maria, Clara, and Jaden are in a team meeting. It takes place in one of the school's dedicated collaboration rooms that is equipped with a document camera, video viewing, and resource sharing capacity. It is Ruth's and Clara's turn to get help with their individual goals, which are about writing introductory paragraphs; this is something they see as important to satisfying the Common Core writing standard. They have each brought examples of their own students' writing for the team to examine, and the team members assess them based on the school's writing rubric which is displayed on a large monitor. Then, they use a "Save the Last Word" protocol (see NSRFHarmony.org for a complete list of protocols) to structure their conversation about what they've read and how they applied the rubric. Each teacher has also come with a short video clip that shows a piece of how they currently explain the skill of writing introductory paragraphs to students. Jaden has volunteered to record notes on their standard team meeting record, which is accessible to all members and their principal in the school's shared drive. Every member clearly articulates how he or she has applied the rubric to student work. Inconsistencies in the application of the writing rubric surface, and the group problem solves and comes to a new shared understanding about quality writing that will enable them avoid discrepancies between their ratings in the future. They also watch the short videos and discuss the differences in Clara's and Ruth's approaches to teaching the skill. Through this structured dialogue, within 20 minutes, both Ruth and Clara have specific strategies they will use to improve their students' work. Clara has the idea to explicitly instruct her students on the "inverted triangle" approach to introductions, which several of the teachers suggested. Ruth's students already use that technique, and they are ready to try to write introductions that use a more compelling "hook" to snag the reader's attention. Maria has emailed her a link to a website that includes examples of great hooks to share with students. Both teachers plan to implement these ideas, and by their third meeting in December they will be able to bring new examples of student work to the team to see if their interventions yielded the intended results. Toward the end of the meeting, each teacher uploads a copy of Jaden's notes to their electronic evidence binder; everyone files it under the standards of 1A (demonstrating knowledge of content and pedagogy), 1D (demonstrating knowledge of resources), and 3D (using assessment in instruction). Ruth and Clara also file it in the section for their individual goals. Before they leave, Jaden reminds the group that their next meeting is going to focus on their shared Goal 3b, "using questions and discussion techniques," and that everyone must complete at least one observation of another team member or film 5 minutes of their own classroom teaching to present to the team for shared analysis. The group knows that observations and videotapes of teaching and learning need to capture what students are actually saying and doing in the classroom in response to instruction. The videotapes and observation notes taken of students' response to teacher questioning will provide the focus of the next meeting, and they intend to use the "Tuning Protocol" to provide accurate, specific, and constructive feedback about the quality of questioning and student learning, and to surface specific recommendations for improvement.

Tier 1 of the System of JEPD provides the foundation of instructional improvement. Under a tiered system of JEPD, every teacher would be a member of a primary team which functions as the locus of her or his professional reflection, growth, and evaluation activities. The focus of Tier 1 teams' work is the improvement of instructional practice predicated on professional performance standards. Artifacts of student learning provide the evidence that guides their cycles of inquiry. The motivation and reward is collegiality and self-efficacy, and the external accountability is the monitoring and reporting functions of educator evaluation. Classroom-based teacher assessment of student learning is a better predictor of success in college than standardized tests (D'Agostino & Powers, 2009); teachers on Tier 1 teams will systematically examine the everyday tests, quizzes, essays, discussions, and projects generated by students. Such evidence best positions teachers to be able to make informed decisions about how to improve their practices to better meet the learning needs of the students currently under their tutelage (Little & Curry, 2008).

School leaders that are serious about supporting instructional improvement through the type of teaming described in Tier 1 will likely face obstacles to implementation. The first and most important condition that must be in place for Tier 1 teaming to happen is *time*, a great deal more than is typically allocated now. Social psychologists have shown that the more frequently communities interact, the closer they become and the more they trust each other (Lave & Wenger, 1991). If teacher teaming is to be the primary means for the continuous improvement of instruction, teacher teams should be enabled to meet at least weekly during the school day (Croft, Coggshall, Dolan, & Powers, 2010; Programme for International Student Assessment, 2007). According to Saphier (2014), even the most basic and least sophisticated forms of teacher teams must be ensured "consistent, protected common planning time 2-3 times a week" (p. 9). Without sufficient time, teachers will not be able to engage in serious and sustained inquiry, nor will they build the kinds of relationships that foster the trust and open communication that instructional improvement requires. Studies show that teacher teams need a minimum of 2 hours per week (8 hours per month) to engage in an ongoing cycle of inquiry into their own practice as evidenced by proof of their students' learning (Darling-Hammond et al., 2009; Wei et al., 2010; Yoon et al., 2007). A recent study, in which 278 teachers were queried about conditions for innovation in a high-performing school system, found that teachers were afforded a minimum of 3 hours per week for professional collaboration (Moolenaar et al., 2014).

