



Six Elements for Effective Instructional Coaching: Supporting Teacher Learning for the Complexity of Teaching in the Twenty-First Century

by Page Tompkins and Christopher Ward

The demands of twenty-first century learning have increased the complexity of teaching and placed new demands on teachers to prepare diverse groups of students for more challenging work. Teachers increasingly are expected to teach students to frame problems; to find, integrate, and synthesize information; to create new solutions; to learn on their own; and to work cooperatively. To do this, teachers need substantially more knowledge and radically different skills than most now have (National Research Council, 2000).

Fortunately, evidence suggests rich professional learning opportunities can help teachers teach in more ambitious and effective ways. Unfortunately, this type of professional learning remains rare, and current professional development efforts tend to be episodic, superficial, and disconnected (Little, 2006). Further, many professional development programs suffer from the “problem of enactment” (Kennedy, 2016), which describes the tendency of teachers to learn and espouse one idea yet continue to enact a different idea or habit in the classroom.

More effective approaches to professional learning must include closer connections to teacher practice, opportunities for practice and feedback, and individual and collective engagement in learning (Little, 2006; Van Driel & Berry, 2012). Or as one of the Upper Valley Educator Institute's collaborating coaches, Beth Ziegler^[1], phrased it, "Professional development delivered on its own without follow-up or reflection is like teaching a skill in isolation without any connection to curriculum. New concepts learned at a workshop or in service will not be useful unless they're somehow connected to daily practice *and* are revisited with follow-up reflections or dialogue with colleagues."

Instructional Coaching as a Form of Continuous, Practice-Embedded Learning

One promising approach to addressing the problem of enactment is instructional coaching (Biancarosa, Bryk, & Dexter, 2010; Knight, 2009). In recent years, instructional coaching has emerged as an important practice at the intersection of instructional leadership and professional development (Knight, 2009; Mangin, 2014), which can bridge new professional knowledge and the enactment of that knowledge in an instructional setting (Taylor, 2008; Tompkins, 2016).

In recent years, instructional coaching has emerged as an important practice at the intersection of instructional leadership and professional development

While instructional coaching has many definitions, all point to instructional coaching as a form of instructional leadership characterized by individualized guidance and support that takes place directly within the instructional setting. This support is intended to promote teachers' learning and application of instructional expertise (Taylor, 2008) and has the capacity to impact student achievement significantly, promote professional growth, deepen personal and professional relationships, and create powerful learning communities (Baron, Moir, & Glass, 2008).

Pedagogy of Coaching

Coaching is much more than accomplished teachers dispensing advice. Despite the emerging evidence of coaching as a promising approach to bridging knowledge and practice, studies of coaching as a tool for enhancing professional learning have indicated that in the absence of meaningful coach development, the impact of coaching is likely to be negligible (Biancarosa et al., 2010; Bryk, Gomez, Grunow, & LeMahieu, 2015). To be effective, initiatives must include careful consideration of what coaches must know and be able to do (Biancarosa et al., 2010). Drawing on literature from teacher education, new teacher mentoring, and subject area coaching, research indicates that to be effective, coaches must develop a pedagogy tailored to supporting teachers as learners through evidence-based formative teacher development aligned with explicitly defined expectations for teacher practice (Athanases & Achinstein, 2003), including opportunities to learn in practice (Darling-Hammond, 2006), collaboration on practical challenges, instructional planning (Feiman-Nemser, 2001), examining student assessment results, and issues of instructional alignment (Athanases & Achinstein, 2003).

Design Study: Developing and Refining a Framework for Effective Coaching

Despite the growing body of research and practitioner literature on the pedagogy of coaching, we and our colleagues at the Upper Valley Educators Institute noticed that even for effective and experienced coaches, a lack of conceptual clarity and detailed descriptions of effective practice was inhibiting coach effectiveness across contexts (teacher education, new teacher mentoring, and supporting professional development). As one of our collaborating coaches, Becky Wipfler^[2], phrased it, “Coaching teachers is a complex undertaking which I hesitated to jump into until I more fully understood the many facets of coaching.” In the hopes of creating better frameworks for addressing this gap, we set out on a yearlong design development process intended to develop a clearer and more detailed description of effective coaching practices.

