



**Teachers'  
Professional  
Lives and Practices**

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# Teacher Education Quarterly

## To Our Panel of Readers

Dear *Teacher Education Quarterly* Readers,

Scholarly inquiry relies on thoughtful researchers conducting sound empirical investigation. Journals such as *Teacher Education Quarterly* offer a public space where the strongest of these works can be shared. In my role as editor, I am honored with the task of managing the process. But this entire enterprise comes to an abrupt and irreversible halt without volunteer reviewers who dedicate their time to review manuscripts. To my mind, volunteer reviewers are the lifeblood of scholarly journals, and *TEQ* is no different.

So I want to thank you, our reviewers, for your time and expertise by listing your names on our website (see [http://teqjournal.org/TEQreviewer\\_list.html](http://teqjournal.org/TEQreviewer_list.html)). This recognition, I admit, is entirely inadequate, but I want each and every one of you to know how much Associate Editor Andrea Rodriguez-Minkoff and the *TEQ* Editorial Board appreciate your work. Of course, authors submitting papers often disagree with your assessment, especially when your recommendation is that the paper is not worthy of publication, but this is how double-blind reviewing works, and it's the only way to ensure that only the best manuscripts are published.

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Kind regards.

Mary Christianakis, Editor, *Teacher Education Quarterly*  
Professor, Department of Critical Theory & Social Justice, Occidental College  
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**Volume 44**  
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## Introduction

### Teachers' Professional Lives and Practices

Mary Christianakis

This Fall 2017 issue of *Teacher Education Quarterly* begins with the inspiring American Educational Research Association (AERA) address presented by Geert Kelchtermans, the 2017 AERA recipient of the Michael Huberman Award for Excellence in Research on the Lives of Teachers. “Studying Teachers’ Lives as an Educational Issue: Autobiographical Reflections from a Scholarly Journey” begins with a profound philosophical question: “What does it mean to live a teacher’s life?” In his address, Kelchtermans reflects on his career-long pursuit to understand teachers’ work lives. Through a combination of personal reflections and life experiences, he explores theories, conceptual and linguistic frames, as well as empirical approaches, to understanding teachers and their lives. Situated in lessons learned from his own development and within the international research on teacher’s lives over the last century, Kelchtermans argues for a purposeful and complex examination of teachers’ work and their development within the technical, moral, emotional, and political dimensions that shape teachers’ professional lives. His express purpose—the improvement of educational practice and teacher development—is deserving of our attention and our recommitment.

While Kelchtermans’ work provides us with retrospective reflections across an entire career, Jacquelyn M. Urbani, Shadi Roshandel, Rosemarie Michaels, and Elizabeth Truesdell look forward to help project and define the 21st-Century skills

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### *Teachers' Professional Lives and Practices*

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necessary in the context of teacher education. In their article, "Developing and Modeling 21st-Century Skills with Preservice Teachers," they argue that education, business, and policy leaders recognize the need to develop competencies in 21st Century Skills (i.e., creativity, critical thinking, communication, collaboration, and information, media, and technology skills). Few would argue with the idea that teacher education must help teachers develop such skills; however, these skills are not the only mandates that pre-service teachers and teacher educators must study and address. Through a mixed methods approach, their study explores how and to what extent faculty developed and modeled multiple skills within one university in three teacher education programs (Multiple Subject, Single Subject, and Education Specialist). Results indicate that teacher educators need to demonstrate the simultaneous integration of 21st Century skills to facilitate the successful development of these competencies in their preservice teachers. By defining the 21st Century skills in the context of teacher education and presenting a model for the development of these skills in preservice teachers, the authors make scholarly contributions deserving of consideration.

The next article, "Building Teacher Interculturality Student Partnerships in University Classrooms," authored by Elizabeth Smolcic and Jessica Arends, considers how preservice teachers preparing to teach English learners develop early intercultural competencies and sociopolitical awareness as they participate in a cross-cultural partnership with international university students. Through their ongoing conversations and collaboration with international students in a course project, the preservice teachers explore their own cultural identities and examine the challenges of learning a second language. A qualitative data analysis documents the preservice teachers' developing cultural awareness, understanding of the complexity of cultural identities, and emerging sociopolitical consciousness. The data indicate that a structured field experience with international students can provide the experience and conceptual learning that is critical to move preservice teachers toward interculturality as they prepare for culturally and linguistically diverse classrooms.

Teacher education is situated in multiple institutional settings. In their article, "Student Teachers' Preparation in Literacy: Cooking in Someone Else's Kitchen," Janet R. Young, Roya Qualls Scales, Dana L. Grisham, Elizabeth Dobler, Thomas DeVere Wolsey, Linda Smetana, Sandar A. Chambers, Kathy Ganske, Susan J. Lenski, and Karen S. Yoder present findings from a multi-institutional, longitudinal study that examined the congruence between 15 student teachers' instructional actions and aspects of literacy instruction emphasized in their teacher preparation programs. Each student teacher evidenced substantial or moderate enactment of at least some of their institution's signature aspects and the ILA Standards. Applying the metaphor of the "kitchen," they attended to their classrooms, wherein student teachers drew on their learning in their programs to "cook" in their mentor teacher's kitchen. The findings have implications for literacy teacher educators, including

determining student teaching placements and teaching preservice teachers to anticipate how to adapt flexible instruction to meet contextual demands while using knowledge from their preparation programs.

The demands and requirements of public school classrooms require that teacher education programs remain nimble and collaborative. In their article, “Learning to Teach Disciplinary Literacy across Diverse Eighth-Grade History Classrooms within a District-University Partnership,” Chauncey Monte-Sano, Susan De La Paz, Mark Felton, Kelly Worland Piantedosi, Laura S. Yee, and Roderick L. Carey address how the public demand for disciplinary literacy in middle school classrooms places new demands on subject area teachers. To address these challenges, they partnered with a large school district and created a student-and-practice-focused professional development course to support teachers’ implementation of a disciplinary literacy curriculum that they created. The authors use teachers’ notebooks with reflections on student writing as their main data source and as one indicator of each teacher’s history and literacy learning. Overall, the study found that teachers learned to attend to their students’ historical thinking in writing, but had difficulty specifying next steps for working on historical thinking and writing with their students. The article has implications for supporting teachers as they learn to emphasize disciplinary literacy in subject area classes.

Living the life of a teacher involves a complex negotiation between various institutions, epistemologies, and relationships. As we grow the knowledge base on teachers, it is increasingly important for teacher educators to adapt their programming and mentoring to help support and nurture the multiple contemporary needs of teachers. The articles in this issue address this need and contribute to the dialogue on the complexity of teachers’ professional lives and practices.



**Teacher Education Quarterly**  
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Authors wishing to submit manuscripts for consideration for publication in *Teacher Education Quarterly* are asked to follow the instructions found at:

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The website offers all of the details for anonymizing the manuscript, etc.

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## **Studying Teachers' Lives as an Educational Issue**

### **Autobiographical Reflections from a Scholarly Journey**

**Geert Kelchtermans**

#### **Setting the Stage**

What does it mean to live a teacher's life? What does it mean to be a teacher, to become a teacher, to stay in teaching, or to leave the profession? Why are teachers doing what they are doing the way they are doing it? These questions have fascinated me throughout my academic career as a researcher as well as in my teaching and my work as a teacher educator, an in-service trainer, and a facilitator of school improvement processes. In my address, I will look back on my career and the ways in which I have tried to understand teachers' work lives. These autobiographical reflections of my own academic development are the story of an ongoing effort to grasp and unravel the lives of teachers through appropriate conceptualization, empirical grounding, and theory building, which eventually constitute the best possible basis to design interventions and practices. It was and continues to be a

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Geert Kelchtermans is a professor with the Center for Innovation and the Development of Teacher and School, University of Leuven, Belgium. He received the 2017 Michael Huberman Award for Outstanding Scholarship on the Lives of Teachers, presented by the Special Interest Group on the Lives of Teachers on April 28, 2017, during the American Educational Research Association meetings in San Antonio, Texas. This article is the text of his Huberman Award presentation that day. Email address: [Geert.Kelchtermans@kuleuven.be](mailto:Geert.Kelchtermans@kuleuven.be)

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### *Studying Teachers' Lives as an Educational Issue*

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fascinating journey. Education was and continues to be “a beautiful risk,” as Biesta (2013) rightly labeled it. Making one’s own work and professional development the theme of a lecture creates the risk of a narcissistic or egocentric discourse. I hope I’ll be able to avoid this by stressing the development in thinking and conceptualization as well as the methodological choices. Furthermore, I will try to situate my work against the broader international developments in educational research on teachers’ lives since the 1980s of the last century and, from there, formulate a few elements for a further research agenda.

