



Student Teachers' Preparation in Literacy Cooking in Someone Else's Kitchen

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Questions about optimal routes to becoming an effective teacher have fueled an ongoing debate for more than 50 years—also, not coincidentally, a time of increasing regulation of teacher preparation programs. A number of alternative pathways

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have been investigated (Darling-Hammond, 2010; Darling-Hammond, Holtzman, Gatlin, & Heilig, 2005), yet the question of how teachers should be prepared to teach remains. Schools of education, once the bastion of teacher preparation, are under siege (e.g., Wiseman, 2012). A central issue in the debate is the effectiveness of schools of education and their impact on candidates' teaching practices. In this study, we (10 literacy teacher educators) report findings from a cross-institutional, longitudinal research project on the impact of preparation programs on teacher knowledge and practices.

We undertook our research in part to counter a view sometimes voiced in policy circles: that teachers are low-level technicians who must carry out plans of policy makers and curriculum experts without exercising expert adaptive knowledge (Snow, Griffin, & Burns, 2005) or making adjustments to address students' specific needs. By contrast, we align with those who argue the merits of teacher preparation, focusing on the complexity of teaching and citing the need for teacher educators who can help candidates put into action what Hammerness et al. (2005) have stated are "solid ideas about teaching" (p. 374), those formed in course work and other aspects of their preparation programs.

Teaching is complex because it is an unpredictable human endeavor. What teachers do in the moment depends on students' ever-changing needs and unanticipated classroom events. As Dewey (1938) stated, differentiating instruction for various learning needs "is a problem for the educator, and the constant factors in the problem are the formation of ideas, acting upon ideas, observation of the conditions which result, and organization of facts and ideas for future use" (p. 112). Indeed, "there are no easy answers" to "multidimensional situations" that arise in classrooms, and "teachers must adapt 'on-the-fly' to pupils' developing understandings and to opportunities for situating instruction in motivating tasks" (Duffy, 2005, p. 300). This *reflection-in-action* (Schön, 1983, 1987) requires teachers to reflect on and reshape their actions while in the midst of their teaching.

Recognizing the complexity of teaching, Hammerness et al. (2005) stated that it is of utmost importance that we help candidates "learn to think systematically about this complexity" and that "they need to develop metacognitive habits of mind that can guide decisions and reflection on practice in support of continual improvement" (p. 359). Cochran-Smith, Ell, Ludlow, Grudnoff, and Aitken (2014) identified various competing demands placed on candidates and the multitude of influences (complex systems) at various levels that play into preparation programs and teaching, including "individuals, school systems, and family systems, as well as legislative processes and regulatory bodies" (p. 7), which change over time.

Specifically focusing on complexities of literacy instruction, Gambrell, Malloy, and Mazzoni (2011) stated that effective literacy teachers are skillful, knowledgeable, and able to plan differentiated instruction based on individual students' needs. Indeed, effective literacy teachers use "evidence-based best practices" and can "adapt the learning environment, materials, and methods to particular situa-

Student Teachers' Preparation in Literacy

tions and students" (p. 28). Thus candidates face complex demands during teacher preparation as they learn to tailor instruction and instructional actions based on students' responses and needs, while reflecting on adaptations and learning from them in the moment.

Literacy teacher preparation research has a long and rich history (e.g., Austin & Morrison, 1962). Recently, researchers verified that candidates learn what they are taught in literacy education course work (Clark, Jones, Reutzler, & Andreasen, 2013; Grisham et al., 2014; Risko et al., 2008; Wolsey et al., 2013). Additionally, Dillon, O'Brien, Sato, and Kelly (2011) reported that, according to candidates' comments and researchers' observations, literacy preparation programs positively influence beginning teachers' practices. Risko et al. (2008) indicated that literacy teacher preparation programs need to help teacher candidates make clear connections between courses and between course work and field placements. Research has shown that connections are being made, with student teachers and novice teachers implementing literacy instruction congruent with their literacy preparation course work (Clark et al., 2013; Dillon et al., 2011; Grisham, 2000; Scales et al., 2014).

Student teaching has long been a key feature of preparation programs (Wilson, Floden, & Ferrini-Mundy, 2002), traditionally positioned as a culminating experience where candidates put course work learning into action. Field-based experiences, lasting several weeks, a semester, or a full school year, facilitate learning as a process that occurs over time and are influenced by classroom settings, students, and mentor teachers (e.g., Sayeski & Paulsen, 2012). Teacher candidates develop knowledge about pedagogical methods, students, content, and curriculum through repeated classroom teaching experiences and interactions (Leinhardt & Greeno, 1986; Shulman, 1987). They seek to integrate what they have learned in preparation programs, translating knowledge into practice. Their situated knowledge is inextricably tied to contexts and cultures in which it is used (Brown, Collins, & Duguid, 1989; Kim & Hannafin, 2008).

Applying practices in the complexity of a classroom allows candidates to try out declarative knowledge and a declarative version of procedural knowledge (Snow et al., 2005), formed through prior learning experiences and information gained through course work, amid real-world classroom settings and guided by a "senior practitioner" (Schön, 1987, p. 38) in the form of a mentor teacher who demonstrates, advises, questions, and critiques. Complexities of the relationships between student teachers and their mentors, and the interplay between university- and field-based experiences, are only partially understood (Valencia, Martin, Place, & Grossman, 2009). According to research, candidates may abandon university learning during field experiences to satisfy mentor teachers, often adopting mentors' ways of teaching and focusing on classroom management over student learning (Clift & Brady, 2005). Understanding the relationship between university learning and instructional decisions in the student-teaching classroom is at the heart of this study.

Grounding Our Work

Our study is grounded in sociocultural theory, specifically in conceptualizations of mediation in human action. A central theme of Vygotsky's work (Moll, 2014), *mediated action* is the notion that individuals' learning and development are forged in goal-directed activity and that such action is mediated by the tools, symbols, or social interactions associated with that activity (see also Wertsch, 2010; Wertsch & Rupert, 1993). These tools, symbols, or social interactions, sometimes called *mediational means*, influence and shape human learning and development. When considering mediated activity, we note that "an inherent property of mediational means is that they are culturally, historically, and institutionally situated" (Wertsch, 1993, p. 230). Thus, in schools, mediating means may be instrumental (schedules, assessment tools, instructional materials), social (cultural practices, interactions with others, policies, procedures), or semiotic (language systems, mathematics; Moll, 2014). Our study examined a range of contextual features in schools—mediational means that shaped candidates' literacy-related teaching actions.