In addition to ensuring an adequate amount of time, Tier 1 teacher teams will also need the support of school leaders to establish a laser-like focus on the examination of the instructional core (City, Elmore, Fiarman, & Teitel, 2009). To do so, school leaders would require teams to actively use established standards of professional performance to set individual and team learning goals, as well as goals for student learning. Team use of established standards such as the ones used by Ruth, Maria, Clara, and Jaden in their ELA PLC greatly increases the likelihood that teachers will focus their dialogue on what gets taught, how it gets taught, how student engage with the content and instruction, and the specific tasks that student are expected to do to demonstrate their learning (Darling-Hammond, 2013). Teams that focus on goals related

to the instructional core prevent time being spent on tangential topics unrelated or peripherally related to student learning (City et al., 2009; Woodland, Lee, & Randall, 2013). In our vignette, for example, Anne, the school principal, has approved the team's individual and group foci for the year, which are directly aligned with the domains and subelements of Danielson's FFT.

Tier 1 also depends on teacher teams engaging in a process that enables them to examine the instructional core in a disciplined, efficient, and effective manner. Teachers, such as Ruth, Maria, Clara, and Jaden in our case example, need to have a high level of literacy in the essentials of high-quality teaming—most important, how to engage in disciplined cycles of dialogue, decision making, action, and evaluation (Gajda & Koliba, 2009; Woodland & Hutton, 2012; Woodland et al., 2013). Administrators can facilitate conditions in which teachers become skilled at how to craft preplanned agendas and keep running records, choose and use protocols to help structure the rigorous and efficient examination of student work and observations of instructional practice, and identify and enact research-based solutions and strategies in the classroom (Gajda & Koliba, 2008; Woodland & Hutton, 2012). Administrator-led expectations for team norms do not need to be contrived or intrusive. According to Datnow (2011), teachers appreciate “positive peer pressure” to maintain productive team dialogue, and their administrators’ “strategic attempts to nurture high expectations and mutual accountability among staff” (p. 152).

Through Tier 1 teaming, teachers will improve their practice by engaging in cycles of inquiry with their peers about instructional practice and student outcomes. With strong administrator support, teachers—via their teams—will be able to comply with both the letter and the spirit of Ed Eval by documenting their work, critically examining student data, and making concrete changes to their instructional practices. However, some individuals and teams of teachers will need short, targeted interventions at various points in their careers.

Tier 2 in Action

It is nearing the end of November, and Anne is spending time reviewing the running records of her Tier 1 teams. She can tell from the records and from her and the assistant principal's occasional, unannounced visits to their meetings, that the teams function well—they are using preplanned agendas and are focused on specific elements of the professional performance standards. Through videotaping of their own teaching, Ruth, Maria, Jaden, and Clara have been able to observe and analyze the quality of each other's classroom practice in their PLC meetings. Anne notices, however, that a few teams in the school have not yet conducted any observations of each others' teaching, and will need to be nudged. Anne is glad that Clara and Ruth, who are newer teachers, are teamed with veterans like Maria and Jaden; both are solid, seasoned teachers, and while Anne occasionally stops into their classrooms, she hasn't really “observed” Maria's or Jaden's teaching in several years. Rather, she evaluates Maria and Jaden mostly on the work they do in teams, and it is quite evident through the team's records that they have been constantly refining their practice and helping the newer teachers develop their skills.

On the other hand, while Clara and Ruth are both doing well at the school, Anne can see from the walkthroughs she has done that both of them are weak in the area of classroom management; Clara is too lenient and Ruth is too stern. Kids are bouncing off the walls in Clara's class and causing distractions. Ruth's heavy-handed style is no more effective, though, and students regularly storm out of her classroom in anger, or she sends them out to the detention room. Neither of these scenarios is unusual with new teachers nor are they issues that the teachers' Tier 1 team will be able to effectively address.