A final introductory comment: I hope to show that my academic interest in and approach to teachers’ lives have not been those of a sociologist, anthropologist, or psychologist but those of an educationalist. What drives me has not only been to understand teachers’ work lives as a purpose in itself but eventually always included the ambition and hope to actually contribute to an improvement of the educational practices and to teacher development. Mentioning “improvement,” however, immediately complicates things. It automatically brings up the central importance of normative issues and the need to take a stance on what is “good” education, “good” teaching, “teacher professionalism.” My stance is that professional teaching and teacher professionalism—as it develops over the time of one’s career—require and reflect both *expertise and commitment*, and that teacher professionalism only emerges in *educational practices*. I will come back to those three words: *expertise*, *commitment*, and their emergence in *practice*.

As a consequence, teacher development during their work lives not only entails a technical or instrumental dimension (e.g., how can I make things work?) but also a moral dimension (e.g., the inevitability of making value-laden choices, acting on them, and taking responsibility for them). This fundamental ethical commitment in a relationship of care and responsibility, furthermore, does not leave one emotionally indifferent (Filipp, 1990). And finally, the value-laden choices can and will be contested, and the discussion on criteria and goals results from the ongoing processes of power, negotiation, and influence, thus reflecting also an essentially political dimension. In other words, I agree with Hargreaves’s programmatic claim in 1995 that teachers, their work, and their professional development include technical, moral, emotional, and political dimensions that are connected and need to be understood in their interplay. Teachers’ lives are lived as situated in particular time-space contexts, and they emerge in and through the enacted practices for which they carry responsibility. This is not the same as accountability (Kelchtermans, 2011), and I am fully aware that believers and promoters in performativity policies—be they policy makers or educational researchers—with high-stakes testing and accountability procedures in many countries, will disagree with my stance on teacher professionalism (Kelchtermans, 2007b).

### **In the Beginning There Was Puzzlement**

In the beginning there was puzzlement.<sup>1</sup> As a master’s student in educational

sciences in the early 1980s, I became interested in educational innovation and school reform. In one course—taught by Roland Vandenberghe (Van den Berg & Vandenberghe, 1981), the later supervisor of my PhD—we studied the international research on educational innovation, which convincingly showed how difficult it was to change educational practices and reform schools in a sustainable way. Research had already shown that studying the moment of adopting an innovation did not suffice but that it was crucial to understand the so-called implementation process: the actual enactment of the innovative ideas in practice (Berman, 1981).

However, parallel to taking this course, I was working on my master's thesis on the so-called Jena-Plan movement in the Netherlands (Deketelaere, De Keyser, & Kelchtermans, 1987; Deketelaere & Kelchtermans, 1988). In that work, however, we encountered a very different story of school reform: One that complicated and even contradicted several research conclusions in the literature. The Jena-Plan was a model for a radically innovative school, developed by the German educationalist Peter Petersen during the 1920s–1930s at the University of Jena, in the tradition of the child-centered philosophy of the “New School Movement” (“Reformpädagogik”). Petersen's ideas had been picked up in the Netherlands in the mid 1950s, and when we studied the movement in the early 1980s, more than 250 Dutch schools were working according to this model. Interestingly, however, this innovation had not been imposed or even promoted by the government but was developed bottom-up as an increasing number of teachers and parents became fundamentally dissatisfied with the dominant school system. They found inspiration in the Jena-Plan and decided to start new schools or radically change existing schools. Because they had been trained for teaching in traditional schools, implementing the reform ideas demanded a heavy investment in study and an increase in workload from the teachers and presented a huge challenge to the practices they had become used to. Enacting the Jena-Plan implied implementing multiage class groups, complex innovative pedagogies of differentiation or inquiry-based learning, increased attention to social skills and art education in the curriculum, and so forth. In other words, those teachers almost completely had to give up their professional zones of comfort and embark on the endeavor of enacting very different ideas of teaching and learning. Among the many fascinating aspects of that study, I was particularly struck by the “stories of conversion” many of those teachers told me. Particular experiences in their teaching had brought them to radically question their taken-for-granted practices, forcing them to thoroughly rethink and reconsider themselves and their pedagogies based on a strong sense of moral purpose and emotional commitment. “Owing it” to the children was the line that kept coming back in their stories of what brought them to their innovative practices.

All these experiences left me with a strong sense of puzzlement when graduating and hoping to work as an educational school consultant, supporting school reform. I had come to understand that apart from facilitating technical interventions, providing support materials, and building capacity, implementing educational innova-

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### *Studying Teachers' Lives as an Educational Issue*

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tions also demanded understanding the complex processes of sense making, moral commitment, and emotional involvement (for example see also Fullan, 1982; Van den Berg, 2002). And I had come to understand that all of this involves dedication, hard work, and professionalism on the part of teachers, throughout their careers.

### **Broadening My Conceptual Horizon on Teacher Development**

When starting the work on my PhD in 1987, however I discovered that I was not alone with my puzzlement over educational innovation, as it was in interesting ways echoed in the international research literature on teaching and teacher development. Let me outline and clarify the lines of work that helped me move beyond my puzzlement and come to grips conceptually with the complexities of teachers' work lives.

### ***Narrative and Biography in Teachers' Work Lives***

Since the mid-1980s, the "teacher thinking" research (see e.g., Clark & Peterson, 1986; Craig, Meijer, & Broeckmans, 2013) argued that teachers' actions could only be properly understood by seeing them as guided by their "thinking," such as their ideas and normative beliefs on teaching, children, and their subjects. Within this broader line of research, many scholars were drawn to theories of narrative and storytelling (e.g., Polkinghorne, 1988) as the prominent genres humans use to make sense of their experiences (e.g., see for overviews Carter & Doyle, 1996; Casey, 1995; Clandinin, 2007; Gudmundsdottir, 1991; also see the edited volume Craig et al., 2013). Storytelling is the natural way through which people make sense of the events, situations, and encounters in which they find themselves: "Humans are storytelling organisms who, individually and socially, lead storied lives. The study of narrative, therefore, is the study of the ways humans experience the world" (Connelly & Clandinin, 1990, p. 2; see also Clandinin, 2007).

Furthermore, many of those researchers explicitly linked this narrative approach to teachers' biographies (e.g., Butt, 1984), thus bridging the psychological interest in teacher cognition and sense making to more sociological traditions. Especially the revival of the life history research (Ball & Goodson, 1985; Goodson, 1984, 1992) as well as studies of teachers' careers and work lives (Huberman, Grounauer, & Marti, 1993; Nias, 1989; Sikes, Measor, & Woods, 1985) created rich opportunities for conceptual cross-fertilization. Although rooted in different theoretical and disciplinary traditions, the central idea in this biographical perspective is that human existence is fundamentally characterized by historicity: People are born at some point, live during a particular amount of time, and then die. Their lives unfold in time between birth and death. Because human beings are gifted with the capacity to remember and make sense of past experiences, their interpretations, thoughts, and actions in the present are influenced by their experiences from the past and expectations for the future.

The idea that teachers, when talking about their professional experiences, spontaneously chose narrative genres and that these stories needed to be understood as situated in the broader story of their work lives became intertwined in what I later labeled the *narrative–biographical approach* to teachers' careers and professional development (Kelchtermans, 1993a, 1994a, 2009).

### ***Understanding the Idea of “Career” in Teachers’ Work Lives***

A second issue I struggled with was how to properly conceive of the *teacher career*. An important inspiration was the book by Sikes et al. (1985) titled *Teacher Careers: Crises and Continuities*. In line with Hughes's (1958) work, Sikes et al. (1985) defined the career not as a series of bureaucratically determined positions but as “the moving perspective in which the person sees his life as a whole and interprets the meaning of his various attributes, actions, and the things which happen to him” (p. 1). These British researchers developed a model of career phases (related to age), but in their conceptualization of the transition between career phases, they introduced the interesting concept of *critical incidents*. This concept allowed me to combine the narrative and biographical approaches as well as the central role of sense making, because they defined critical incidents as “key events in an individual's life, . . . around which pivotal decisions revolve. They provoke the individual into selecting particular kinds of actions which lead in particular directions” (p. 57). The stories of conversion of the teachers in the Jena-Plan schools clearly exemplified these critical incidents. They were significant experiences that caused an intrinsic and compelling need to reconsider and revise one's deeply held beliefs and the practices built on them.

Building on but going beyond the work of Sikes et al. (1985) in conceptualizing teachers' lives was the famous study by Michael Huberman and his colleagues in Geneva, the French-speaking part of Switzerland, titled *La vie des enseignants* (Huberman, Grounauer, & Marti, 1989).<sup>2</sup> Huberman and his colleagues combined psychological and sociological approaches to understanding teachers' careers (against the backdrop of a policy environment of far-reaching school reform). Their ambition was not only to reconstruct the career trajectories teachers take throughout the organizational contexts of the schools they are working in, but to go further and unpack how the characteristics of the individuals influenced the organization as well as were influenced by it. In other words, they broke away from a traditional, more passive approach of professional socialization to a more interactive one where individual and organization were seen as both influencing and being influenced by each other: “comprendre comment les caractéristiques de ces personnes influent sur cette organisation et, en même temps, en subissent l'influence” (Huberman et al., 1989, p. 13). Properly conceptualizing, empirically grounding, and understanding this mutually influencing interaction of individual and organization became one of the central threads in my own research, as an instance of the fundamental issue of the relation of agency and structure (Kelchtermans, 1994b).