We drew on literature regarding conceptions of teacher knowledge associated with learning to teach. Recognizing that numerous theoretical perspectives on teacher knowledge exist (Munby, Russell, & Martin, 2001), we differentiated between candidates' *formal* knowledge (Fenstermacher, 1994), signifying knowledge constructed through preparation programs prior to student teaching, and *practical* teacher knowledge constructed as they engaged in student teaching. These categories roughly represent two threads in the broader literature on teacher knowledge. Formal teacher knowledge, primarily derived from research on what teachers need to know about teaching, is propositional in nature (Munby et al., 2001). In literacy teacher preparation, this formal knowledge would include knowledge of content, sound instructional practices, and children's literacy development (International Reading Association [IRA], 2007). Teachers' practical knowledge, however, is personal (Clandinin, 1985), situated in classrooms (Brown, Collins, & Duguid, 1989), and embedded in the lived experiences of teachers' professional contexts (Clandinin & Connelly, 1996).

Hammerness et al. (2005) noted that using teacher knowledge in action is more than putting propositional knowledge into practice and is complicated by the fact that much a teacher must do "emerges in the context of the practice" (p. 374). For candidates, this is a challenging endeavor. One candidate stated that working with a mentor teacher was like cooking in someone else's kitchen. The simile struck us as particularly appropriate for describing student teaching. Novice cooks working in someone else's kitchen may not know where all utensils are kept or even what ingredients or utensils are most appropriate for given situations. Each chef may use different techniques, which may conflict with novices' formal knowledge. How the novice enters into practice appears to be a function, at least in part, of the culture in the particular kitchen. Likewise, candidates, building on their work in teacher

Student Teachers' Preparation in Literacy

preparation, are assigned mentor teachers whose tools, contexts, and cultures are always complex and may be different from experiences candidates have encountered during teacher preparation. Student teachers need to be able to do more than follow any sort of inflexible script, instead responding to the complexity of teaching, constructing new knowledge as they do so. In an effort to understand candidates' emerging teacher knowledge and teaching practices, we examined their activity in their student-teaching context.

Our Study

The idea for this study emerged from conversations about the efficacy of our literacy preparation programs. As literacy teacher educators from eight geographically and programmatically diverse institutions in the United States, we wondered how our preparation programs impacted our candidates. The resulting 3-year study of the ways our candidates enacted what was taught about literacy instruction during their preparation programs provides a systematic examination of candidates' teaching practices from the perspective of those who are most likely positioned to recognize nuanced connections between preparation programs' key features and candidates' teaching practices. Note that our purpose for this research was not to evaluate our preparation programs or to compare them but rather to provide an account of our efforts to prepare highly qualified literacy teachers (Farnan & Grisham, 2006).

Our longitudinal inquiry was conducted in three contexts (university classrooms, student-teaching classrooms, and first-year teachers' elementary classrooms). Year 1 involved interviewing literacy faculty and examining course documents to identify *signature aspects* of our literacy preparation programs, elements that received particular emphasis in each program (Lenski et al., 2013; Wolsey et al., 2013). We also determined the degree of emphasis (i.e., high, medium high, medium, low) placed by each program on the Standards for Reading Professionals (SRP; IRA, 2010). The SRP established criteria for "developing and evaluating preparation programs for reading professionals" (p. 1) and have described what candidates "should know and be able to do in professional settings" (p. 1).

Building on initial findings about signature aspects and program emphasis on the SRP, our research transitioned during Year 2 from university course work to the student-teaching experience, this study's context. We aimed to illuminate candidates' implementation of literacy instruction under their mentor teachers' guidance. We focused on candidates' emerging metacognition about teaching literacy, including mediating means (Wertsch, 2010) that shaped their practice.

Specifically, we examined congruence between candidates' actions in placement classrooms and principles and knowledge about literacy teaching encompassed in signature aspects of their preparation programs and in the SRP. Thus we pursued descriptive findings focused not only on formal teacher knowledge but also on candidates' emerging practical knowledge of teaching constructed through teach-

ing experiences (Fenstermacher, 1994). To account for the degree of congruence between candidates' activity and our programs' features, we sought descriptive evidence of classroom contexts' key features. These data were examined for mediating influences affecting candidates' classroom actions.

We framed our study around two interrelated research questions:

1. How do teacher candidates enact signature aspects and the Standards for Reading Professionals in their placement classrooms?
2. What are the mediational means that affect candidates' actions?

Participants

Participants were 15 student teachers and their mentor teachers, each pair constituting a separate case in our multiple-case study. Candidates represented eight preparation programs and were in kindergarten through Grade 5 for their programs' capstone field experiences. Selection of candidates per program was based on accessibility and willingness to participate in the study. Candidates (14 women, 1 man) ranged from 22 to 59 years in age, with a mean age of 29 years. Twelve were White, 1 was Hispanic, and 1 was American Indian (Alaskan). Eight candidates were in urban schools (with one Reading First school), five were in suburban schools (with one Title I school), and two were in rural schools. Participants were not compensated for participation in our study. Table 1 contains descriptive characteristics of the 15 candidates.

Table 1
Descriptive Characteristics of Candidates

<i>Candidate^a</i>	<i>Age</i>	<i>Ethnicity</i>	<i>School demographic</i>	<i>Grade</i>
Carin	22	White	Suburban/Title I	3
Charla	22	White	Rural	4
Elana	24	Hispanic	Urban	2
Elise	29	American Indian/ Alaskan	Urban	1
Eryca	29	White	Urban	5
Holly	24	White	Urban/Reading First	3
Jill	36	White	Urban	5/1
Joan	22	White	Suburban	1
John	22	White	Suburban	2
Kristie	24	White	Suburban	1
Katie	22	White	Urban	3
Lily	40	White	Rural	2
Melinda	39	White	Urban	K
Rachel	25	White	Suburban	1
Sabrina	59	White	Urban	2

^a All names are pseudonyms.

Student Teachers' Preparation in Literacy

Data Sources

Guided by an observation instrument adapted from Henk, Moore, Marinak, and Tomasetti (2000), each researcher observed candidates from his or her institution at least twice during literacy instruction. We adapted the instrument by aligning the instrument's descriptors with the SRP then inserting numbers beside each descriptor to identify corresponding standards. The larger research team arrived at consensus for this adaptation. The instrument focused attention on central aspects of an observed reading lesson, including classroom climate; before-, during-, and after-reading phases of the lesson; skill and strategy instruction; and materials and tasks employed. We recorded field notes during classroom visits and conducted individual semistructured interviews with each candidate and each mentor teacher. Interview questions focused on candidates' preparation for literacy teaching and learning about literacy instructional practices based on classroom experiences (see the appendix). Interviews were recorded, transcribed, and posted in an online repository for researchers' access to the larger data set for analysis. Observations and interviews were gathered over one school year.

Data Analysis

Two stages of analysis were completed, as described subsequently: program-level and cross-case analysis. In the first stage, researchers prepared a comprehensive case summary per candidate. During the second stage, research teams conducted several rounds of cross-case analyses with all researchers reviewing, refining, and confirming results of these analyses.