Design development research is an applied approach to improvement that seeks to connect an actionable problem to an intervention through a theory of action. The task in design development work is twofold. On the one hand, design developers support educational environments by responding to urgent problems of practice that pose a *design challenge in a specific context*. On the other hand, they work in a systematic fashion toward designs that can be transferred from one organizational unit to another (Mintrop, 2015).

Guided by this method of improvement, the Upper Valley Educator’s Institute faculty developed a theory of action to guide our study (see Figure 1). The intervention, evaluation, and refinement process occurred over the course of six cycles of coaching practice, video analysis, and revisions to the prototype.

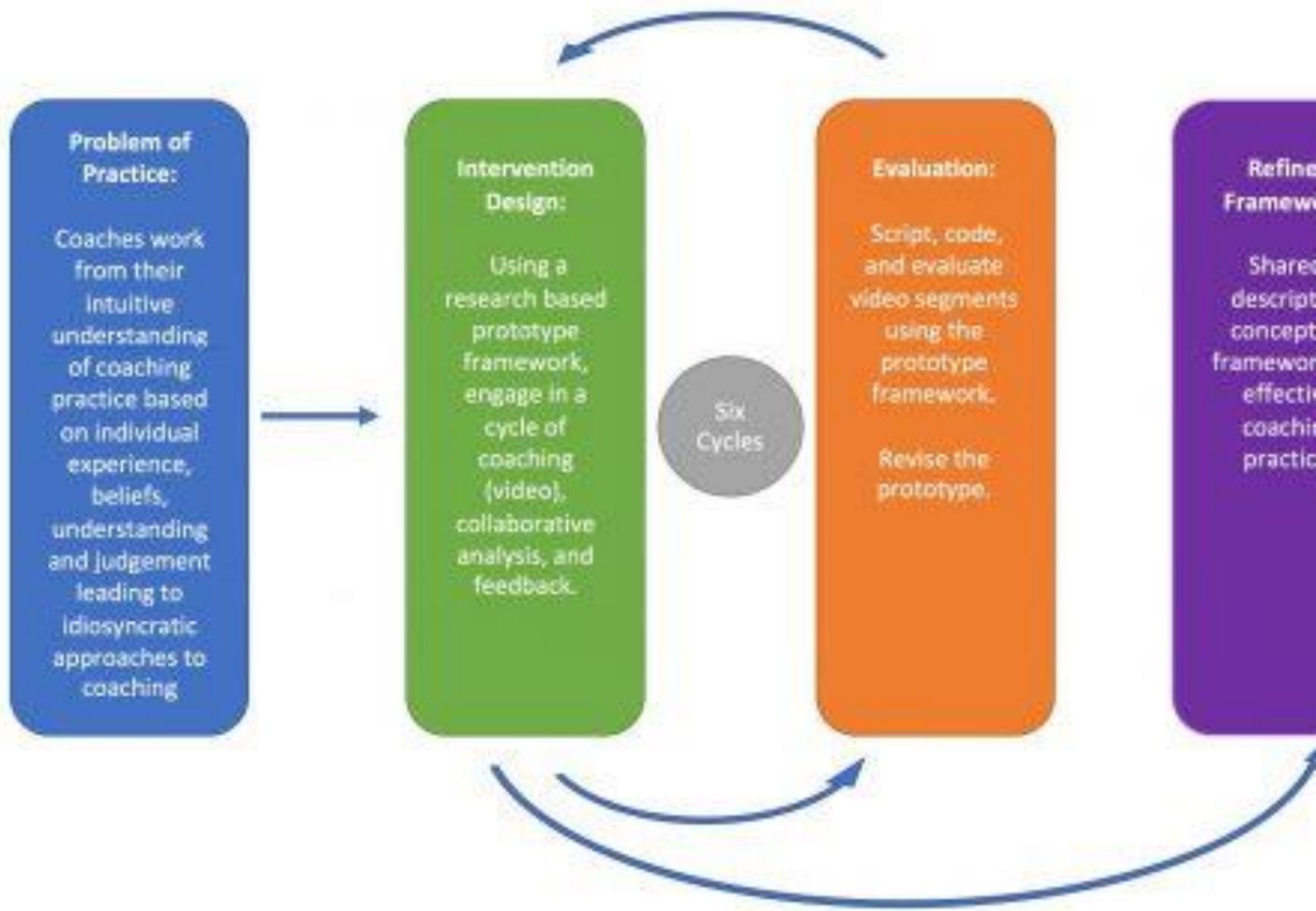


Figure 1. *Theory of Action*

The end result of the process was a modified framework for coaching and, as an important distal outcome, extensive development of our own coaching practices and improvement to our coach training programs.