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Different from the career model developed by Sikes et al. (1985), Huberman and colleagues (1989) used extensive interview data on teachers' professional lives to identify different career phases as well as different patterns or trajectories in which they were lived through: no longer development through phases in a fixed order but an understanding of individual careers as a personal trajectory in which the order of the phases could differ. "We have come to see that many patterns once attributed to age-related influences are in fact as much or more the result of 'cohort' or 'period' influences, which means that historical or sociological factors need to be counted more heavily" (Huberman, 1989, p. 31). That is one of the reasons why this study became so groundbreaking. In Europe, it immediately inspired other researchers, such as Hirsch, Ganguillet, Trier, Egli, and Elmer (1990; see also Hirsch, 1990, 1993) in the German-speaking cantons of Switzerland and Terhart, Czerwenka, Ehrlich, Jordan, and Schmidt (1993) in Germany.

#### **The Issue of Teacher Identity**

Almost all the work on teachers' lives—regardless of its theoretical roots—involved issues of their "self" or "identity." In 1980, Ivor Goodson had argued that "in understanding something so intensely personal as teaching it is critical we know about the person the teacher is" (p. 69). In 1985, Stephen Ball and Ivor Goodson stated in their important edited volume *Teachers' Lives and Careers* that "the ways in which teachers achieve, maintain, and develop their identity, their sense of self, in and through a career, are of vital significance in understanding the actions and commitments of teachers in their work" (p. 18). This idea was taken on and empirically grounded by Nias (1989) in her book *Primary Teachers Talking*. Nias argued that, when talking about the experiences in their work lives, teachers inevitably brought up their understanding of themselves as teachers: "It was their persistent selfreferentialism which made it possible to construct a generalized picture of their experience. Aspects of the 'self' repeatedly emerged as central to the experience of these teachers, even though each 'self' was different" (p. 5). In other words, my narrative–biographical approach toward teachers' work lives (careers) would need to include an understanding of teachers' professional selves, of who they are and want to be as teachers.

It is interesting here to mention that, parallel to this work in the tradition of interpretative sociology in the Anglo-Saxon literature, similar issues were addressed and discussed in the German literature of the so-called *pädagogische Biographieforschung* (Baacke & Schulze, 1979, 1985; Krüger & Marotzki, 1996; Schütze, 1984): Understanding career as it appears in biographical accounts and drawing on a diversity of philosophical and empirical perspectives, these authors also focused on issues of identity development and (auto)biographical reflection while also making interesting methodological contributions. Since the German *Biographieforschung* not only contributed to theory development but also explicitly

and creatively addressed important epistemological and methodological matters in narrative–biographical research, it was too bad, and in a way even tragic, that little work from those traditions made it into the international discussions, especially since, during the 1980s and 1990s, English definitely took over as the modern lingua franca for educational research in general and work on teachers’ lives in particular.<sup>3</sup>

### **Professional Development From the Narrative– Biographical Perspective**

So let me wrap up how these different lines of conceptual and methodological inspiration affected my own work on teachers’ professional development from a narrative–biographical perspective. As I have already indicated, my interest in teachers’ careers and work lives was and is educational rather than sociological or psychological. Because teachers play a key role in education, their own professional learning and development over time (throughout their career) is a central issue for research in educational science. My interest in the narrative and biographical approach was ultimately driven by the ambition to reconstruct and understand this learning process and to be able to draw on these insights when designing and enacting programs or curricula for teacher education, for in-service training, or for supporting schools in implementing innovations. I defined professional development as the *lifelong learning process resulting from the meaningful interactions of teachers with others, in different contexts*. Context needs to be understood not only as *context in space* but also as *context in time*. In other words, one’s present being influenced by experiences in the past and expectations for the future. On the basis of my narrative–biographical research, I concluded that we need to understand the outcome of this learning as twofold—in teachers’ actions as well as their thinking (Kelchtermans, 2004, 2009). At the level of teachers’ professional actions, the result becomes visible in a more complex and refined repertoire of professional skills to draw on when acting professionally. Parallel to the change in actions, however—and this is the link with the teacher thinking research—there is a change in what I have called teachers’ *personal interpretative framework*: “a set of cognitions, of mental representations that operates as a lens through which teachers look at their job, give meaning to it and act in it” (Kelchtermans, 2009, p. 260). This framework actually guides teachers’ interpretations, sense making, and actions in particular situations (context) but at the same time is also modified by and results from these meaningful interactions (sense making) with that context. As such, it is both a *condition for* and a *result of* the interactions and represents the—always preliminary—“mental sediment” of teachers’ learning and development over time.

We can link this to what Lortie (1975) called the “apprenticeship of observation”: Student teachers enter the teacher education program with about 15 years



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of experience in schools and with teachers. On the basis of those experiences, the students have built an idea about what the teaching job entails as well as about themselves as (future) teachers. These representations and motivations determine the way they engage with the teacher education curriculum and learn from their experiences during internships (see, e.g., Rots, Kelchtermans, & Aelterman, 2012). Once they enter the profession, teachers' personal interpretative frameworks will continue to develop throughout the further career.

My research has led me to conclude that in this personal interpretative framework, two different yet interconnected domains need to be distinguished: professional self-understanding and subjective educational theory. *Professional self-understanding* refers to teachers' conceptions of themselves as teachers.<sup>4</sup> The advantage of the word *self-understanding* is that its very form refers both to the understanding one has of one's "self" at a certain moment in time (*product*) and to the fact that this product results from an ongoing *process* of making sense of one's experiences and their impact on the "self." By stressing the narrative nature, the possible essentialist pitfall in conceptualizing "identity" can be avoided. In this view, we should not look for a "deep," "essential," or "true" personal core that makes up the "real" self. The narrative character implies that one's self-understanding only appears in the act of "telling" (or in the act of explicit self-reflection and as such "telling oneself"). The intersubjective nature of the self-understanding is thus immediately included in the concept itself, because the telling that reveals the self-understanding always presupposes an audience of "listeners."

Teachers' narrative accounts of their experiences are not just informative about how they think about themselves. Rather, they construct that self-understanding in the interactive act, at the same time (implicitly or explicitly) inviting the "audience" to acknowledge, confirm, or question and contradict the statement. Narrative accounts revealing one's self-understanding are moments of *interactive sense making*. Because the issue at stake is not a neutral statement but one's self and the moral choices and emotions it encompasses, the narrative accounts always entail an aspect of *negotiation* (seeking recognition or acknowledgment of one's self-understanding; Kelchtermans, in press-a). For example, the value-laden choices in the task perception (the normative component of self understanding) can be contested and questioned, but also offer strong possibilities for negotiating common understandings and shared moral and political choices among colleagues. That is why—as I said before—I conceive of teacher professionalism as encompassing both expertise and commitment.

By the *subjective educational theory*—the second domain in the personal interpretative framework—I mean the personal system of knowledge and beliefs about education that teachers use when performing their job. It thus encompasses their professional know-how, the basis on which teachers ground their decisions for action. *Knowledge* refers to more or less formal insights and understandings, as derived from teacher education or in-service training, professional reading, and so on. *Beliefs*

refers to more person-based, idiosyncratic convictions, built up through different career experiences. If juxtaposed like this, knowledge and beliefs suggest two different categories of information, but in teachers' thinking, they are much more mixed and intertwined and may be better conceived of as the extremes of a continuum. The actual line between knowledge and more personal beliefs is not so easy to draw.<sup>5</sup> The subjective educational theory reflects the teacher's personal answer to the questions, How should I deal with this particular situation? (= what to do?) and Why should I do it that way? (= why do I think that action is appropriate now?). Hence, "using" or "applying" one's subjective educational theory demands first of all a process of *judgment* and deliberation, an interpretative reading of the situation before deciding on which approach may be most appropriate. This judgment is technical and practical, as it involves a concrete situation or problem that requires action yet inevitably reflects also the values and norms one holds (task perception) (see also Biesta, 2013).

Methodologically, I 'operationalized' the narrative–biographical perspective by elaborating a particular qualitative research procedure (a cycle of multiple biographical interviews, in combination with observations; Kelchtermans, 1994a) to elicit teachers' narrative accounts of the experiences throughout their careers and their sense making of them, from which I could eventually reconstruct their personal interpretative frameworks (Kelchtermans, 1993a, 1993b, 2009). To sum up, this methodological approach reflected my *educational* interest in teachers' work lives, a need to understand teachers' learning throughout their career, and the awareness of having to understand educational practices and the people who enact them as contextualized in multiple ways (biographically, geographically, historically, organizationally, and socially). Teachers do not live their work lives in a vacuum. They always work somewhere, at some point in time.