Program-level analysis. Analysis of raw data began at the program level, so each researcher assembled interviews, observations, and other available data about school, student teacher, mentor, and classroom for each case for the purpose of extracting a rich description of candidates' actions related to literacy instruction in the placement classroom and existing literacy approaches or programs. During multiple rounds of analysis, we individually read and reread observation and interview data associated with each case, coding for evidence of candidates' enactment of their preparation programs' signature aspects (Lenski et al., 2013) and enactment of the SRP (Scales et al., 2014). Working in cross-institutional pairs, we coded data for a second case and then compared coded documents, discussed any differences that arose, and negotiated changes to accurately reflect candidates' enacted practices. This increased the trustworthiness of our findings.

In our first round of coding, we used the SRP as an analytic lens. In subsequent rounds of program-level analysis, we employed open coding to seek evidence of signature aspects and types of literacy programs or instructional approaches in placement classrooms. In each round, we identified salient passages from interviews and observations to serve as exemplars of our findings. Drawing primarily from

observations and interviews, individual researchers prepared a comprehensive narrative case summary for each of their candidates, using research questions to organize summaries.

Cross-case analysis. In the second stage of analysis, we addressed research questions collectively across 15 cases. Initially, cross-case analysis teams focused on particulars from individual sections of case summaries, deductively searching for patterns and themes to inform further analysis. Teams constructed series of data reduction charts (Miles & Huberman, 1994), each focused on a particular facet of our research questions. After reading each case summary, cross-case analysis team members rated candidates on the magnitude of evidence enactment of signature aspects from the individual candidate's preparation program using a 5-point scale. Continuing with a 5-point scale, the team rated each candidate, by standard, on the degree of enactment evidenced. The team's data reduction charts allowed us to search across cases for patterns of congruence between candidates' literacy instruction and concepts taught during course work. All researchers reviewed and confirmed ratings for each round of analysis.

From these descriptive findings, we extended our cross-case analysis to "build an explanation" (Yin, 2009, p. 141) of mediational means affecting candidates' actions in student-teaching classrooms. We sought evidence across cases that suggested how or why events occurred, relying on firsthand observers of candidates during student teaching, those who were most familiar with key features of their preparation programs.

We assembled previous findings into a single table (Yin, 2009) containing descriptive findings from initial rounds of cross-case analysis arranged in an array, with each row representing an individual case. This table helped us readily consider all facets of our data as we sought cross-case patterns that could suggest subgroups—groups of cases that might be considered instances of a particular type of case—or other explanatory patterns in the data that would provide insight into mediating influences in school contexts or candidates' classroom settings. As in prior stages of analysis, all researchers reviewed, refined, and confirmed cross-case analysis team findings.

Findings

Analysis of the 15 cases, individually and collectively across cases, revealed that candidates were situated in a range of classroom contexts. Equipped with knowledge and skills constructed in their preparation programs, they engaged as teachers in various ways, evidencing differences in enactment of both knowledge from preparation programs and practices aligned with the SRP.

The first two sections of findings combine to address our first research question about how candidates enacted what they learned in their programs when situated in

Student Teachers' Preparation in Literacy

their placement classrooms. First, we focus on descriptive evidence of candidates' enactment of signature aspects of their programs, and then we provide a brief description of their enactment of the SRP. In the final two sections, we address our research question regarding mediating means during candidates' student teaching.

Enacting Signature Aspects of a Teacher Preparation Program

The programs differed in emphasis given to particular aspects of literacy instruction or signature aspects (Lenski et al., 2013). Therefore data were analyzed per case in the context of a candidate's own preparation program (Table 2). For example, one signature aspect of Abernathy's¹ preparation program focused on *teaching competencies* required for obtaining state licensure. By contrast, Cathal emphasized *reflective practice*, whereas Sinclair promoted learning to exercise *professional judgment*.

Overall, candidates evidenced at least modest enactment of what they had been taught in their preparation programs. Fourteen candidates exhibited high to moderately high levels of congruence with at least one identified signature aspect. For more than one-fourth of candidates, enactment was consistently high across all signature aspects of their respective programs. When aspects were considered collectively for individuals, more than two-thirds of the candidates exhibited at least moderately high levels of congruence between actions and their own programs' signature aspects.

A few institutions shared some signature aspects, but we found that individual candidates were apt to enact them differently within student-teaching contexts. For example, *balanced literacy* was a signature aspect of Elena's program and of four other programs. In terms consistent with knowledge of literacy instruction constructed during her preparation program, Elena described her experiences with teaching reading and writing in an urban second-grade classroom, including read-alouds, guided reading, shared reading, and modeled writing. She explained her teaching of comprehension strategies, including making predictions, previewing text, reading for a purpose, asking questions, making connections, and summarizing. Elena's teaching observations confirmed that these and other hallmarks of balanced literacy, as taught in her preparation program, were woven throughout her literacy instruction.

Balanced literacy was also identified as a signature aspect of John's preparation program, where it was defined as instruction valuing authentic literacy experiences and flexible, competent use of reading skills and strategies, as taught and practiced through modeled, shared, interactive, guided, and independent reading opportunities. In John's student-teaching classroom, a core reading series was the reading program's backbone. One hour daily was allotted to reading, writing, and skill work from the anthology in whole group—a feature not generally congruent with the balanced literacy framework he learned about in his preparation program. However, John's mentor afforded him considerable flexibility with using the basal,

Table 2
Degree of Candidates' Enactment of Signature Aspects by Program

<i>Program^a</i>	<i>Signature aspects</i>	<i>Candidate(s)</i>		
Finlay	Assessment for planning	M	M	M
	Impact of diverse students	ML	MH	MH
	Strategies for equity	MH	MH	H
Sinclair			Holly	Rachel
	Workshop approach		H	H
	Professional judgment		H	H
	Applied assessment		MH	H
Innes			Elana	Katie
	"How to" teach reading		MH	H
	Balanced literacy		MH	MH
	Administering/applying assessment data		L	ML
Cathal			Charla	Lily
	Reflective practice		H	M
	Situated practice		H	M
Abernathy			Eryca	Jill
	Teaching competencies		H	L
	Balanced literacy		H	MH
	Skills/strategies for instruction		H	H
Murray			Kristie	Joan
	Theory into practice		M	H
	Balanced literacy		H	H
	Assessment for instruction		MH	MH
Wallace				Carin
	Theory into practice			M
	Understanding and supporting learners			H
	Situated practice			L
Lachlan				ML
	Instructional approaches and practices			John
	Balanced literacy			MH
	Professional conferences			H
				ML

Note. H = high. L = low. M = medium. MH = medium high. ML = medium low.

^a Pseudonyms.