Like many principals, Anne needs to figure out how to help some of her teachers get a much better handle on classroom management. She considers bringing in the district's language arts instructional coach to give them some tips, sending them out to a conference or course, giving them each release time to observe teachers who are more skilled at classroom management, or some combination of these things. Anne will document what she does at the outset of the intervention, and then observe both Clara and Ruth afterward to see if it worked. Part of the practical benefit of the tiered system of JEPD is that Anne will have the capacity to pay this kind of attention to the teachers who need it because she will not have to attend in this way to the entire faculty. When Tier 2 interventions are initiated by administrators, the results of the intervention become part of the evaluation record. Classroom management, for example, is not an optional skill for teachers to have; it is explicitly described in the *Framework for Teaching* (Domain 2a, "creating an environment of respect and rapport," and Domain 2d, "managing student behavior"). Both Clara and Ruth must improve if they are to stay in the school and in the field, and if they do not improve, they will be candidates for a Tier 3 intervention or possibly dismissal. After providing Clara and Ruth with the support they need, it will be Anne's job to observe Clara and Ruth again to see how their classroom practice has improved, if at all.

Under a tiered system of JEPD, teachers would be encouraged and may request Tier 2 interventions on their own. For example, a group of math teachers in the same high school as Jaden, Maria, Clara, and Ruth could be excited about a new online tool (such as @Poll Everywhere, a classroom response system) that would enable them to improve their skills related to FfT in Domain 3d (using assessment in instruction). The teachers would be encouraged to ask for some training on how to use it. Once trained, the math teachers will bring their new skills and knowledge to the ongoing work of their Tier 1 teams; they will initiate a cycle of inquiry into how that intervention did or did not change their practice, and how it did or did not enhance the learning of their students. If, for example, some teachers realize success with the new tool and others do not, the work of the Tier 1 team will be to figure out why and then help all teachers to capitalize on what works.

When Tier 2 requests come from teachers, the job of administrators is to support teachers' continued growth, and then watch with curiosity to see how the intervention fares, and how successful teachers are in their Tier 1 teams with making sense of their own learning. A record of all these decisions and actions related to Tier 2 activities can become part of evaluation documentation. Tier 2 is intended to provide the additional, ad hoc support for knowledge and skills that most teachers need or seek out at some point in their careers

either to advance their learning or to address a deficit in their practice. Though the bulk of teacher learning is designed to be supported via the Tier 1 teaming structure, it is unlikely that level of work will address the needs of all teachers at all phases of their careers. We anticipate that newer teachers will especially need the support of Tier 2 interventions as they start out in their practice, but most teachers at some point in their careers will benefit from support and activities afforded through Tier 2 professional development.

Tier 3

We see the third tier of JEPD as being reserved for individuals of two types: those who need individualized, targeted interventions for last-chance remedial purposes, and those whose excellence calls for recognition and reward. In Tier 3, teachers who need serious interventions are helped by an expert and then carefully observed by an evaluator to see if targeted behaviors have been remedied. Schools cannot permit ineffective teachers to remain among the ranks of their instructional forces; for those teachers, in this proposed model Tier 3 would be the last stop. Equally important to removing the “bad” teachers, however, is the need to maintain “irreplaceable” teachers in the ranks of the profession. A type of teacher often overlooked by current Ed Eval and PLC approaches to school improvement is the “irreplaceable” teacher whose talents need to be recognized, rewarded, and brought to scale (“Perspectives of Irreplaceable Teachers,” 2013). One of the great challenges facing schools is that many excellent teachers are exiting the profession, largely out of frustration with institutional practices that allow superior performance to go unrecognized and unrewarded (“Perspectives of Irreplaceable Teachers,” 2013). The profession benefits—and students benefit—when excellent teachers are recognized and rewarded for their skills; Tier 3 is intended to provide the structure for that to happen.