### **Emotions, Micropolitics, and Vulnerability**

An important further lesson I learned from this narrative–biographical work was the pervasive and fundamental role of the emotional dimension in teachers' work and lives. Emotions were omnipresent in the professional biographies. But I came to understand that they were not simply related to teachers' subjective experiences of their job but were more intrinsic to the teaching job itself (Kelchtermans, 1996, 2009; Kelchtermans & Deketelaere, 2016). The emotions, as the bodily felt meanings, were rooted in the moral commitment as well as the political issues of power and influence of teaching and being a teacher. In their daily practices—as I have already stated—teachers have to make numerous judgments as the basis for their actions. These judgments are never merely technical or instrumental, trying to link means and ends as efficiently as possible, but are ultimately rooted in and justified through teachers' care and commitment to the students and as such moral and ethical in nature. Furthermore, they are also always deeply contextualized in the here and now of a particular situation. Although teachers cannot but judge and act on their professional

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judgment, they know this judgment can always be contested and questioned by others holding different normative views about what is good, best, and necessary for students. And because these different views are related to different power structures, teachers' work lives are also characterized by a political dimension.

Trying to understand the latter brought me to move my focus from mid-career teachers to beginning teachers and the induction phase. The complex process of new teachers finding their way into the school as an organization is indeed a "critical phase" in the teaching career, involving in an intensified way professional learning (quite challenging for the personal interpretative framework and in particular one's self-understanding) but also political action: negotiation, self-presentation, and so on (Kelchtermans & Ballet, 2002; Piot, Kelchtermans, & Ballet, 2010; Vanderlinde & Kelchtermans, 2013).

Integrating the micropolitical perspective (Ball, 1987; Blase, 1991; Hoyle, 1982; Kelchtermans & Vanassche, 2017; Malen, 1994) in the conceptual lens of the narrative–biographical approach strengthened its analytical power in the study of teacher induction. We found that beginning teachers had a more or less clear idea of what for them were necessary or desirable conditions to do a proper job, *proper* meaning not only effective (achieving results with the students) but at the same time also satisfying (providing a sense of fulfillment, of being able to live up to one's personal normative ideas of good teaching). These necessary or desirable working conditions operated as *professional interests*, triggering strategic (micropolitical) *actions to protect, establish, or restore them* when they were threatened, absent, or abolished. Learning to read situations in terms of professional interests, developing a mastery of micropolitical tactics and strategies as well as the emotional stamina to endure and persist, constitutes what we labeled *micropolitical literacy*, an important agenda in the ongoing professional development of beginning teachers (Kelchtermans & Ballet, 2002; Kelchtermans & Vanassche, 2017). The different categories of professional interests we distinguished in the analysis of beginning teachers were later confirmed by other authors as well as in other studies (e.g., on leadership and school development and quality control; Kelchtermans, 2007a; Kelchtermans, Piot, & Ballet, 2011; Piot & Kelchtermans, 2016).<sup>6</sup>

Conceptually integrating the emotional, moral, and political dimension into the analysis of the career stories brought me to argue that the teacher job is *structurally* characterized by *vulnerability* (Kelchtermans, 1996, 2009, 2011). Not being in control of essential working conditions (such as the students one finds in one's class or the colleagues one finds in one's school), not being able to actually prove one's effectiveness as a teacher (and yet having students' outcomes used as "evidence" to evaluate one's professional quality), and, most importantly, lacking an unquestionable basis for judgment (and therefore always finding one's judgments being exposed to possible criticism and contestation) are all inherent to the teaching job. Therefore the vulnerability they compose is to be seen as a structural characteristic of the job and not a personal characteristic of the individual. Through professional develop-

ment, teachers cannot but learn to deal with this reality. As such this vulnerability also constitutes a part of the typical “professionalism” of teachers. Professional vulnerability is therefore not a flaw, a weakness, but the inevitable outcome of the fact that enacting the teaching profession requires not only expertise (knowledge, skills, competencies) but also commitment (care, morals, and ethics) as a person. I think this structural vulnerability is still not fully understood and yet seems to me key to understanding a number of complex issues, such as teacher attrition, resistance to change, teacher burnout, and intensification of the teaching job (Kelchtermans, 1996, 1999, 2009, in press-b).

## **A Double Conclusion, While Looking Backward and Forward**

### ***Agency and Structure***

It will have become clear that my work on teachers’ lives has always strongly emphasized teachers’ agency—as focused on their interactive sense making, their professional learning, and their negotiations and judgments as the basis for their actions and practice. Yet, at the same time, I have always been aware of the need to acknowledge and integrate the role of the structural realities impacting teachers’ development and practice. Ivor Goodson’s argument in 1984 that teachers’ life stories ought to be embedded in broader sociohistorical accounts as life histories has always played in the back of my head. And in 1994—inspired by Anthony Giddens’s (1984) *The Constitution of Society*—I phrased the research agenda of my postdoctoral projects in terms of the need to unpack and understand the multiple and complex tensions of agency and structure, or, to be more precise, to understand educational practices (constituting the realities of teachers’ work lives) as the outcome of the complex interplay of teachers as sense-making actors, operating in and being determined by structural and institutional realities of schools as organizations, as well as the wider educational system and policy environment (Kelchtermans, 1994b).

In my attempts to deal with it, I broadened my attention from teachers to the other professional actors who operate in the organizational conditions of the school as the enactors of structurally defined roles and positions (e.g., principals; teacher leaders, such as mentors; school counselors; teacher educators) (Kelchtermans, 2007a; Piot & Kelchtermans, 2016; Vanassche & Kelchtermans, 2014). While never giving up my effort to empirically base and justify my research interest in data, obtained by qualitative research methods, allowing me to grasp those actors’ contextualized sense making, I have applied and explored the potential of different theoretical lenses to capture their structural and institutional embeddedness. Drawing on Michael Apple’s (1986) “intensification thesis,” we looked at teachers’ experience of increased work load and how that was mediated by the organizational working conditions in schools.; Ballet & Kelchtermans, 2008, 2009). We applied neoinstitutional theory and routines theory to unpack implementation processes of innovations, with particular attention

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paid to the role of artifacts as material carriers of innovative, normative frames (März, Kelchtermans, & Dumay, 2016; März, Kelchtermans, Vanhoof, & Onghena, 2013; März, Kelchtermans, & Vermeir, in press). In the study of educational artifacts, we also applied frame analysis (Vermeir, Kelchtermans, & März, 2017), which we used as well in analyzing decision making by the principal teams in school clusters (Piot, 2015). In our work on the professional development of teacher educators, we explored the possibilities of positioning theory (Vanassche & Kelchtermans, 2014), which we are now extending to teacher induction (as a complement to the micropolitical perspective and network approaches).

Carefully listening to and thus acknowledging teachers' voices, the narrative sense making of practitioners, have been and remain the starting point in my research on teachers' lives. But at the same time, I think researchers can and should add conceptual layers of understanding by embedding this sense making and the practices as situated in and determined by broader and larger meaning systems, power structures, and policy measures (see, e.g., Lanas & Kelchtermans, 2015; März et al., 2016; Simons & Kelchtermans, 2008).

Looking back on these studies—I now realize—they are actually all related in their effort and ambition to analytically addressing the interplay of factors at the macrolevel of policy making, the mesolevel of the school as an organization, and the microlevel of the individual teacher and his or her professional development (e.g., in the first phases of his or her career). Although it remains both conceptually and methodologically quite challenging, I think this research agenda is vital for appropriate theory development on teachers' work lives, as committed and competent professionals, but also to deepening our understanding of important issues like teacher attrition and retention, supporting the implementation of educational innovations, or providing really professionalizing professional development opportunities for teachers throughout their careers.

I have to say that I am often struck and worried by the lack of attention to the structural and institutional factors in the curricula of teacher education and in-service training, with their emphasis on practical executive skills instead of critical, theory-based reflection and responsible judgments. All too often, student teachers are still trained to professionally conceive of themselves as primarily (and/or even exclusively) working with children or youngsters on a particular curriculum content in a classroom, with little understanding of how organizational and institutional processes determine who they are or can be, what they can strive for or think they can strive for (see also Kelchtermans, in press-b). These practices, of course, reflect the equally narrow ideas on what constitutes the core of the teaching job for many teacher educators, other educational professionals, and—as a consequence—policymakers and news media. Research on teachers' lives should be at the forefront of the struggle to break these naïve and stereotyped views, which not only don't do justice to the complexity of the job, but also continue to provide legitimacy to the widespread unfair blaming and

shaming by policymakers and news media of individual teachers as the cause for weak learning outcomes (Kelchtermans, 2007b).

### ***Language Issues in the Study of Lives***

My second, and final, conclusive and prospective issue concerns language, multilingualism, and their relevance for the research on teachers' lives. As a European researcher, working also in an officially trilingual country and situated in a wider European context with very different languages and cultures, I have always been and over time have become even more aware of the meaning and impact of language and linguistic issues in our work. This is even more crucial for qualitative research on teachers' work lives, where experiences, sense making, and aspects of self-understanding are so central.