Student Teachers' Preparation in Literacy

encouraging him to be selective in the ways he guided students' reading. John used some teacher's guide questions to steer discussions and sought opportunities to teach in ways consistent with formal knowledge about balanced literacy from his program. He often engaged students in read-alouds and was careful to ensure that students read independently for approximately 20 minutes daily. John stated, "Any chance to get the kids reading by themselves is a plus. . . . I like to just get them reading—nonfiction, fiction, whatever they want to read. They get their heads in the book, and I just let them go."

In other instances, identified signature aspects were unique to individual programs. For example, a signature aspect of Rachel's program was a focus on the workshop approach in literacy instruction. Like Elena and John, Rachel found opportunities to employ formal knowledge in her suburban first-grade classroom. Her mentor teacher used a modified version of Daily 5 (Boushey & Moser, 2006), a framework for daily literacy instruction including independent and partner reading, word work, writing, and listening to reading. Reflecting on preparation for classroom experiences, Rachel explored the relationship between formal knowledge from her preparation program and her emerging practical teaching knowledge. Rachel stated that although she had learned about the workshop approach in her preparation program, the Daily 5 structure provided practical suggestions about how to implement literacy instruction in ways congruent with reading and writing workshops. She explained,

Daily 5 sort of gave me an actual picture of what a reading classroom looks like, and how to run a reading classroom, and how to handle situations where it's not actually the reading that's the problem; it's the layout and the management and that sort of thing.

By contrast, we found instances when candidates evidenced practices not highly congruent with their programs' signature aspects. For example, Katie's preparation program placed emphasis on *administering assessments and applying assessment data*. Thus Katie had opportunities to construct formal knowledge about multiple methods for determining whether students were learning and what to do if they were not. However, Katie's placement school experienced pressure to improve state reading assessment scores owing to its "improvement" status because of low scores in the previous year. For much of Katie's student-teaching experience, assessment-related practices focused on test preparation, "going over the skills again that we want them to know." According to her mentor, "starting in January, . . . [they] started practicing every single week to get ready for the assessments," standardized tests administered in late March. Recognizing the disconnect between her formal knowledge and her student-teaching practices, Katie commented about wanting to take reading instruction beyond test preparation by helping students apply skills to everyday reading. Thus, although Katie evidenced instructional practices that were incongruent with her program's signature aspects, she sought ways to align the two.

**Enacting the International Reading Association's
Standards for Reading Professionals**

As with signature aspects, we found that individual candidates evidenced substantial or moderate enactment of at least some of the standards. Because programs differed in centrality of each standard (Lenski et al., 2013), cross-case analysis focused on patterns in congruity between individual candidates' practices and the relative degree of emphasis placed on each standard in their preparation programs, as determined previously (Table 3). If a candidate's rating for a standard met or exceeded program emphasis for that standard, the level of congruity was considered high. For example, Holly evidenced moderately high enactment of Standard 3 ("Assessment and Evaluation"), and because her program placed moderately high emphasis on Standard 3, congruence between her program and her teaching was high. If the rating was one level of enactment lower than program emphasis, as was the case with Carin's moderately high enactment of Standard 2 ("Curriculum and Instruction") when compared with her program's high level of emphasis on Standard 2, congruence between the two was considered moderate. Similarly, when a candidate's rating on a standard was more than two levels of enactment lower than his or her program's emphasis, the level of congruence was considered low. To determine an individual candidate's overall level of congruence with degree of program emphasis on the standards, we assigned numerical values to congruence level by standard (high = 3; moderate = 2; low = 1) and then calculated an average score per candidate (Table 3).

Generally, we found that candidates' enactment of standards reflected their programs' emphasis on corresponding standards. More than two-thirds of candidates evidenced high to moderate levels of congruity between the degree of emphasis given to the standards within their programs and their instructional actions. We found overall low levels of congruity in four cases.

Two unexpected patterns emerged when we examined individual standards across cases. First, we noted in all 15 cases that candidates evidenced enactment of Standard 5, "Literate Environment," at a degree that matched or exceeded the level of emphasis for that standard in their programs. Standard 5 embodies other standards because it focuses attention on creating an environment "that fosters reading and writing by integrating foundational knowledge, instructional practices, approaches, and methods, curriculum materials, and the appropriate use of assessments" (IRA, 2010, p. 40). Perhaps the multifaceted nature of this standard made it easier to identify in observations and interviews and therefore more evident in case summaries. Perhaps because candidates were in mentors' classrooms, the mentors' expertise in regard to literate environment was reflected in the data. Although candidates were in classrooms where the literate environment was largely established, our analysis suggested that all 15 candidates attended to issues related to physical or social environments, choices of instructional materials and other resources,

Student Teachers' Preparation in Literacy

routines for supporting literacy instruction, and classroom configurations (whole class, small group, individual), just as they learned in their programs.

The second pattern was less encouraging. We discovered that two-thirds of the candidates evidenced a degree of enactment of Standard 3, "Assessment and Evaluation," that was at least two levels below program emphasis. Because this standard focuses attention on employing "a variety of assessment tools and practices to plan and evaluate effective reading and writing instruction" (IRA, 2010, p. 39), perhaps enactment of candidates' formal knowledge related to Standard 3 was less visible during instruction and not explicitly revealed in interviews. Furthermore, many assessment practices noted in candidates' classrooms were established before school placements were made and were, therefore, beyond candidates' influence. Nonetheless, candidates did not evidence a range of assessments in daily classroom actions, nor did they reveal how established assessments informed their instruction.

Table 3
Degree of Candidates' Enactment of International Reading Association Standards for Reading Professionals Compared to Magnitude of Their Programs' Emphasis on Those Standards

<i>Student Teacher</i>	<i>Foundational Knowledge</i>	<i>Curriculum and Instruction</i>	<i>Assessment and Evaluation</i>	<i>IRA standard</i>			<i>Overall Level of Congruence^a</i>
				<i>Diversity</i>	<i>Literate Environment</i>	<i>Professional Learning and</i>	
Carin	M (H) ^b	MH (H)	M (H) ^b	M (M)	M (M)	L (L)	H
Charla	MH (H)	H (H)	M (H) ^b	L (M) ^b	H (M) ^c	ML (M)	M
Elana	MH (H)	M (H) ^b	M (H) ^b	L (MH) ^b	MH (M) ^c	ML (M)	L
Elise	L (H) ^b	M (H)	L (H) ^b	L (H) ^b	M (L) ^c	L (L)	L
Eryca	ML (H) ^b	H (H)	M (H) ^b	L (L)	MH (M) ^c	L (M) ^b	H
Holly	MH (H)	MH (H)	M (M)	L (M) ^b	MH (M) ^c	L (M) ^b	M
Jill	M (H) ^b	M (H) ^b	ML (H) ^b	L (L)	MH (MH)	MH (MH)	M
Joan	MH (MH)	H (H)	MH (H)	ML (L) ^c	M (M)	MH (H)	H
John	MH (MH)	MH (H)	H (M) ^c	ML (L) ^c	MH (M) ^c	ML (H) ^b	H
Kristie	M (MH)	H (H)	M (H) ^b	L (L)	H (M) ^c	M (H) ^b	H
Katie	MH (H)	MH (H)	ML (H) ^b	L (MH) ^b	H (M) ^c	ML (M)	M
Lily	MH (H)	H (H)	MH (H)	M (M)	H (M) ^c	ML (M)	H
Melinda	ML (H) ^b	MH (H)	ML (H) ^b	M (H) ^b	M (L) ^c	L (L)	L
Rachel	MH (H)	MH (H)	MH (M) ^c	L (M) ^b	H (M) ^c	ML (M)	H
Sabrina	ML (H) ^b	MH (H)	L (H) ^b	MH (H)	MH (L) ^c	L (L)	L

Note. Program emphasis for each standard is in parentheses.