Tier 3 in Action

It is February. Anne arranged for the district ELA instructional coach to work with Clara and Ruth as a Tier 2 intervention. She is happy to see, via classroom walkthroughs, that Clara’s classroom management has improved, and she can tell from the team’s Tier 1 record that she is working to improve her practice in many other ways. The situation with Ruth is not as ideal. She is still too stern, and her inability to change is causing problems; students continue to self-select out of her class at an alarming rate, and parents have been complaining about her. Anne likes Ruth and feels strongly that she has the potential to be a fine teacher, but she can’t keep Ruth on staff if her performance does not improve. Clearly, a Tier 3 intervention is needed—something individualized to Ruth’s specific needs. The chair of the English department agrees to let Ruth sit in on his classes for a week so that she can observe how he deals with classroom management, and Anne arranges for the release time. The instructional coach also mentioned a 2-day workshop in a nearby city that Ruth might benefit from, so Anne makes those arrangements, too. For Ruth, this will be the last chance to get help with her classroom management skills.

Anne also knows that one of Ruth’s Tier 1 teammates, Jaden, is also in need of a Tier 3 intervention, but not because he needs remediation. Rather, he is one of the school’s most

effective teachers and someone who Anne respects a lot—he is “irreplaceable,” and she wants to encourage his continued growth and his desire to stay at the school as long as possible. She knows how important it is to recognize Jaden for his excellence in teaching. She writes a “teacher commendation” for him, and has copies sent to Jaden and to the central office. In person, she tells him that she has continued to see clear evidence (via Tier 1 documentation) of his valuable contributions to the instructional practice of other teachers and his capacity to bring about student learning; she celebrates these accomplishments at a full faculty meeting in which Jaden is presented with a gift certificate to a local bookstore. Jaden is also offered release time, if he would like it, to attend a week-long class about teaching Shakespeare, who Anne knows is a particular favorite of Jaden’s. What he will learn through that experience will be diffused to the other teachers in his Tier 1 team, and his new knowledge will enhance his and his teammates’ shared understandings about teaching.

The role of administrators in Tier 3 is to: intervene for those who need remediation, observe and assess teaching performance after the intervention, and fully document the process of doing so. If Ruth improves and sustains that improvement, then she will receive a satisfactory evaluation rating, and she will continue improving throughout her career with the help of her Tier 1 team. If she does not improve, or if her improvement is short-lived, then she will be dismissed. For people like Jaden, leaders need to recognize their value, reward their accomplishments, and provide mechanisms for other teachers (and therefore students) to benefit from Jaden’s knowledge and innovative instructional practices.

It is April, and Anne is reviewing the records of various Tier 1 teams. She can see that the English team has made significant progress around their team goal of improving questioning and discussion techniques; all of them have observed each others’ teaching both in person and on video, and they have made several research-based adaptations to their classroom instructional practices that have resulted in increases in student engagement and student learning. She encourages the team to consider new goals for next year in FfT Domains 2 and 3 regarding “student interactions with one another” and “expectations of student learning,” respectively. Anne has documentation via Oasys, the electronic PD management system, that these are the two areas that Tier 1 teams have most often mentioned as weak spots throughout the year. At upcoming faculty meetings, the descriptions for each of those indicators will be examined and teams will be given time to reflect and “surface” issues that come up for them around those two indicators.

Conclusion

What we really need in the United States is a conception of teacher evaluation as part of a teaching and learning system that supports continuous improvement, both for individual teachers and the profession as a whole. Such a system should enhance teacher learning and skill, while at the same time ensuring that teachers who are retained and tenured can effectively support student learning throughout their careers. (Darling-Hammond, 2013, p. 3)

American public education is experiencing a watershed moment. Educator evaluation and PLCs, what we have called “the hammer and the hug,” are two of our nation’s most predominant approaches to instructional improvement, yet in most states Ed Eval and PLCs are not linked; educator accountability and professional learning are widely treated as separate policy initiatives (Hazi & Rucinski, 2014). These two prevailing reform strategies often appear to exist at cross-purposes—Ed Eval as a legislative mandate is more top-down, whereas PLCs based on the work of teacher teams tend to be more ground-up; Ed Eval is born of an assess-and-measure mindset, whereas PLCs are rooted in the world of classroom curriculum, teaching and learning; Ed Eval focuses largely on professional accountability and weeding out the “bad,” whereas PLCs are championed as a means for teacher professional learning and growth. It is quite possible that the current dualistic approach may do harm to schools by ignoring what one venerated scholar has called the most important lesson that the history of teacher evaluation has to offer:

that we not adopt an individualistic, competitive approach to ranking and sorting teachers that undermines the growth of learning communities which will, at the end of the day, do more to support student achievement than dozens of the most elaborate ranking schemes ever could. (Darling-Hammond, 2013, p. 3)