I suppose we can all agree that language or linguistic structures are fundamental and essential in processes of sense making. If we claim to do justice to teachers' experiences and accounts of their work lives as central in our research, we cannot turn away from the empirical, epistemological, and methodological, but also deeply ethical and political, relevance of language as well as multilingualism. The bulk of international research collaboration happens in English, and this self-evident fact automatically creates a dichotomy between native speakers and nonnative speakers. I will not go into the fundamental issues of cultural hegemony, the strategic advantage in and control over the authoritative publication facilities, the advantage in the competition on obtaining research funds, and so on. Let me just mention a few of the issues or questions that, in my opinion, warrant attention here:

- What happens to narrative or biographical data when they are being translated to English to get published or to allow for international collaboration? Given the illustrative and argumentative role in reports on qualitative research, the very idea of "translating" is so much more complex than simply replacing words with their semantic equivalents from another language. Let me give one example. The word *zelfverstaan* (self-understanding) in Dutch is at the same time both a noun and a verb and as such in its very linguistic form confirms and strengthens the message that teachers' sense of self is continuously developing over time. In my first publications, I used "sense of self" or "self" as the English equivalent, and it was only when sharing with Betty Achinstein (a native English speaker) my doubts and frustrations over losing the extra layer of meaning and rhetorical strength in translation that she suggested using "self-understanding" as a valid possible alternative in English to capture and preserve as much as possible the layers of meaning in the Dutch word.
- Can a nonnative speaker ever be sure that he or she has really properly translated the message and conveyed the meaning of narrative data to an international audience? Does the audience really get the message? For example, the

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concept “task perception,” my translation of *taakopvatting* as the normative component of self-understanding, has on several occasions created confusion with international readers, who, for example, understood “task” more as an identifiable “to-do” or duty (one of many that could be listed in job descriptions) rather than as the overall normative agenda through which a teacher ethically positions and commits himself or herself in the job as well as against the formal and informal job demands and the view on “good teaching” they reflect. In the latter meaning, it further becomes much easier to understand also the political relevance of the concept, instead of merely its ethical or moral sense.

• How is international collaborative research using qualitative data and methodologies affected by the fact that the collaborating colleagues are using English because they have a different mother tongue and no mastery of each other’s languages (and therefore also no direct access to each other’s data sets)? When I was working in Finland and Vietnam, for example, I experienced the actual distancing, even exclusion, from not having direct access to the data or the narrative sense making by teachers. It is good to notice that this complex and urgent matter is getting more attention recently. I just mention the recent PhD research of Erkki Lassila, who has worked as a Finnish researcher on the experiences of Japanese teachers in their induction phase (Lassila, 2017) and has added interesting reflections on the language issue (including self-evidently also broader cultural elements) in his research process. He reflectively recalls both problems and advantages in being the outsider, the foreigner, the one-who-does-not-fully-master-the-language (and its cultural complexities).

And—to close the circle and get back to Huberman’s work—one could also link this matter back to the observation of the different language (English, German, French) circuits in which the research on teachers’ work lives developed in Europe (and maybe also elsewhere in the world). I think that the confrontation of these different circuits, with the very different theoretical and epistemological traditions and frameworks on which they draw as well as the diverse empirical contexts in which they take place, with the work in the Anglo-Saxon world would constitute a very powerful and intellectually challenging impetus for further development of theories on teachers’ work lives (Kelchtermans, 2008).

### **A Final Word**

Teaching, and education in general, is definitely a profession, a job worth spending one’s life on: the daily investment of expertise and commitment in enacting one’s practices, driven by care for the child, the youngster, the student; having to judge and choose, having to plan but knowing that there will always be happening both more and less than one had planned for; enduring and embracing the vulnerability that goes with it. It is work and life, something we should not forget, despite the, in my opinion,



deeply troubling worldwide proliferation of educational policy regimes, with high-stakes testing and a multitude of procedures and measures in which performativity logic reduces the educational endeavor to an obsession with measurable effectiveness and efficiency as the only relevant criteria. There is so much more to teaching and education. In my own work, I have tried to find a language and an understanding that does justice to this richness and to keep the conversation open and ongoing. Giving a talk like this makes one feel old. Yet, I still want to end with some words of hope as I found them in the final verses of Tennyson's poem *Ulysses*:

Tho' much is taken, much abides; and tho'  
We are not now that strength which in old days  
Moved earth and heaven, that which we are, we are;  
One equal temper of heroic hearts,  
Made weak by time and fate, but strong in will  
To strive, to seek, to find, and not to yield.

## Notes

<sup>1</sup> This paragraph and the next are slightly revised versions of Kelchtermans (2016, pp. 32–34).

<sup>2</sup> It is important to stress that this study was done in the mid-1980s, with the original book report published in 1989 in French—the English summarizing translation of the book, titled *The Lives of Teachers*, was not published until 1993.

<sup>3</sup> Oppositely, there was a clear influence of the Anglo-Saxon research on the German-speaking academic world, which was further facilitated by the translation into German of several seminal English publications (see, e.g., Terhart, 1991; Terhart, Czerwenka, Ehrich, Jordan, & Schmidt, 1993).

<sup>4</sup> Shulman's (1987) concept of “pedagogical content knowledge,” for example, can be understood as part of the subjective educational theory (see, e.g., Depaepe, Verschaffel, & Kelchtermans, 2013).

<sup>5</sup> I have purposefully avoided the notion of “identity” because of its association with a static essence, implicitly ignoring or denying its dynamic and biographical nature (as well as the inflation of multiple meanings, constructed from multiple and very different conceptual and theoretical approaches).

<sup>6</sup> This exploration of the emotional dimension of teacher induction using both narrative and micropolitical lenses was also a central line in the collaboration with Eila Estola and other colleagues at the University of Oulu in Finland, where I held a visiting professorship between 2012 and 2016 (Jokikokko, Uitto, Deketelaere, & Estola, 2017; Uitto, Kaunisto, Kelchtermans, & Estola, 2016).

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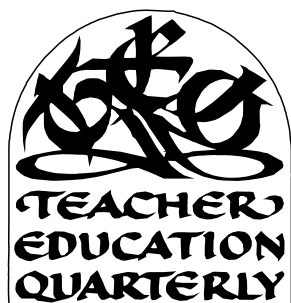
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## **Developing and Modeling 21st-Century Skills with Preservice Teachers**

**Jacquelyn M. Urbani, Shadi Roshandel,  
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Today's youth face a rapidly changing world, requiring them to move beyond basic formulaic knowledge and skills. Current educational policy, such as the Common Core State Standards (CCSS), represents a shift away from rote learning and memorization of facts to the development of the 21st-century skills of creativity: critical thinking; communication; collaboration; and information, media, and technology skills (IMTS). Business and political leaders also recognize the necessity in addressing these core competencies for the 21st-century landscape (Ravitch, 2010). For students to be competent in a global society, K–12 teachers need to develop, model, and assess the 21st-century skills in their students (National Governors Association Center for Best Practices [NGA] & Council of Chief State School Officers [CCSSO], 2010; Partnership for 21st Century Skills, 2016; Rotherham & Willingham, 2009; Truesdell & Birch, 2013). As such, there is a call for teacher education programs to facilitate preservice teachers' personal development of these

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skills as well as their application to educational settings (American Association of Colleges for Teacher Education, 2010; Michaels, Truesdell, & Brown, 2015).

While research exists on each of the 21st-century skills in isolation or in pairs, a scarcity of research exists on the process of explicitly facilitating them with preservice teachers (Kagle, 2014; Kokotsaki, 2011; McDonald & Kahn, 2014; Thieman, 2008). Some international examples, such as Singapore's TE21 Model of Teacher Education and teacher education in Finland, have elements of 21st-century skill training; however, few studies detail how to explicitly facilitate this process (Schleicher, 2012). To that end, this study describes a collaboration in one university between three teacher education programs (multiple subject, single subject, and education specialist) that explores how and to what extent faculty are developing and modeling the 21st-century skills in preservice teachers. In addition, this study analyzes preservice teachers' perceptions of their competence in 21st-century skills and their ability to incorporate them into their own teaching. Relying on the theory of cognitive apprenticeship (Collins, 2006; Collins, Brown, & Newman, 1987), the researchers approached this process primarily for the purpose of promoting expertise in teaching, focusing on teaching methods including modeling, coaching, scaffolding, articulation, reflection, and exploration.

This current study fills a gap in the teacher education literature as it identifies how teacher educators across programs within one institution developed the 21st-century skills with preservice teachers, through both course work and field experiences. The current study asked, How and to what extent do our teacher education programs develop and model the 21st-century skills in preservice teachers? This study also aimed to build a model for teacher education programs by purposefully facilitating the development of these skills (see Figure 1); specifically, the initial stage is personal development of each skill, followed by the application of these skills in educational contexts, and finally their utilization professionally with K–12 students, colleagues, and parents.

## **21st-Century Skills**

The 21st-century skills of creativity, critical thinking, communication, collaboration, and IMTS are not novel to today's educational and business settings (Rotherham & Willingham, 2009; Silva, 2009). Indeed, these skills have been integral elements throughout human history; however, *how* these skills are taught and developed in K–12 schools has evolved. The CCSS represents a shift away from basic drill and recitation of simple facts to an emphasis on the multifaceted processes of learning (NGA & CCSSO, 2010).