H = high. L = low. M = medium. MH = medium high. ML = medium low.

^a Total 18 possible; high = 14–18; moderate = 12–13; low = 9–11.

^b Evidence of enactment at least two levels below program emphasis.

^c Evidence of enactment exceeding level of program emphasis.

Mediational Means in Student Teachers' Classrooms

To understand candidates' instructional practices, it was essential to attend to the kitchens where they were learning to cook—the student-teaching contexts. Upon examining the kinds of literacy programs or approaches in candidates' classrooms, we found a wide array of contexts, each with unique features, situated within their own educational systems and local communities. Despite this diversity, cross-case analyses revealed commonalities and patterns in types of literacy programs and approaches, such as core reading programs, grouping practices, and literacy assessment practices. This section of the findings focuses on commonalities and influences of such features on candidates' actions.

Core reading programs. One of the most prevalent features of candidates' classrooms was the presence of core or basal reading programs. In 14 candidates' classrooms, core reading materials were used, but the relative influence of these materials in daily classroom operation varied greatly. Implementation ranged from scripted instruction, where content and methods were tightly controlled through teachers' guides and program-driven assessments, to classrooms where basals were sometimes used for whole-class shared reading lessons or as a resource for instruction.

One notable example of scripted instruction was from Holly's third-grade classroom. Holly was required to use the scripted teacher's guide for small-group instruction. Lessons began with focusing on word parts, then moved to vocabulary instruction, followed by round-robin reading, where Holly used teacher's guide questions to move the lesson along. When students stumbled, she helped them figure out words using cues from the basal program. Similarly, Katie was in a third-grade classroom where a core reading program encompassed various aspects of her literacy teaching, including vocabulary instruction. For each text, Katie was expected to introduce vocabulary words identified in the teacher's manual by explaining their meanings, pointing them out in text, and discussing any context clues serving as meaning aids.

Other candidates experienced more flexibility in using core reading materials. Some mentor teachers encouraged candidates to use publishers' materials selectively or to supplement them with other materials or programs for specific purposes. Illustratively, John's mentor encouraged him to selectively use the manual as a resource in guiding class discussions of core reading stories. Similarly, Charla flexibly used basal texts in fourth grade. Her mentor explained,

We have a basal textbook. We do a couple basal stories, then we take a break, then we do a chapter book, and then we do nonfiction studies, and then we'll go back to the basal and do another basal chapter.

Eryca's mentor took a more radical stance, indicating that although her district had a basal program, she substituted trade books instead. She encouraged Eryca

Student Teachers' Preparation in Literacy

to help her fifth-grade students “read, think, and communicate” using trade books for instruction. Similarly, Elise’s mentor felt that, except for phonics readers, most of the core reading program’s main components were lacking, so she introduced elements of additional programs.

Pacing guides, common features of core reading programs, were prevalent in at least one-third of the classrooms, although their implementation varied. Katie was expected to follow district pacing guides with fidelity. Specifically, she was expected to begin a unit on the same day as other third-grade teachers in the district, spend the same amount of time on each story, and give the end-of-unit assessment on the same day. Each story followed a 5-day cycle, which could be adapted for shortened weeks. In most classrooms where pacing guides were present, their use had more flexibility. In John’s classroom, for example, there were district-wide expectations as to skills, concepts, or strategies to be taught weekly, but John and his mentor were comfortable doing whatever was necessary to keep students focused on real reading.

Grouping practices. Small-group reading instruction was evident in 14 placements, a classroom structure that mediated candidates’ actions by allowing more individual attention to students. Again, practices varied. For at least three candidates, these were prescriptive lessons delivered with fidelity to a manual’s scripts. Their reading groups proceeded with traditional oral reading instruction in round-robin fashion. In at least two other classrooms, small-group reading instruction was different. In daily guided reading groups, Joan and Kristie provided brief, targeted skill instruction and then supported students’ individual reading of leveled text matched to students’ instructional reading levels. Both candidates administered frequent running records to monitor students’ progress.

In 11 classrooms, students were grouped homogeneously for reading instruction, using students’ reading levels to determine group placements. This meant that grouping was fluid, but for Katie and Eryca, cross-class structures existed to facilitate homogenous grouping across grade levels. Students in those schools rotated to particular teachers’ classrooms for reading instruction by reading level, leaving these candidates little flexibility in grouping for specific needs. In four other classrooms, whole-class instruction dominated the day, and when small groups were employed, groups were primarily heterogeneous.

In 8 of the 10 primary-grade classrooms (K–2), shared reading in a whole-class setting was evident. Sabrina, for example, led her second-grade class in reading a story from the core reading anthology, presenting vocabulary and realia prior to reading to make concepts come to life. While reading, she had students turn to partners and discuss connections to their lives, make predictions, or summarize, depending on the text. She found meaningful ways for students to relate the text to themselves after reading, without workbook pages.

Literacy assessment practices. In some student-teaching classrooms, assessment practices occupied considerable time and attention. This was noted in

classrooms where core reading programs were central to literacy instruction. In cases where core programs were implemented with fidelity, required weekly and unit tests were an omnipresent mediating classroom feature.

In a portion of the cases, state- and district-mandated standardized tests loomed large in candidates' daily lives. For Katie, whose student teaching occurred in the latter part of the school year, focus on the state reading assessment administered in late March shaped her student teaching experience. As described earlier, her third-grade students experienced weekly test preparation for months. Indeed, her mentor was reluctant to fully cede reading-teaching responsibilities to Katie until after the state reading assessment. The mentor regularly took over Katie's planned literacy lessons to conduct test preparation sessions, which frustrated Katie.

Benchmarks or progress-monitoring assessments were evident in more than half of the student teachers' classrooms. Literacy assessment instruments (e.g., Dynamic Indicators of Basic Early Literacy Skills, Standardized Test for the Assessment of Reading) were employed for these purposes, and assessment results were used to assign students to reading groups or to periodically check students' progress. Informal assessments were evident in most classrooms. Kristie recognized the importance of frequent, ongoing anecdotal records about students' literacy development and learning. She regularly administered running records on students' reading. Kristie contrasted information that first-grade teachers could obtain through "reading scores" and information for tracking students' progress provided by anecdotes and running records, clearly valuing authentic, frequent data from the latter.