We believe that educator evaluation and PLCs both offer valuable attributes that help create conditions for effective professional development and widespread effective teaching in our nation’s middle and high schools. PLCs offer teachers the opportunity to collaborate, and high-quality collaboration, when it uses structured cycles of inquiry into student work, is the most effective lever schools have to affect changes to instructional practices (Learning Forward, 2014; Woodland, Barry, & Crotts, 2014). Moreover, PLCs add immeasurably to a school’s climate, to its teachers’ sense of satisfaction with their work, and they serve the needs of *all* teachers (DuFour, 2004; Pounder, 1999). However, PLCs often suffer from a lack of focus on student learning and weak processes that result in “collaboration,” frustration, and lack of meaningful, measurable improvement. And despite persistent urging from scholars and testimonials from practitioners, PLCs have not garnered many fierce policy-level proponents who have managed to effectively codify them into state or federal mandates. On the other hand, educator evaluation systems ground the work of teachers in vetted and validated professional standards for performance, systematize cycles of observation and feedback, and, perhaps most important, enable school administrators to weed out ineffective employees. Moreover, teacher evaluation is currently experiencing almost unprecedented support in the policy and political arena, which means that it may be afforded the necessary resources to realize more of its positive potential. But educator evaluation still, despite rhetoric to the contrary, prizes teacher accountability (often at the expense of teacher learning); it relies on already overburdened administrators to carry out many of its requirements, and its primary effects (namely dismissal) are felt only by a small percentage of the teaching force.

The integrated and tiered approach to JEPD envisioned in this article is intended to serve and improve the practice of *all teachers*, no matter where they are in their careers

or how effective they already are. Through Tier 1, teacher teams will surface relative differences in instructional quality and make specific evidence-based decisions about what to keep, stop, and change about those instructional practices in order to effectively create conditions for meaningful student learning. Tier 2 will help extend the learning of teachers who are in need of additional growth opportunities and will support those who are struggling to improve. Tier 3 will provide intense remediation for the small percentage of teachers who require it, and provide a clear path toward removing ineffective educators from school; it will also recognize and reward excellent teachers and keep “irreplaceable” teachers in classrooms. A tiered system of JEPD, such as the one we have proposed here, would not necessarily reduce the documentation work that teachers will be required to accomplish under most new systems of educator evaluation. However, it should reduce the *workload* by letting teachers collaborate and by providing them with Tier 1 time to engage in the kind of interactions that will feed the evaluation system in a way that will feel natural and useful to most teachers. Furthermore, a tiered approach to JEPD, which is predicated on high functioning teacher teams and focused on continuous improvement, has the potential to free principals from the untenable burden of observing all (or many) teachers all (or most of) the time. In a tiered and integrated model, teacher teams become the primary unit of focus and analysis.

Tiered systems of JEPD, which amplify the best attributes and prune the respective pitfalls of Ed Eval and PLCs, could enable school leaders to reach key organizational goals. In a tiered system such as the one we have envisioned, more time, money, and attention would be funneled toward breaking a widespread

normative environment that views all matters of [instructional] practice as matters of idiosyncratic taste and preference, rather than subject to serious debate, discourse, or inquiry; a structure of work in which isolation is the norm, and collective work is the exception. . . . (Elmore, 2000, p. 35)

Through a tiered system of JEPD that integrates the best of PLCs and Ed Eval, school leaders can help prevent “making nice” and “collaboration lite” (DuFour, 2003, p. 63), whereby practitioners confuse mere congeniality and imprecise conversation with the serious, collegial, reflective dialogue, which is vital to school improvement.

School leaders must seek to design and implement a coherent system of professional development that creates the fundamental conditions for the proliferation of excellent teaching and student learning. Such a system will ensure that schools do not retain teachers who perform at subpar levels, that acceptable teaching is constantly improved upon, and that outstanding teaching is sustained and replicated as widely as possible. We believe that getting beyond hammers versus hugs, to the purposeful integration of the best of Ed Eval and PLCs in a tiered system of JEPD, holds enormous potential for the improvement of teaching and student learning.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