The recently adopted CCSS intentionally include 21st-century skills. Literacy standards contain explicit requirements for communication. The other elements of creativity, critical thinking, collaboration, and the use of technology are all subsumed in the standards for literacy, math, and science (NGA & CCSSO, 2010;



Partnership for 21st Century Skills, 2016). In fact, even the names of math standards speak to these skills, identifying creativity and critical thinking explicitly (NGA & CCSSO, 2010).

As the CCSS require K–12 students to demonstrate competency in the 21st-century skills, teachers also need to understand how to develop, model, and assess these skills. In turn, teacher education programs should be expected to start this process by facilitating preservice teachers' exploration and reflection on these

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**Figure 1**

*Model of 21st-century skill development for teacher education programs (Michaels, Roshandel, Truesdell, & Urbani, 2015). This trajectory identifies three phases: (a) personal development (preservice teachers' capacity to understand and apply these skills in multiple contexts, not limited to educational settings), (b) applied development (continued building of individual capacity as preservice teachers, while facilitating the skill development within their students during supervised teaching fieldwork), and (c) professional development (continued development of these skills with students, colleagues, parents, and administrators as in-service teachers).*





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competencies to apply them within their classrooms, so they continue to develop and learn throughout their careers (Darling-Hammond, 2006). While an abundance of research on developing the 21st-century skills through professional development for *in-service* teachers exists, fewer studies focus on more than one or two elements of 21st-century skills in *preservice* teachers (Dong, Chai, Sang, Koh, & Tsai, 2015; Hagevik, Aydeniz, & Rowell, 2012; Jones & Jones, 2013; Pamuk, 2011). As the existing definitions of the skills focus on K–12 students (Partnership for 21st Century Skills, 2016), and can be applied to schools and the workplace (Silva, 2009), this study recognized the need to define the 21st-century skills for preservice teacher education. Therefore the existing literature was analyzed to develop definitions (see Figure 2) to use in teacher education programs (e.g., Hora & Holden, 2013; Partnership for 21st Century Skills, 2016; Rotherham & Willingham, 2009; Ryhammar & Brolin, 1999; Sternberg & Lubart, 1999; Ward & McCotter, 2004). The foundation of the 21st-century skills elements and definitions stem from the framework presented by Partnership for 21st Skills (Dede, 2010). The following sections explore research on each identified component in teacher education.

#### **Creativity**

Research on creativity with preservice teachers is limited and identifies its restriction within classrooms in several ways: fidelity to the curriculum and standards, assessment of creativity, and a lack of training in the development of

**Figure 2**  
*Definitions of 21st-century skills for preservice teachers (Michaels et al., 2015).*

<i>Creativity</i>	Creativity is the ability to develop, choose, and integrate novel, unconventional, and innovative approaches to teaching and learning.
<i>Critical Thinking</i>	Critical thinking is the ability to effectively use higher order thinking skills to plan, teach, and reflect on instructional practice while integrating and applying theories of teaching, learning, and development.
<i>Communication</i>	Communication is the ability to successfully use interpersonal skills and components of literacy (reading, writing, speaking, and listening) to contribute to teaching, learning, and development.
<i>Collaboration</i>	Collaboration is the ability to work productively and equitably while valuing others in diverse educational settings.
<i>Information, Media, and Technology Skills (IMTS)</i>	IMTS is the ability to access, manage, apply, analyze, and evaluate digital information and instructional technological tools. This includes leveraging technology innovatively and effectively in diverse learning environments to collaborate, communicate, think critically, and create new functions in the midst of rapidly changing technological advances.

creativity (Kampylis, Berki, & Saariluoma, 2009; Kokotsaki, 2011). Grounded in self-report data, these studies asked preservice teachers how they prefer students to respond during classroom discussions. For example, Beghetto (2007) asked secondary preservice teachers their preferences for unique versus relevant answers. Unique answers were defined as students using creative thinking skills, including novel ideas, varied perspectives, and creative connections, whereas relevant answers were defined as providing answers and demonstrating one's competence without digressing from the curricular expectations. The majority of preservice teachers preferred relevance over uniqueness. However, it is important to note that creativity requires both uniqueness and relevance (Amabile, 1996; Plucker, Beghetto, & Dow, 2004), as it is essential to teach preservice teachers how to identify, develop, and assess these elements and encourage their own students to further develop their creative skills (Beghetto, 2007).

The limited studies on creativity have also suggested that certain content areas are perceived as offering fewer opportunities for creativity than others (Beghetto, 2007; Bolden, Harries, & Newton, 2010). For example, regardless of grade level, studies have shown that preservice teachers do not believe math to be a creative subject and thus perceive creativity as a potential distraction (Beghetto, 2007). In addition, preservice teachers could not distinguish between teaching creatively and teaching *for* creativity and had difficulty in identifying ways of encouraging and assessing this skill in the math classroom (Bolden et al., 2010). However, preservice teachers indicated that all other subject areas provide more opportunities for creativity through discussions, exploration of ideas, and freedom of choice (Beghetto, 2007; Bolden et al., 2010). Although these perceptions may exist due to potential constraints in the curriculum, it is imperative for teacher education programs to develop, model, and assess what it means to be creative (Beghetto, 2007; Bolden et al., 2010; Kokotsaki, 2011).

### **Critical Thinking**

Research on critical thinking in teacher education has typically focused on critical reflection during course work and fieldwork. The universal challenge is to encourage preservice teachers "to reflect on their practice in meaningful ways, to consider the effect their teaching has on student learning, and develop habits that will stay with them" (Ward & McCotter, 2004, p. 244). To this end, teacher educators have designed assignments that allow preservice teachers to practice and demonstrate critical reflection. Researchers measured the development and quality of critical reflection skills using a common framework: a low level is identified as a focus on themselves and teaching tasks, whereas a high level is demonstrated by a focus on pedagogy and multiple perspectives, resulting in a transformative change in teaching practice (e.g., McDonald & Kahn, 2014; Ward & McCotter, 2004).

A common method for researchers to study critical reflection is to analyze

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preservice teachers' written assignments (e.g., autobiographies, self-assessments, and fieldwork essays). Results indicate that the majority of essays are written at the lower levels of critical reflective thinking, that is, preservice teachers' focus on themselves and teaching tasks (Griffin, 2003; Ward & McCotter, 2004). It may be natural for preservice teachers to have a self and teacher task emphasis rather than a higher level of critical reflection (Ward & McCotter, 2004). However, preservice teachers can move from concrete thinking about themselves to thinking through a variety of perspectives within the context of teaching and learning (Griffin, 2003). For example, McDonald and Kahn (2014) found that critical self-assessments generated a greater self-awareness, improvements in teaching practice, and progress in seeing through multiple perspectives. In addition, participation in action research or small-group discussions that incorporate peer feedback improve preservice teachers' critical reflection skills (Griffin, 2003; Hagevik et al., 2012).

Teacher educators play an important role in the development of preservice teachers' critical reflection skills through coaching and scaffolding. McDonald and Kahn (2014) found a direct relationship between preservice teachers' level of critical reflection and the level of professors' prompts, questions, and feedback. In addition, Ward and McCotter (2004) recommended that teacher educators use provocative questions and high-level prompts and feedback to assist preservice teachers in developing these skills. Once preservice teachers begin their first year of teaching, they are expected to do more than critically reflect on their practice; they are expected to be critical thinkers, model critical thinking, and demonstrate that they can teach students to develop their own critical thinking skills in a variety of academic subjects and classroom situations (California Commission on Teacher Credentialing, 2013). In addition, researchers advocate that teacher educators explicitly guide preservice teachers to the higher levels of critical reflection (Jones & Jones, 2013; Ward & McCotter, 2004); therefore teacher education programs need to be intentional in developing, modeling, and assessing these skills.

### **Communication and Collaboration**

Research on communication and collaboration is often presented simultaneously, as effective communication is vital for and leads to successful collaboration (Partnership for 21st Century Skills, 2016). A common example of the integration of these two skills in education is professional learning communities (PLCs), which focus on teacher discussions and collaborations. For example, Kagle (2014) created a PLC for undergraduate preservice teachers to develop their skills in collaboration, critical reflection, and pedagogy. A protocol provided a structured format for preservice teachers to bring a dilemma with their teaching to their peers for feedback. In particular, they experienced a shared language, developed critical inquiry skills, built knowledge for practice, and learned the value of collaboration with colleagues. Teacher education programs need to explicitly provide opportuni-

ties for the development of communication and collaboration for the purposes of improved instructional practice.

PLCs also promote the practice of critical reflection and critique, both individually and with a group. Daniel, Auhl, and Hastings (2013) found that preservice teachers experience difficulty with offering and receiving critical feedback. Specifically, this study focused on how to offer critical feedback in a way that can be heard and responded to, while maintaining a collaborative environment. As the study progressed, preservice teachers recognized and valued the importance of critique to improve teaching practices. Arguably, while learning how to give and receive critical feedback can be difficult, the results on teaching and learning can be significant. The implications from research are that preservice teachers can and should begin to experience collaboration to promote critical reflection on their own teaching practices (Elster, Barendziak, Haskamp, & Kastenholz, 2014; Kagle, 2014). Therefore the limited research supports the need for teacher education programs to facilitate development of these skills in their preservice teachers.