Mediating Influences in Student Teachers' Actions

We extended analysis of mediational means by seeking commonalities among candidates evidencing a relatively high degree of congruence between what they learned in their programs and classroom actions. Initially, we theorized that for these candidates, we would find a strong match between preparation program and classroom context. This pattern did not necessarily materialize. Rather, we found that flexibility and the degree of latitude in candidates' implementation of existing literacy programs and approaches were important mediating factors across cases. A complementary finding to the first was that positive, productive relationships with mentor teachers appeared to mediate candidates' actions.

Latitude in program implementation. The seven candidates who evidenced the highest levels of enactment of both signature aspects and the SRP emphasized that in their preparation programs, they were consistently afforded some degree of latitude in implementing literacy programs or approaches in their placement classrooms. Core reading programs existed in six of these seven classrooms, yet most of these candidates were encouraged to adapt or supplement core programs' materials and practices. Conversely, the eight candidates who evidenced the lowest levels of enactment of what they had been taught at the university were in classrooms

Student Teachers' Preparation in Literacy

where mentors adhered closely to school- or district-mandated forms of literacy instruction. In six of these eight contexts, we found core reading programs with pacing guides and weekly mandated testing for scheduled content. In at least three instances, candidates were expected to implement the core program with fidelity to pacing guides and teacher's materials.

It appears that it was not simply the presence or absence of a core reading program, or even particular types of curricula or approaches present in classrooms, that mediated candidates' actions. Rather, analysis indicated that "space" afforded certain candidates the opportunity to diverge from scripts, selectively employ core materials as resources instead of considering them as mandates, or supplement existing programs to meet students' needs, which also served as a mediating influence on their actions. Even when space was small, candidates found ways to draw on their university learning to "cook" in their mentors' kitchens. For example, in Holly's classroom, there was a school-mandated curriculum, and she was required to use scripted skill lessons for whole-class reading instruction. In small-group reading instruction, however, her mentor teacher explained, "[Holly] would . . . expand on [the script], . . . which I think made it a lot more interesting for the kids." When she had certain amounts of latitude to make changes, she could develop lessons incorporating literature as she had been taught to do and teach strategies from her preparation program.

Relationship with mentor teacher. Our finding regarding the mediating influence of the relationship between candidates and mentors mirrors our findings about latitude in program implementation. Six of the same seven candidates, those who evidenced the highest levels of enactment of signature aspects and the SRP, also appeared to experience positive, productive relationships with their mentors. These relationships can be characterized as helpful, collaborative, trusting, flexible, and, in three cases, based on shared views about literacy instruction. For example, Charla and Kristie enjoyed collaborative relationships with their mentors, planning together and modeling instruction after mentors' practices. Similarly, Rachel's mentor helped her identify parallels between the preparation program's workshop approach and the Daily 5 framework in her first-grade classroom.

By contrast, for the seven candidates evidencing the lowest levels of enactment of signature aspects and the SRP, philosophical and practical differences with their mentors manifested as mismatches between university learning and mentors' practice. This placed strain on their relationships. Three of these candidates recognized differences in their own and their mentors' beliefs about how reading should be taught. In all three instances, candidates imitated their mentors' established classroom practices, even as they disagreed with the efficacy of those practices. Elise described such a mismatch regarding comprehension instruction in her first-grade classroom: "What I envision is not what I'm doing right now. I'm in her classroom and I have to do it her way, but I'm learning a lot, so it's OK."

In three other cases, relationships between candidates and mentors were strained because of a perceived reluctance of mentors to cede classroom control to candidates. This was true for Katie. Her involvement in literacy instruction was limited until after standardized testing completion. Similarly, Lily's mentor reluctantly assigned her to administer running records for her second-grade students, stating, "So, what I think I'll do . . . is maybe . . . let her do one or two [running records], but ultimately I'm responsible for that, so some things it's kind of hard to let go." These examples illustrate the sometimes stark differences between candidates' and mentor teachers' instructional practices.

Discussion

In our study of candidates' enactment of literacy instruction in their placement classrooms, we found evidence in all cases of at least modest implementation of signature aspects and the SRP emphasized in preparation programs. The levels of implementation of almost half of the candidates could be considered moderate to high, although we found instances where candidates evidenced practices that were not highly congruent with their programs' signature aspects or with the SRP. Generally, candidates had not abandoned what they had learned in their programs; rather, to varying degrees, they found ways to implement their learning. While individual candidates enacted formal knowledge about literacy instruction in their own ways, two patterns of enactment were most significant: (a) those who were aware they were teaching in ways contrary to what they had been taught and (b) those who found ways to implement what they learned even when the school context did not necessarily match what they had learned in their preparation programs.

In some contexts, candidates' actions were incongruent, even starkly opposed, to what they were taught in their preparation programs. In several cases, candidates explicitly drew attention to the lack of congruence between university experiences and classroom literacy instruction. Thus, while they experienced a mismatch between their formal knowledge and their teaching practice, they were aware of incongruities. Cooking in mentors' kitchens may appear to have caused them to "act against their beliefs in order to avoid conflict with their cooperating teachers" (Clift & Brady, 2005, p. 332), but it is unclear at this point in these candidates' development how deeply they adopted mentors' practices. That some of them could discern differences between formal knowledge and practice suggests that they were reflecting on incongruities. What develops when they have their own kitchen is the focus of the next phase of our longitudinal study.

It is the second pattern of enactment, where established procedures and practices in mentors' classrooms stood in contrast to candidates' university preparation, but where candidates found ways to infuse their teaching with formal knowledge of literacy instruction, that has captured our attention. In these mentors' kitchens, candidates were given, or in some cases persistently sought to discover, at least

Student Teachers' Preparation in Literacy

some latitude to experiment or innovate—to develop their ability to work within the space between external mandates and their emerging practical knowledge. Sometimes we found mentors who were flexible and collaborative and who helped candidates see connections between university learning and implementation of their formal knowledge in the classroom. An essential element in such classrooms was a level of trust on the part of the mentor teachers, and these trusting relationships appeared to mediate candidates' actions.

In a few cases, we found candidates who encountered barriers to implementation of formal knowledge about literacy instruction, but rather than becoming oppositional, they sought ways to add their own flair to the cooking. Without seeking to change the entire recipe, in a professional way, they found space to put their unique stamp on an instructional activity or impact students' learning in unscripted ways. In these small acts of teaching in challenging situations, candidates negotiated space to enact what they knew, while building confidence over time. Unlike low-level technicians simply implementing a prescribed curriculum, these candidates sought to implement their pedagogical knowledge about literacy teaching formed in their preparation programs (Darling-Hammond & Bransford, 2005), evidencing their emerging expert adaptive knowledge (Snow et al., 2005), the level of teacher knowledge expected of an experienced teacher.