Note

1. Vignette content is based on the experiences of an actual high school-level ELA PLC, all names are pseudonyms.

References

- Allen, D., & Blythe, T. (2004). *The facilitator's book of questions: Tools for looking together at student and teacher work*. New York, NY: Teachers College Press.
- Anrig, G. (2013). *Beyond the education wars: Evidence that collaboration builds effective schools*. New York, NY: Century Foundation.
- Bakeman, J. (2013). *State announces high teacher scores, hopes union fears are calmed*. Retrieved from <http://www.capitalnewyork.com/article/politics/2013/10/8534883/state-announces-high-teacher-scores-hopes-union-fears-are-calmed>
- Caprara, G. V., Barbaranelli, C., Steca, P., & Malone, P. S. (2006). Teachers' self-efficacy beliefs as determinants of job satisfaction and students' academic achievement: A study at the school level. *Journal of School Psychology, 44*(6), 473-490.
- City, E. A., Elmore, R. F., Fiarman, S. E., & Teitel, L. (2009). *Instructional rounds in education: A network approach to improving teaching and learning*. Cambridge, MA: Harvard Education Press.
- Croft, A., Cogshall, J. G., Dolan, M., & Powers, E. (2010, April). *Job-embedded professional development: What it is, who is responsible, and how to get it done well* (Issue Brief). Washington, DC: National Comprehensive Center for Teacher Quality.
- Crum, K. S., & Sherman, W. H. (2008). Facilitating high achievement: High school principals' reflections on their successful leadership practices. *Journal of Educational Administration, 46*, 562-580.
- Curry, M. (2008). Critical friends groups: The possibilities and limitations embedded in teacher professional communities aimed at instructional improvement and school reform. *Teachers College Record, 110*, 733-774.
- D'Agostino, J. V., & Powers, S. J. (2009). Predicting teacher performance with test scores and grade point average: A meta-analysis. *American Educational Research Journal, 46*, 146-182.
- Danielson, C. (2013). *The framework for teaching evaluation instrument*. Retrieved from <http://usny.nysed.gov/rttt/teachers-leaders/practicrubrics/Docs/danielson-teacher-rubric.pdf>
- Darling-Hammond, L. (2013). *Getting teacher evaluation right: What really matters for effectiveness and improvement*. New York, NY: Teachers College Press.
- Darling-Hammond, L., Wei, R. C., Andree, A., Richardson, N., & Orphanos, S. (2009). *Professional learning in the learning profession*. Washington, DC: National Staff Development Council.
- Datnow, A. (2011). Collaboration and contrived collegiality: Revisiting Hargreaves in the age of accountability. *Journal of Educational Change, 12*, 147-158.
- Doherty, K. M., & Jacobs, S. (2013, October). *State of the states 2013 connect the dots: Using evaluations of teacher effectiveness to inform policy and practice*. Retrieved from <http://www.nctq.org>