Framework for Effective Coaching

The framework that emerged from this study included six elements for effective coaching: fostering feedback loops, sequencing conferences, coaching stances, surfacing reflection and metacognition, coaching for equity, and use of coaching language. Each is described briefly below.

Feedback Loops. Effective coaches create a feedback loop (Black & Wiliam, 1998; Black & Wiliam, 2009) in which the *learner* clearly visualizes their own practice and desired practice, learns productive ways to move forward, and takes new action. As we developed the framework,

it became increasingly clear that engaging the teacher in a feedback loop was an overarching concept and that all other elements of the model combined to contribute to this aspect of coaching.

Effective coaches create a feedback loop (Black & Wiliam, 1998; Black & Wiliam, 2009) in which the learner clearly visualizes their own practice and desired practice, learns productive ways to move forward, and takes new action.

The use of a research-based framework of instructional practice is an important aspect of fostering feedback loops and helps teachers to evaluate their current performance and define their desired level of performance. In this study, the instructional framework was based on a combination of elements drawn from the Danielson Framework for Teaching (Ho & Kane, 2013), Performance Assessment for California Teachers[3] (Darling-Hammond, Newton, & Wei, 2013; Pecheone & Chung, 2006), and the InTASC Model Core Teaching Standards and Learning Progressions for Teachers (Council of Chief State School Officers, 2013).

Consistent with thinking about clinical cycles (Sullivan & Glanz, 2005), observing and conferencing did not constitute a complete feedback loop. Teachers needed to take subsequent action to implement the new practices (thus addressing the problem of enactment). New action served to generate a new conception of current practice, leading to a new feedback loop.

Thinking of a feedback loop as something the learner engages in required a shift in our conception of the coach's role. Initially, we thought of coaches as "giving feedback" to the teacher. When observing initial conferences, we became aware that this framing focused on the coach and not the teacher. By conceptualizing the role of the coach as assisting the teacher in seeing their own practice, visualizing desired practice, understanding strategies for moving forward, and taking action, our attention shifted toward a more teacher-centered approach and placed particular emphasis on the reflection and metacognition element of this coaching framework, discussed in more detail below.

Sequence Conferences. Coupled with an observation, the conference was the core activity of coaching in this framework (Blase & Blase, 2004; Tompkins, Mintrop, & Wayne, 2013). While different conference types call for variations in sequencing, a typical conference sequence follows a general pattern: opening, bringing focus, moving practice forward, and closure (New Teacher Center, 2008; Tompkins et al., 2013).

In an effective *opening*, the instructional leader establishes or reestablishes rapport, clarifies the purpose and goals of the conference, orients the conversation toward learning and improving technical competence, embeds the conversation in an ongoing process of learning, and directs the teacher toward the analysis of core practices that need examining. Together, these strategies reduce defensiveness and foster a learning orientation.

The purpose of the *bringing focus* phase is to establish a “mirror” in which the evidence allows the teacher to clearly see their own performance. Prior to analysis, the instructional leader and teacher need to agree on what evidence their conversation will be based. The teacher and instructional leader do not need to agree on shared interpretations but do need to accept as true what each of them observed or perceived during instruction. Establishing the evidence base also serves to narrow the focus of the conference toward selected, observed instructional events that are aligned with an instructional framework and personalized areas for teacher growth. Effectiveness in this phase relies on the collection of targeted, low-inference, nonjudgmental evidence of instruction. Low-inference evidence refers to collected data that is an objective (or as objective as possible) representation of what occurred.

There are two dimensions to the *moving* practice component of the conference: (1) analyzing the evidence and (2) moving practice. (These need not be distinct, and the analysis and focus on growth can be intermingled.) After agreement on what has been observed, the conversation turns to analysis based on models of effective teaching: why they have been effective or not and means of improving. The coach makes sure that growth goals focus on core competencies and allow the teacher to situate their own performance relative to expected or desired performance. Strengths and weaknesses are clear, rooted in the evidence, and reveal the developmental level at which the teacher currently operates. The coach and teacher, in dialog, formulate directions for improvement in the teacher’s zone of proximal development.

In the *closure* phase, the conference is bounded by a sense of completion and clear next steps. The learning from the conference is reiterated and clarified, next steps are identified, and accountability is promoted by establishing measures of success.