When examining contexts for literacy instruction in classrooms where candidates were most apt to incorporate signature aspects and the SRP, as fostered in their preparation programs, we found that placement in contexts where existing practices were congruent with those advocated at the university facilitated candidates' implementation of what was taught. This finding was not surprising and certainly lends credence to the practice of seeking student-teaching placements where instruction is harmonious with a university's programmatic perspectives (Darling-Hammond, 2006). However, the question remains how deeply candidates in such classrooms embraced pedagogical practices, developing practical knowledge about literacy instruction that would carry over into their own classrooms—another aspect of the current study that has guided the next phase of our longitudinal study.

Findings of our inquiry into candidates' placements and teaching experiences have implications for our work as literacy teacher educators. First, considerations about selecting appropriate placements are informed by findings about levels of congruence between university and classroom settings. Although classroom contexts where mentors model and support instructional practices taught in preparation programs are likely to provide opportunities for candidates to implement what they have learned, our findings suggest that it is equally important to place candidates with mentors who are flexible, supportive, and able to establish trusting relationships with them. Helping candidates find space to innovate, even in highly structured classrooms where core reading programs, pacing guides, and mandated assessments exist, fundamentally shapes candidates' actions.

Second, the findings cause us to reflect on whether we, as teacher educators,

prepare candidates to search in a professional way for space to enact their learning when encountering roadblocks or resistance while cooking in the mentor's kitchen. Not only should we provide candidates with strong content so that they have declarative knowledge, along with reasonable levels of situated procedural knowledge (Snow et al., 2005), but we must also consider ways to help them anticipate and respond to obstacles they may encounter in the classroom (Gambrell et al., 2011). Much flexibility needed by teachers for real classroom contexts may be dispositional in nature, and we plan to investigate that further.

Finally, our findings of candidates' actions have highlighted the need to extend our inquiry into their first year of teaching. For example, we were puzzled when we found that candidates' enactment of assessment practices congruent with their preparation programs was lower than expected, even as we found that assessment occupied considerable amounts of time in classrooms. Classroom assessment, then, became an area of focus for future research.

References

- Austin, M. C., & Morrison, C. (1962). *The torch lighters: Tomorrow's teachers of reading*. Cambridge, MA: Harvard University Press.
- Brown, J. S., Collins, A., & Duguid, P. (1989). Situated cognition and the culture of learning. *Educational Researcher*, 18(1), 32–42.
- Boushey, G., & Moser, J. (2006). *The Daily 5: Fostering literacy independence in the elementary grades*. Portland, ME: Stenhouse.
- Clandinin, D. J. (1985). Personal practical knowledge: A study of teachers' classroom images. *Curriculum Inquiry*, 15, 361–385.
- Clandinin, D. J., & Connelly, F. M. (1996). Teachers' professional knowledge landscapes: Teacher stories—stories of teachers—school stories—stories of school. *Educational Researcher*, 25(3), 2–14.
- Clark, S. K., Jones, C. D., Reutzel, D. R., & Andreason, L. (2013). An examination of the influences of a teacher preparation program on beginning teachers' reading instruction. *Literacy Research and Instruction*, 52, 87–105.
- Clift, R. T., & Brady, P. (2005). Research on methods courses and field experiences. In M. Cochran-Smith & K. M. Zeichner (Eds.), *Studying teacher education: The report of the AERA panel on research and teacher education* (pp. 309–424). Mahwah, NJ: Lawrence Erlbaum Associates.
- Cochran-Smith, M., Ell, F., Ludlow, L., Grudnoff, L., & Aitken, G. (2014). The challenge and promise of complexity theory for teacher education research. *Teachers College Record*, 116(5), 1–38.
- Darling-Hammond, L. (2006). *Powerful teacher education: Lessons from exemplary programs*. San Francisco, CA: Jossey-Bass.
- Darling-Hammond, L. (2010). *The flat world and education: How America's commitment to equity will determine our future*. New York, NY: Teachers College Press.
- Darling-Hammond, L., & Bransford, J. (Eds.). (2005). *Preparing teachers for a changing world*. San Francisco, CA: Jossey Bass.
- Darling-Hammond, L., Holtzman, D., Gatlin, S. J., & Heilig, J. V. (2005). Does teacher

Student Teachers' Preparation in Literacy

- preparation matter? In J. L. Herman & E. H. Haertel (Eds.), *The 104th yearbook of the National Society for the Study of Education: Part II. Uses and misuses of data for educational accountability and improvement* (pp. 289–319). New York: John Wiley.
- Dewey, J. (1938). *Experience and education*. New York, NY: Macmillan.
- Dillon, D. R., O'Brien, D. G., Sato, M., & Kelly, C. M. (2011). Professional development and teacher education for reading instruction. In M. L. Kamil, P. D. Pearson, E. B. Moje, & P. P. Afflerbach (Eds.), *Handbook of reading research* (Vol. 4, pp. 629–660). New York, NY: Routledge.
- Duffy, G. G. (2005). Developing metacognitive teachers: Visioning and the expert's changing role in teacher education and professional development. In S. E. Israel, C. C. Block, K. L. Bauserman, & K. Kinnucan-Welsch (Eds.), *Metacognition in literacy learning* (pp. 299–314). Mahwah, NJ: Lawrence Erlbaum Associates.
- Farnan, N., & Grisham, D. L. (2006). Truth 10: Teacher education programs graduate highly qualified novice teachers. In S. D. Lenski, D. L. Grisham, & L. S. Wold (Eds.), *Literacy teacher preparation: Ten truths teacher educators need to know* (pp. 102–113). Newark, DE: International Reading Association.
- Fenstermacher, G. D. (1994). The knower and the known: The nature of knowledge in research on teacher education. *Review of Research in Education*, 20, 3–56.
- Gambrell, L. B., Malloy, J. A., & Mazzoni, S. A. (2011). Evidence-based best practices in comprehensive literacy instruction. In L. M. Morrow & L. B. Gambrell (Eds.), *Best practices in literacy instruction* (4th ed., pp. 11–36). New York, NY: Guilford.
- Grisham, D. L. (2000). Connecting theoretical conceptions of reading to practice: A longitudinal study of elementary school teachers. *Reading Psychology*, 21, 145–170.
- Grisham, D. L., Yoder, K. K., Smetana, L., Dobler, E., Wolsey, D., Lenski, S. J., . . . Scales, W. D. (2014). Are teacher candidates learning what they are taught? Declarative literacy learning in 10 teacher preparation programs. *Teacher Education and Practice*, 27(1), 168–189.
- Hammerman, K., Darling-Hammond, L., Bransford, J., Berliner, D., Cochran-Smith, M., McDonald, M., & Zeichner, K. (2005). How teachers learn and develop. In L. Darling-Hammond & J. Bransford (Eds.), *Preparing teachers for a changing world* (pp. 358–389). San Francisco, CA: Jossey-Bass.
- Henk, B., Moore, J. C., Marinak, B. A., & Tomasetti, B. W. (2000). A reading lesson observation framework for elementary teachers, principals, and literacy supervisors. *The Reading Teacher*, 53, 358–369.
- International Reading Association. (2007). *Teaching reading well: A synthesis of the IRA's research on teacher preparation for reading instruction*. Newark, DE: Author.
- International Reading Association. (2010). *Standards for reading professionals*. Newark, DE: Author.
- Kim, H., & Hannafin, M. J. (2008). Situated case-based knowledge: An emerging framework for prospective teacher learning. *Teaching and Teacher Education*, 24, 1837–1845.
- Leinhardt, G., & Greeno, J. G. (1986). The cognitive skill of teaching. *Journal of Educational Psychology*, 78(2), 75–95.
- Lenski, S. J., Ganske, K., Chambers, S., Wold, L., Dobler, E., Grisham, D. L., . . . Young, J. (2013). Literacy course priorities and Signature Aspects of nine teacher preparation programs. *Journal of Literacy Research and Instruction*, 52(1), 11–27.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis* (2nd ed.). Los Angeles,