- DuFour, R. (2003). Leading edge: "Collaboration lite" puts student achievement on a starvation diet. *Journal of Staff Development*, 24(3), 63-64.
- DuFour, R. (2004). What is a professional learning community? *Educational Leadership*, 61(8), 6-11.
- DuFour, R., DuFour, R. B., & Eaker, R. E. (2008). *Revisiting professional learning communities at work: New insights for improving schools*. Bloomington, IN: Solution Tree.
- DuFour, R., Eaker, R. E., & DuFour, R. B. (2005). *On common ground: The power of professional learning communities*. Bloomington, IN: National Educational Service.
- Elmore, R. F. (2000). *Building a new structure for school leadership*. Washington, DC: Albert Shanker Institute.
- Elmore, R. F. (2004). *School reform from the inside out*. Cambridge, MA: Harvard Education Press.
- Firestone, W. A. (2014). Teacher evaluation policy and conflicting theories of motivation. *Educational Researcher*, 43, 100-107.
- Gajda, R., & Koliba, C. (2008). Evaluating and improving the quality of teacher collaboration: A field-tested framework for school leaders. *NASSP Bulletin*, 92, 133-154.
- Gajda, R., & Koliba, C. (2009). "Communities of practice" as an analytical construct: Implications for theory and practice. *International Journal of Public Administration*, 32, 97-135.
- Giles, C., & Hargreaves, A. (2006). The sustainability of innovative schools as learning organizations and professional learning communities during standardized reform. *Educational Administration Quarterly*, 42, 124-156.
- Glickman, C. D. (2002). *Leadership for learning: How to help teachers succeed*. Alexandria, VA: ASCD.
- Grissom, J. A., Loeb, S., & Master, B. (2013). Effective instructional time use for school leaders: Longitudinal evidence from observations of principals. *Educational Researcher*, 42, 433-444.
- Hargreaves, A. (2007). Sustainable professional learning communities. In L. Stoll & K. S. Louis (Eds.), *Professional learning communities: Divergence, depth and dilemmas* (pp. 181-196). Berkshire, England: Open University Press.
- Harris, D. N., & Sass, T. R. (2010). *What makes for a good teacher and who can tell?* Retrieved from <http://myweb.fsu.edu/tsass/Papers/IES%20Harris%20Sass%20Principal%20Eval%2034.pdf>
- Hazi, H., & Rucinski, D. A. (2014). Policy meets practice: Districts feel the impact of state regulations. *Journal of Staff Development*, 35(6), 44-47.
- Hord, S. (2004) *Learning together, leading together: Changing schools through professional learning communities*. New York, NY: Teachers College Press.
- Horn, I. S., & Little, J. W. (2010). Attending to problems of practice: Routines and resources for professional learning in teachers' workplace interactions. *American Educational Research Journal*, 47(1), 181-217.
- Jacob, B. A., & Lefgren, L. (2008). Can principals identify effective teachers? Evidence on subjective performance evaluation in education. *Journal of Labor Economics*, 26, 101-136.
- Kane, T. J., McCaffrey, D. F., Miller, T., & Staiger, D. O. (2013). *Have we identified effective teachers? Validating measures of effective teaching using random assignment* (MET project research paper). Retrieved from http://www.metproject.org/downloads/MET_Validating_Using_Random_Assignment_Research_Paper.pdf
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge, England: Cambridge University Press.

- Lavigne, A. L. (2014). Exploring the intended and unintended consequences of high-stakes teacher evaluation on schools, teachers, and students. *Teachers College Record*, 116, 1-29.
- Lavigne, A. L., & Good, T. L. (2014). *Teacher and student evaluation: Moving beyond the failure of school reform*. New York, NY: Routledge.
- Learning Forward. (2014). *Standards for professional learning: Learning communities*. Retrieved from <http://learningforward.org/standards/learning-communities#.VIpEUosqlwY>
- Little, J. W. (1990). The persistence of privacy: Autonomy and initiative in teachers' professional relations. *Teachers College Record*, 91, 509-536.
- Little, J. W., & Curry, M. W. (2008). Structuring talk about teaching and learning: The use of evidence in protocol-based conversation. In L. M. Earl & H. Timperley (Eds.), *Professional learning conversations: Challenges in using evidence for improvement* (pp. 29-42). Dordrecht, Netherlands: Springer.
- Marzano, R. J. (2012). The two purposes of teacher evaluation. *Educational Leadership*, 70(3), 14-19.
- Massachusetts Department of Elementary and Secondary Education. (2013). *First year of educator evaluation ratings show majority of teachers in Massachusetts performing at high levels*. Retrieved from <http://www.doe.mass.edu/news/news.aspx?id=7867>
- McLaughlin, M. W., & Talbert, J. E. (2001). *Professional communities and the work of high school teaching*. Chicago, IL: University of Chicago Press.
- McLaughlin, M. W., & Talbert, J. E. (2006). *Building school-based teacher learning communities: Professional strategies to improve student achievement*. New York, NY: Teachers College Press.
- Moolenaar, N. M., Daly, A. J., Cornelissen, F., Liou, Y.-H., Caillier, S., Riordan, R., Wilson, K., & Cohen, N. A. (2014). Linked to innovation: Shaping an innovative climate through network intentionality and educators' social network position. *Journal of Educational Change*, 15(2), 99-123.
- National Board for Professional Teaching Standards. (2015). Certificates, Standards, and Instructions for First-time Candidates. Retrieved February 2, 2015, from National Board for Professional Teaching Standards website <http://boardcertifiedteachers.org>
- National School Reform Faculty. (2014). Retrieved from <http://www.nsrharmony.org/>
- Nelson, T. H., & Slavit, D. (2008). Supported teacher collaborative inquiry. *Teacher Education Quarterly*, 35, 99-116.
- Newmann, F. M. (1996). *Authentic achievement: Restructuring schools for intellectual quality*. San Francisco, CA: Jossey-Bass.
- Perspectives of irreplaceable teachers: What America's best teachers think about teaching. (2013, August). *The National Teacher Project*. Retrieved from <http://tntp.org/ideas-and-innovations/view/perspectives-of-irreplaceable-teachers>
- Programme for International Student Assessment. (2007). *PISA 2006: Science competencies for tomorrow's world*. Paris, France: OECD.
- Pounder, D. G. (1999). Teacher teams: Exploring job characteristics and work-related outcomes of work group enhancement. *Educational Administration Quarterly*, 35, 317-348.
- Saphier, J. (2014). Content teams and error analysis: How school leaders create high-functioning teams that use data to plan re-teaching. *Research for Better Teaching*. Retrieved from <http://www.rbteach.com/sites/default/files/contentteamsanderroranalysis.pdf>
- Schmoker, M. (2004). Tipping point: From feckless reform to substantive instructional improvement. *Phi Delta Kappan*, 85, 424-432.
- Stiggins, R. (2005). From formative assessment to assessment for learning: A path to success in standards-based schools. *Phi Delta Kappan*, 324-328.