Similar to a teacher’s lesson plan, we found that the lack of conference structure led to unclear learning experiences. By developing a loose protocol, coaches were able to think about the purposes and quality criteria for each aspect of the conference, allowing us to directly link evidence of our work to specific processes rather than general descriptions, an important aspect of design development work (Bryk et al., 2015).

Stances. Coaching stances describe the different degrees of responsibility and control the coach may exercise in a learning process and include instructive, collaborative, and facilitative stances. Effective coaches shift stances flexibly based on the learner’s needs. In an instructive stance, the coach directs interactions based on assessed needs, providing information about teaching or procedures and offering suggestions, options, and solutions with rationales. In a collaborative stance, the coach guides interactions without controlling them and co-constructs solutions. In a facilitative stance, the coach acts as a facilitator, surfacing and clarifying the teacher’s thinking and problem-solving, and supporting teacher self-assessment and self-prescription (Glickman, Gordon, & Ross-Gordon, 2013).

While each of us came into the design process with certain biases and tendencies related to stances, over the course of the study we became increasingly convinced that no single stance was preferable or inherently superior, that each stance could be enacted well or poorly, and that the

learner's needs were the most important determinant of the appropriate stance in a given situation.

Fostering Reflection and Metacognition. Ultimately, the purpose of coaching is to support the teacher in seeing their own practice more clearly. This means that whatever stances or questioning techniques a coach uses, in the end it only matters how the teacher understands their practice, good teaching, their goals for improvement, and the actions they would take. Effective coaching is ultimately aimed at building teachers' metacognitive thinking and self-regulation so they can make decisions about their practice and goals (Sullivan & Glanz, 2005; McLymont & Costa, 1998).

Coach practices that foster reflection and metacognition include techniques for helping the teacher describe and name practice, build a conceptual model of effective practice, see the relevance of concepts and ideas, analyze and assess, surface dilemmas, plan for action, and identify growth.

Of all the elements of our coaching design, techniques for fostering teacher reflection and metacognition proved the most significant. In examining early videos of coaching, we recognized that even when the coach used questioning effectively, moved through a sequence, and ended conferences with what appeared to be productive next steps, we were left wondering whether the teacher in fact substantively understood their practice. This led to an emphasis on language stems and techniques for placing teacher thinking at the center of the coaching experience.

Coaching for Equity. The role of the coach in coaching for equity is to ground the discussion of teaching and learning in student equity by raising awareness of student differences, supporting the teacher to take new actions, and helping the teacher generalize and transfer what they learn from those new actions (Achinstein & Athanases, 2005; Lee, 2010):

Effective coaches put inequity on the table by surfacing and identifying students' different needs, particularly those related to groups of students historically underserved by the education system (e.g., low-income students, special populations, students of color, English language learners). Coaches help the teacher to uncover biases and assumptions about students.

Coaches subsequently help the teacher clarify their "actionable space" and support the teacher's efforts to identify instructional strategies to meet identified students' needs. Because issues of inequity are inherently tied to systemic and societal factors that are beyond an individual teacher's control, teachers may resist taking action due to a belief that their actions cannot make a difference. The coach's job is to help the teacher focus on what they can do rather than what is out of their control. When the teacher takes action and sees positive results, however modest, on student performance, new thinking and beliefs about marginalized groups and students begins to emerge. Effective coaches support colleagues to transfer these lessons, leading to changed teacher assumptions and greater access for all students.

Of all the elements of the coaching model, coaching for equity proved to be the most difficult to enact. Despite repeatedly identifying coaching for equity as important, the design group consistently fell short of our ambitions for equity coaching. This led to multiple rounds of revisions to the framework in an effort to identify more tangible ways of productively putting inequity on the table. While our efforts were not entirely successful, we remain committed to coaching for equity as a key focus of our design work moving forward.

Coaching Language. Effective coaches deploy a range of discourse strategies designed to surface, clarify, and/or deepen teacher thinking. The use of coaching language and questioning are the technical skills used to support all the other elements. Because language and thinking are interactive processes, how the coach and the teacher interact matters as much as the content about which they interact. Thoughtful, thought-filled conversations require carefully constructed verbal elements (Lipton & Wellman, 2003). Our design includes language stems for a wide variety of types of coaching language, such as effective paraphrasing, questioning, and prompting techniques.