- CA: Sage.
- Moll, L. C. (2014). *L. S. Vygotsky and education*. New York, NY: Routledge.
- Munby, H., Russell, T., & Martin, A. K. (2001). Teachers' knowledge and how it develops. In V. Richardson (Ed.), *Handbook of research on teaching* (4th ed., pp. 877–904). Washington, DC: American Educational Research Association.
- Risko, V. J., Roller, C., Cummins, C., Bean, R., Block, C. C., Anders, P., & Flood, J. (2008). A critical analysis of the research on reading teacher education. *Reading Research Quarterly, 43*, 252–288.
- Sayeski, K. L., & Paulsen, K. J. (2012). Student teacher evaluations of cooperating teachers as indices of effective mentoring. *Teacher Education Quarterly, 39*, 117–130.
- Scales, R. Q., Ganske, K., Grisham, D. L., Yoder, K. K., Lenski, S. J., Wolsey, T. D., . . . Smetana, L. (2014). Exploring the impact of literacy teacher education programs on student teachers' instructional practices. *Journal of Reading Education, 39*(3), 3–13.
- Schön, D. A. (1983). *The reflective practitioner: How professionals think in action*. New York, NY: Basic Books.
- Schön, D. A. (1987). *Educating the reflective practitioner*. San Francisco, CA: Jossey-Bass.
- Shulman, L. S. (1987). Knowledge and teaching: Foundations of the new reform. *Harvard Educational Review, 57*, 1–22.
- Snow, C. E., Griffin, P., & Burns, M. S. (2005). *Knowledge to support the teaching of reading: Preparing teachers for a changing world*. San Francisco, CA: Jossey-Bass.
- Valencia, S. W., Martin, S. D., Place, N. A., & Grossman, P. (2009). Complex interactions in student teaching: Lost opportunities for learning. *Journal of Teacher Education, 69*, 304–322.
- Wertsch, J. V. (1993). *Voices of the mind: Sociocultural approach to mediated action*. Boston, MA: Harvard University Press.
- Wertsch, J. V. (2010). Vygotsky and recent developments. In E. Baker, B. McGaw, & P. Peterson (Eds.), *International encyclopedia of education* (3rd ed., pp. 231–236). Oxford, England: Elsevier.
- Wertsch, J. V., & Rupert, L. J. (1993). The authority of cultural tools in a sociocultural approach to mediated agency. *Cognition and Instruction, 11*, 227–239.
- Wilson, S. M., Floden, R. E., & Ferrini-Mundy, J. (2002). Teacher preparation research: An insider's view from the outside. *Journal of Teacher Education, 53*, 190–204.
- Wiseman, D. L. (2012). The intersection of policy, reform, and teacher education. *Journal of Teacher Education, 63*, 87–91.
- Wolsey, T. D., Young, J., Scales, R. Q., Scales, W. D., Lenski, S. D., Yoder, K. K., . . . Chambers, S. (2013). An examination of teacher education in literacy instruction and candidate perceptions of their learned literacy practices. *Action in Teacher Education, 35*(3), 1–18.
- Yin, R. K. (2009). *Case study research: Design and methods* (4th ed.). Thousand Oaks, CA: Sage.

Appendix

Interview Protocols

Student Teacher

1. Describe what you can recall from your teacher preparation program that prepared you to establish a classroom climate that promotes literacy.

Student Teachers' Preparation in Literacy

2. Based on your student-teaching placement . . .
 - a. what would you expect to see in an ideal classroom where literacy is valued?
 - b. describe the tasks and instructional routines you might use to prepare students to begin reading text. What is most important before students begin reading a text selection?
 - c. discuss your ideas about the best ways to guide students' reading of texts you assign or that students choose.
 - d. describe the tasks and instructional routines you might use to help students achieve instructional objectives once students complete reading a text selection.
 - e. how do you assist students with skills and strategies they need to become efficient readers for their grade level?
 - f. describe the materials you could use to teach students to be proficient readers? What classroom methods might you use with each type of material? In what ways do teachers assign or students choose their reading materials?
 - g. describe how to balance independent reading, reading in groups, and assessment practices. How do you set goals for students to ensure continuous progress?
3. How does what you learned in your teacher preparation program compare with your current practices as a student teacher in teaching literacy to your students?
4. What counts as evidence of student learning? How do you know you are effective? Can you give specific examples?
5. Is there anything else you would like to tell us about your teacher preparation program or student teaching placement?

Cooperating Teacher

1. Classroom literacy: Please briefly describe . . .
 - a. the school literacy program(s) that you are currently using.
 - b. the classroom reading formats or methods of your current reading program that you use with each type of material.
 - c. how you assign or allow students to choose their reading materials.
 - d. how you balance independent reading, reading in groups, and assessment practices.
 - e. how you set goals for students to ensure continuous progress.
2. Teacher preparation:
 - a. What do you know about the teacher preparation program that helped prepare your student teacher to establish a classroom climate that promotes literacy? How does he or she create a climate that promotes literacy?
 - b. How does your school's literacy program match your student teacher's current practices in teaching literacy to your students?
 - c. How well has your student teacher been prepared by his or her institution to do the following:
 - establish a classroom climate that promotes literacy?
 - guide or facilitate students' reading of texts that were assigned or that students chose?
 - undertake various tasks and instructional routines to help students achieve instructional objectives (or standards)?
 - assess a student's literacy learning?
 - adjust his or her teaching to address students' learning needs?

- set goals to ensure students' continuous progress?
- d. What advice would you give to the teacher preparation program about preparing student teachers to teach reading?