### ***Information Media and Technology Skills***

In addition to the development of creativity, critical thinking, communication, and collaboration, emergent technologies have altered how and to what extent 21st-century skills are integrated in the classroom. Technology has become a tool with which these skills are leveraged both in and outside of the classroom (Thieman, 2008), teaching students how to effectively transfer their learning to varied contexts (Saavedra & Opfer, 2012). Research on IMTS indicates that K–12 schools are facing digital natives in the classroom; hence effective training needs to be developed for preservice teachers. This includes modeling the use of instructional technology as well as deliberately incorporating the National Educational Technology Standards for Students (NETS) in teacher education programs (Collier, Weinburgh, & Rivera, 2004; Graham, Cox, & Velasquez, 2009; Pamuk, 2011).

Thieman (2008) explored how preservice teachers use technology through the lens of NETS. The study examined work samples and reflections to discern the extent to which they integrate instructional technology into their planning and to measure how that integration relates to 21st-century citizenship. Findings indicated that 85% of preservice teachers integrate instructional technologies with their K–12 students, and approximately 50% documented the use of technology in conjunction with creativity, communication, collaboration, and IMTS to conduct research. Despite this push toward modeling effective technology use in teacher education programs, some studies have found that preexisting belief systems and practices tend to hinder teacher educators from learning new technologies and adapting their pedagogy (Dong et al., 2015; Hora & Holden, 2013; Nicholson & Galguera, 2013). Considering that IMTS are integral components of the development of 21st-century skills, research supports this study's structured approach to incorporating these tools for preservice teachers.

### **The Current Study**

This study recognized the need to establish definitions specific to the roles and responsibilities of teacher educators and preservice teachers (see Figure 2). The researchers used these definitions as a framework to ensure consistency across the four courses under study, which shaped the model of 21st-century skill development for teacher education (see Figure 1). This trajectory identifies three phases:

1. *personal development*: preservice teachers' capacity to understand and apply these skills in multiple contexts, not limited to educational settings
2. *applied development*: continued building of individual capacity as preservice teachers while facilitating the skill development within their students during supervised teaching fieldwork
3. *professional development*: continued development of these skills with students, colleagues, parents, and administrators while in-service teachers

In summary, there is a need for teacher education programs to provide opportunities to develop and model 21st-century skills in both course work and fieldwork requirements. Scholars have noted the importance of transferring theory and course work to practice for preservice teachers (Rust & Bergey, 2014; White & Chant, 2014). Therefore the current study examined preservice teachers' perceptions of the impact of anchor assignments on their personal and applied development through course work and fieldwork experiences. This study builds a model for teacher education programs by purposefully integrating the 21st-century skills (see Figure 1). Owing to these efforts, preservice teachers may be better prepared to facilitate the learning of today's diverse student population in a rapidly changing world.

## **Methods**

### **Research Design**

A mixed methods approach was used to measure how and to what extent teacher education programs develop and model the 21st-century skills in preservice teachers. Researchers were faculty in one university across three teacher education programs, thus classifying this study as participatory action research (Berg, 2004; Gabel, 1995; Stringer, 1999), as it investigated the effect of researchers' practice on participants (Berg, 2004).

### **Sample**

This study took place in a small, private university in northern California. Participants ( $N = 54$ ) were graduate ( $n = 39$ ) and undergraduate ( $n = 15$ ) preservice teachers enrolled in multiple subject ( $n = 19$ ), single subject ( $n = 16$ ), and education specialist ( $n$

= 19) programs. Some preservice teachers were enrolled in multiple courses involved in this study. They ranged in age from 20 to 60 years, and 10% were men. Participants were 75% White, 15% Latina, 7% Asian, and 3% African American.

### **Data Collection and Measures**

Data were collected from four courses, taught by each of the four researchers, and chosen to represent each program, including a foundational course in which all preservice teachers across programs must enroll (see Figure 3). Each course also aligned with either the personal or applied developmental stage of the conceptual model. Surveys were created to measure the extent to which anchor assignments developed preservice teachers' competencies with the 21st-century skills as well as their ability to incorporate these skills into their own teaching. Whereas the quantitative data provided preservice teachers' perceptions of the impact of anchor assignments on their personal and professional development, the researchers were also interested in gathering more information on how that development occurred based on instruction. Therefore, at the end of the semester, nine preservice teachers participated in a focus group to elicit that information.

**Survey data.** The survey instrument measured two areas: (a) impact of the anchor assignments on preservice teachers' personal development of competencies in the 21st-century skills and (b) impact of the anchor assignments on preservice teachers' ability to incorporate the 21st-century skills into their teaching. A closed-ended 4-point Likert-type scale ranging from 4 (*a great deal*) to 1 (*not at all*) measured each component of the 21st-century skills. Because of the small sample size, survey responses were analyzed using basic statistics, which generated percentages of preservice teachers' responses. These methods allowed for comparison of responses between 21st-century skills and anchor assignments.

**Focus group data.** A focus group was conducted at the end of the semester to elucidate how the instruction and assignments in the four selected courses developed preservice teachers' skills personally and facilitated their application of these skills to classroom settings. The focus group was conducted with nine preservice teachers (17% of the original 54) across the selected classes to represent a sample of the teacher education programs. Three of the focus group participants were undergraduates, two were Latina, and one was male.

The facilitator was selected from outside the Department of Education due to a background in organizational development as well as expertise with conducting focus groups. The facilitator requested information on how the assignments, activities, and instruction engaged preservice teachers and facilitated development of 21st-century skills. In addition, the facilitator asked ways that the learning experience could be improved, referred to as the delta. The focus group was audiotaped and transcribed using the research software HyperTRANSCRIBE.

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**Figure 3**

Description of courses and anchor assignments, aligned with developmental level of the 21st-century skill development for teacher education programs conceptual model (see Figure 1).

<i>Course Description</i>	<i>Anchor Assignment</i>	<i>Developmental Level</i>
<p><b>Teaching for Equity: All Programs</b> Teaching for Equity is a 3-unit course that examines principles of educational equity and diversity and their implementation in curriculum content and school practices. Candidates examine their own beliefs, attitudes, biases, and expectations about educational equity, so that they may be better prepared to create equitable classrooms. In this course, candidates also explore the historical and cultural traditions of cultural and ethnic groups in California, and ways to include cultural traditions in instructional programs. Candidates will learn how to maximize the academic achievement for ALL students.</p>	<p><b>Diversity Statement</b> Preservice teachers write narrative essays describing the value of a multicultural perspective and consider the following questions: (a) What is a multicultural perspective? (b) Why is it important for educators to have a multicultural perspective? If you do not think it is important, why not? (c) What are your beliefs about teaching and learning with a diverse student population? (d) How do you teach (or see yourself teaching) in a diverse classroom? (e) Why do you think that teaching that way will address the needs of all students? (f) What norms for student behavior and interactions will you develop in your future classroom? and (g) How might 21st Century Skills enhance teaching diverse learners?</p>	<p><b>Personal</b></p>
<p><b>Teaching Mathematics: Multiple Subject &amp; Education Specialist</b> This course prepares preservice teachers to teach mathematics in elementary school. Candidates are prepared to deliver a balanced instructional program through active construction of pedagogical knowledge and skills. Candidates learn developmentally appropriate strategies to teach students California's Mathematics Content Standards. Candidates participate in fieldwork where appropriate mathematics instruction is modeled.</p>	<p><b>Student Work Analysis</b> Preservice teachers analyze elementary student work samples (addition and subtraction of 3-digit numbers with and without regrouping), representative of a class of 25 third-grade students. Preservice teachers analyze the student work for accuracy, and procedural and conceptual knowledge. Based on this analysis, they create lesson plans to teach and reach all students.</p>	<p><b>Personal</b></p>



**Figure 3** (continued)

<i>Course Description</i>	<i>Anchor Assignment</i>	<i>Developmental Level</i>
<p><b>Preparation for Student Teaching: Single Subject</b>                      This course develops an understanding of school culture and adolescent development while preparing candidates for the demands of a teaching career. It explores the essential knowledge and skills required for effective secondary teaching and learning as defined by the California Teaching Performance Expectations (TPEs).</p>	<p><b>Practice Lessons</b>                      Preservice teachers will design and teach two lessons in classrooms where they are observing and will student teach. Each lesson design must include differentiated instruction and/or assessment for at least one individual in two groups of students: English learners and students with special needs. This assignment includes (a) planning the lessons, (b) conferring with the supervising teacher, (c) teaching the lessons, (d) assessing their own instruction in each practice lesson, (e) securing observation notes/ feedback from university supervisors and directing teachers, (f) writing a critical reflection the lessons.</p>	<p><b>Personal &amp; Applied</b></p>
<p><b>Program Design &amp; Curriculum Development: Education Specialist</b>                      Candidates learn about Individual Education Plan (IEP) development and curriculum planning and instruction for students with mild/moderate learning challenges. Candidates write a complete IEP including transition plans. Candidates learn how to make adaptations to general education curriculum in order to ensure student success. Knowledge of ethical standards related to laws and regulations that provide equity for students with learning challenges is emphasized.</p>	<p><b>Individualized Education Program (IEP)</b>                      Preservice teachers independently develop a quality IEP, detailing the current functioning and areas of strength and struggle for a K-12 student, relating these to the goals and accommodations. The required elements include: Assessment Summary, Eligibility, Present Levels of Academic Achievement and Functional Performance, Measurable Annual Goals, Services, Setting, Statewide Assessments, and Transition Services.</p>	<p><b>Personal</b></p>



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Researchers coded the transcripts by developing a preliminary list of codes (Miles & Huberman, 1994; Miles, Huberman, & Saldana, 2013), which stemmed from the study's conceptual framework, around the variables creativity, critical thinking, communication, collaboration, and IMTS, as well as their deltas. The researchers read and coded transcripts separately for each class and then across the programs, establishing an interrater reliability of 94%. The analysis and coding were conducted using the research software HyperRESEARCH.