The coaching framework that resulted from this study, elements of which are highlighted above, includes descriptive knowledge briefs, language and questioning stems for each element, and rubrics. Together, these form the current iteration of our design work and are intended to fill the “what coaches need to know and be able to do” gap, forming the substance of our own improvement work and our work developing coaches, mentors, and instructional leaders in partner schools.

Challenges and Opportunities

Coaching is complicated work, requiring significant and continuing practice. This design process sought to explicate the complexity of coaching rather than simplify it. Even so, this coaching framework describes only particular aspects of coaching (i.e., observing and conferencing). While much of this framework is relevant for other dimensions of coaching (such as modeling practice, analyzing student work, and collaborative planning), these dimensions are not explicitly addressed by this framework.

Even a broader conception of coaching that incorporates all of these dimensions is not a magic bullet. Coaching is only one of many elements needed to foster collective improvement. Without additional elements—e.g., a shared vision and shared goals for improvement, research-based instructional frameworks, professional collaboration, supportive leadership, relational trust, individual motivation (Bryk, Sebring, Allensworth, Luppescu, & Easton, 2010; Tompkins, 2014)—collective improvement is not likely. Additionally, coaching requires resources, including, at minimum, release time and effective professional development.

Despite these challenges and limitations, the results of this design study provide significant opportunities for improved coaching and coach development. By describing elements of effective coaching and coaching practice in depth, we partially address the “what coaches need to know and be able to do” gap. This has provided a rich opportunity for us to improve our own coaching and our models for developing coaches.

More broadly, effective coaching has the potential to support school improvement, to distribute leadership within schools, to build capacity throughout the school system, to develop leadership pipelines, and to enhance existing investments in professional development.

Most important, however, is the degree to which better designs for coaching support teachers' ability to meet the increasingly complex demands of our profession. In the words of a second-year New Hampshire teacher who has received coaching through the Upper Valley Educators Institute, "When you first start teaching, it's kind of like feeling your way through a darkened hallway. You bump into things and you are never quite sure you're actually going in the right direction. Having a coach is like having a flashlight."

^[1] Beth Ziegler is a math coach at Hartland Elementary School in Hartland, Vermont.

^[2] At the time of this study, Becky Wipfler was the literacy specialist at Frances C. Richmond Middle School in Hanover, NH.

^[3] The New Hampshire Institutions of Higher Education Network (NH IHE Network) has developed and is piloting the New Hampshire Teacher Candidate Assessment of Performance (TCAP), which is based on the Performance Assessment for California Teachers for use across teacher preparation programs in New Hampshire.

Page Tompkins is Executive Director of Upper Valley Educators Institute in Lebanon, New Hampshire.

Christopher Ward is Graduate Studies Coordinator at Upper Valley Educators Institute in Lebanon, New Hampshire.

References

Achinstein, B., & Athanases, S. Z. (2005). Focusing new teachers on diversity and equity: Toward a knowledge base for mentors. *Teaching and Teacher Education, 21*(7), 843–862.

Athanases, S. Z., & Achinstein, B. (2003). Focusing new teachers on individual and low performing students: The centrality of formative assessment in the mentor's repertoire of practice. *Teachers College Record, 105*(8), 1486–1520.

Baron, W., Moir, E., & Glass, J. (2008). *Coaching to promote teacher development*. California Formative Assessment System Professional Development: Year 1 Day 2, Inquiry Into Practice [Presentation Handout]. Santa Cruz, CA: New Teacher Center.

Biancarosa, G., Bryk, A. S., & Dexter, E. R. (2010). Assessing the value-added effects of literacy collaborative professional development on student learning. *Elementary School Journal*, *111*(1), 7–34.

Black, P., & Wiliam, D. (1998). Assessment and classroom learning. *Assessment in Education: Principles, Policy & Practice*, *5*(1), 7–74.

Black, P., & Wiliam, D. (2009). Developing the theory of formative assessment. *Educational Assessment, Evaluation and Accountability*, *21*(1), 5–31. doi:10.1007/s11092-008-9068-5

Blase, J., & Blase, J. (2004). *Handbook of instructional supervision*. Thousand Oaks, CA: Corwin Press.

Bryk, A. S., Gomez, L., Grunow, A., & LeMahieu, P. (2015). *Learning to improve: How America's schools can get better at getting better*. Cambridge, MA: Harvard Education Publishing.