- Strong, M., Gargani, J., & Hacifazlioglu, Ö. (2011). Do we know a successful teacher when we see one? Experiments in the identification of effective teachers. *Journal of Teacher Education, 62*, 367-382.
- Sutton, R. (2010). Challenges of Developing and Implementing Formative Assessment Practices in Schools. *International Encyclopedia of Education, Amsterdam, Elsevier-Academic Press, 3*, 353-358.
- Talbert, J. E. (2010). Professional learning communities at the crossroads: How systems hinder or engender change. In A. Hargreaves, A. Lieberman, M. Fullan, & D. Hopkins (Eds.), *The second international handbook of educational change* (pp. 555-571). New York, NY: Springer.
- Taylor, E. S., & Tyler, J. H. (2012). The effect of evaluation on teacher performance. *American Economic Review, 102*, 3628-3651.
- Trotman, D. (2009). Networking for educational change: Concepts, impediments and opportunities for primary school professional learning communities. *Professional Development in Education, 35*, 341-356.
- U.S. Department of Education. (2010). *A blueprint for reform: The reauthorization of the Elementary and Secondary Education Act*. Alexandria, VA: Author.
- Vescio, V., Ross, D., & Adams, A. (2008). A review of research on the impact of professional learning communities on teaching practice and student learning. *Teaching and Teacher Education, 24*, 80-91.
- Wei, R. C., Darling-Hammond, L., & Adamson, F. (2010). *Professional development in the United States: Trends and challenges*. Dallas, TX: National Staff Development Council.
- Woodland, R. H., Barry, S., & Crotts, K. (2014). Using social network analysis (SNA) to promote school-wide instructional innovation: A case study. *Journal of School Leadership, 24*, 114-145.
- Woodland, R. H., & Hutton, M. S. (2012). Evaluating organizational collaborations suggested entry points and strategies. *American Journal of Evaluation, 33*, 366-383.
- Woodland, R. H., Lee, M. K., & Randall, J. (2013). A validation study of the teacher collaboration assessment survey. *Educational Research and Evaluation, 19*, 442-460.
- Yendol-Hoppey, D., & Dana, N. F. (2010). *Powerful professional development: Building expertise within the four walls of your school*. Thousand Oaks, CA: Corwin.
- Yoon, K. S., Duncan, T., Lee, S. W.-Y., Scarloss, B., & Shapley, K. (2007). *Reviewing the evidence on how teacher professional development affects student achievement* (Issues & Answers, REL 2007–No. 033). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance. Retrieved from http://ies.ed.gov/ncee/edlabs/regions/southwest/pdf/rel_2007033_sum.pdf

Author Biographies

Rebecca H. Woodland, Ph.D, is Associate Professor of Educational Leadership and Associate Director of the Center for Education Policy in the Department of Educational Policy, Research and Administration at the University of Massachusetts–Amherst. Her scholarship is focused on examining and improving conditions for job-embedded professional learning, and investigating the links between teacher collaboration, instructional practice, and student achievement.

Rebecca Mazur is a high school librarian and a doctoral student in the Educational Policy and Leadership studies program at the University of Massachusetts–Amherst. She has won numerous teaching awards.