Bryk, A. S., Sebring, P. B., Allensworth, E., Luppescu, S., & Easton, J. Q. (2010). *Organizing schools for improvement: Lessons from Chicago*. Chicago: University of Chicago Press.

Council of Chief State School Officers. (2013). *InTASC model core teaching standards and learning progressions for teachers 1.0*. Retrieved from http://www.ccsso.org/Documents/2013/2013_INTASC_Learning_Progressions_for_Teachers.pdf

Darling-Hammond, L. (2006). Constructing 21st-century teacher education. *Journal of Teacher Education*, *57*(3), 300–314. doi:10.1177/0022487105285962

Darling-Hammond, L., Newton, S. P., & Wei, R. C. (2013). Developing and assessing beginning teacher effectiveness: The potential of performance assessments. *Educational Assessment, Evaluation and Accountability*, *25*(3), 179–204.

Feiman-Nemser, S. (2001). From preparation to practice: Designing a continuum to strengthen and sustain teaching. *Teachers College Record*, *103*(6), 1013-1055.

Glickman, C., Gordon, S., & Ross-Gordon, J. M. (2014). *SuperVision and instructional leadership: A developmental approach* (9th edition). Upper Saddle River, NJ: Pearson.

Ho, A. D., & Kane, T. J. (2013). *The reliability of classroom observations by school personnel* (Research paper). Retrieved from <http://files.eric.ed.gov/fulltext/ED540957.pdf>

Kennedy, M. M. (2016). How does professional development improve teaching? *Review of Educational Research*, *86*(4), 945–980. doi:10.3102/0034654315626800

- Knight, J. (2009). Coaching. *National Staff Development Council*, 30(1).
- Lee, E. (2010). Mentoring for equity. Mentor Professional Development: Mentoring for Equity [Presentation Handout]. Santa Cruz, CA: New Teacher Center.
- Lipton, L., & Wellman, B. (2003). *Mentoring matters: A practical guide to learning-focused relationships, 2nd Edition*. Sherman, CT: MiraVia.
- Little, J. W. (2006). *Professional community and professional development in the learning-centered school* [Working paper]. Washington, DC: National Education Association.
- Mangin, M. M. (2014). Capacity building and districts' decision to implement coaching initiatives. *Education Policy Analysis Archives*, 22(56).
- Mintrop, R. (2015). *Design-based school improvement: A practical guide for education leaders*. Cambridge, MA: Harvard Education Press.
- McLymont, E., & Costa, J. d. (1998). *Cognitive coaching: The vehicle for professional development and teacher collaboration*. Paper presented at the American Educational Research Association, San Diego, CA.
- National Research Council. (2000). *How people learn: Brain, mind, experience, and school* (Expanded edition). Washington, DC: National Academy Press.
- New Teacher Center. (2008). *Mentoring conversation: A protocol*. Foundations in instructional mentoring [Presentation Handout]. Santa Cruz, CA: New Teacher Center.
- Pecheone, R. L., & Chung, R. R. (2006). Evidence in teacher education: The performance assessment for California teachers (PACT). *Journal of Teacher Education*, 57(1), 22–36.
- Sullivan, S. S. , & Glanz, J. (2005). *Supervision that improves teaching: Strategies and techniques* (2nd ed.). Thousand Oaks, CA: Corwin Press.
- Taylor, J. (2008). Instructional coaching: The state of the art. In M. M. Mangin & S. R. Stoelinga (Eds.), *Effective teacher leadership: Using research to inform and reform* (pp. 10–35). New York, NY: Teachers College Press.
- Tompkins, P. (2014). *Conceptual framework for effective professional learning based change initiatives*. Paper presented at the Rowland Foundation Annual Conference, Burlington, VT.
- Tompkins, P. (2016). Emergent integration: Coach roles in bridging coursework and fieldwork in effective, clinically focused teacher certification programs. Paper presented at the New England Educational Research Organization (NEERO), Portsmouth, NH.

Tompkins, P., Mintrop, H., & Wayne, M. (2013). *Instructional conference guide: Learning oriented conferences based on observation(s) and evidence of instruction*. Unpublished Manuscript, Reach Institute for School Leadership & University of California, Berkeley.

Van Driel, J. H., & Berry, A. (2012). Teacher professional development focusing on pedagogical content knowledge. *Educational Researcher*, 41(1), 26–28.