## **Results**

To investigate how and to what extent our teacher education programs developed and modeled the 21st-century skills in preservice teachers, the following questions were examined: What are preservice teachers' perceptions of the impact of anchor assignments on their personal and applied development of the 21st-century skills? How did course instruction affect the development of these skills? Specifically, survey results indicated that the anchor assignments impacted preservice teachers' ability to incorporate 21st-century skills in their teaching (see Tables 2, 4, 6, and 8) more than it impacted their own personal competencies in these skills (see Tables 1, 3, 5, and 7). Results of the focus group and surveys were analyzed based on preservice teachers' competencies and their ability to incorporate the 21st-century skills into their classrooms; these results are simultaneously reported for each skill. Survey results of each course, including descriptive statistics, are reported in Tables 1–8.

### **Creativity**

Preservice teachers cited a variety of examples of creativity in their course assignments and activities and described how their professors modeled and instilled a sense of creativity. For example, a participant from the Preparation for Student Teaching course stated that incorporating creativity into daily lesson planning is a

**Table 1**  
*Impact of Teaching for Equity Anchor Assignment on Preservice Teachers' Competencies in the 21st-Century Skills*

<i>21st-century skill</i>	<i>A great deal (%)</i>	<i>To some extent (%)</i>	<i>Minimally (%)</i>	<i>Not at all (%)</i>	<i>Mean (SD)</i>
Communication	71.4	21.4	7.1	–	3.64 (0.63)
Collaboration	71.4	28.6	–	–	3.71 (0.47)
Critical thinking	71.4	28.6	–	–	3.71 (0.47)
Creativity	85.7	7.1	7.1	–	3.79 (0.58)
IMTS	21.4	21.4	28.6	28.6	2.36 (1.16)
CCSS	28.6	42.9	7.1	21.4	2.79 (1.12)

Note. n = 14. CCSS = Common Core State Standards. IMTS = information, media, and technology skills.

major component of being a teacher. Lesson planning was the anchor assignment for this course; preservice teachers developed and taught two lessons in a second-

**Table 2**  
*Impact of Teaching for Equity Assignment on Preservice Teachers' Ability to Incorporate the 21st-Century Skills in Their Teaching*

<i>21st-century skill</i>	<i>A great deal (%)</i>	<i>To some extent (%)</i>	<i>Minimally (%)</i>	<i>Not at all (%)</i>	<i>Mean (SD)</i>
Communication	92.9	7.1	–	–	3.93 (0.27)
Collaboration	92.9	7.1	–	–	3.93 (0.27)
Critical thinking	78.6	14.3	7.1	–	3.71 (0.61)
Creativity	85.7	14.3	–	–	3.86 (0.36)
IMTS	14.3	35.7	14.3	35.7	2.29 (1.14)
CCSS	14.3	42.9	14.3	28.6	2.43 (1.09)

Note. *n* = 14. CCSS = Common Core State Standards. IMTS = information, media, and technology skills.

**Table 3**  
*Impact of Teaching Mathematics Anchor Assignment on Preservice Teachers' Competencies in the 21st-Century Skills*

<i>21st-century skill</i>	<i>A great deal (%)</i>	<i>To some extent (%)</i>	<i>Minimally (%)</i>	<i>Not at all (%)</i>	<i>Mean (SD)</i>
Communication	27.8	38.9	22.2	11.1	2.83 (0.99)
Collaboration	27.8	50.0	16.7	5.6	3.00 (0.84)
Critical thinking	88.9	11.1	–	–	3.89 (0.32)
Creativity	55.6	16.7	22.2	5.6	3.22 (1.00)
IMTS	–	22.2	50.0	27.8	1.94 (0.73)
CCSS	27.8	44.4	11.1	16.7	2.83 (1.04)

Note. *n* = 18. CCSS = Common Core State Standards. IMTS = information, media, and technology skills.

**Table 4**  
*Impact of Teaching Mathematics Anchor Assignment on Preservice Teachers' Ability to Incorporate the 21st-Century Skills in Their Teaching*

<i>21st-century skill</i>	<i>A great deal (%)</i>	<i>To some extent (%)</i>	<i>Minimally (%)</i>	<i>Not at all (%)</i>	<i>Mean (SD)</i>
Communication	38.9	33.3	16.7	11.1	3.00 (1.03)
Collaboration	16.7	50.0	27.8	5.6	2.78 (0.81)
Critical thinking	61.1	27.8	5.6	5.6	3.44 (0.86)
Creativity	55.6	27.8	16.7	–	3.39 (0.78)
IMTS	–	17.6	47.1	35.3	1.82 (0.73)
CCSS	22.2	50.0	16.7	11.1	2.83 (0.92)

Note. *n* = 18. CCSS = Common Core State Standards. IMTS = information, media, and technology skills

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ary classroom, receiving written feedback from their university supervisors and directing teachers. The qualitative data coincide with survey data on the anchor

**Table 5**  
*Impact of Preparation for Student Teaching Seminar Anchor Assignment on Preservice Teachers' Competencies in the 21st-Century Skills*

<i>21st-century skill</i>	<i>A great deal (%)</i>	<i>To some extent (%)</i>	<i>Minimally (%)</i>	<i>Not at all (%)</i>	<i>Mean (SD)</i>
Communication	61.5	38.5	–	–	3.62 (0.51)
Collaboration	53.8	38.5	7.7	–	3.46 (0.66)
Critical thinking	69.2	23.1	7.7	–	3.62 (0.65)
Creativity	84.6	15.4	–	–	3.85 (0.38)
IMTS	61.5	23.1	15.4	–	3.36 (0.78)
CCSS	69.2	23.1	7.7	–	3.62 (0.65)

Note. *n* = 13. CCSS = Common Core State Standards. IMTS = information, media, and technology skills.

**Table 6**  
*Impact of Preparation for Student Teaching Seminar Anchor Assignment on Preservice Teachers' Ability to Incorporate the 21st-Century Skills in Their Teaching*

<i>21st-century skill</i>	<i>A great deal (%)</i>	<i>To some extent (%)</i>	<i>Minimally (%)</i>	<i>Not at all (%)</i>	<i>Mean (SD)</i>
Communication	69.2	23.1	7.7	–	3.62 (0.65)
Collaboration	61.5	38.5	–	–	3.62 (0.51)
Critical thinking	61.5	23.1	15.4	–	3.46 (0.78)
Creativity	69.2	23.1	7.7	–	3.62 (0.65)
IMTS	61.5	15.4	23.1	–	3.38 (0.87)
CCSS	69.2	23.1	7.7	–	3.62 (0.65)

Note. *n* = 13. CCSS = Common Core State Standards. IMTS = information, media, and technology skills.

**Table 7**  
*Impact of Program Design Anchor Assignment on Preservice Teachers' Competencies in the 21st-Century Skills*

<i>21st-century skill</i>	<i>A great deal (%)</i>	<i>To some extent (%)</i>	<i>Minimally (%)</i>	<i>Not at all (%)</i>	<i>Mean (SD)</i>
Communication	47.4	42.1	10.5	–	3.37 (0.68)
Collaboration	36.8	47.4	15.8	–	3.21 (0.71)
Critical thinking	68.4	21.1	10.5	–	3.58 (0.69)
Creativity	31.6	47.4	21.1	–	3.11 (0.74)
IMTS	11.1	33.3	27.8	27.8	2.28 (1.02)
CCSS	26.3	21.1	31.6	21.1	2.53 (1.12)

Note. *n* = 19. CCSS = Common Core State Standards. IMTS = information, media, and technology skills.

assignment for this course, with 84.6% of preservice teachers responding that it impacted their competency in creativity “a great deal” (see Table 5).

Additionally, preservice teachers spoke about how the professor addressed teaching the CCSS in the Teaching for Equity course, stating that while the standards are set, how one imparts or teaches to the standards is when a teacher can facilitate creativity. This course also incorporated creativity in learning how to teach to a diverse student population through various classroom activities, such as cultural simulations and analysis of case studies and equity policies. Preservice teachers wrote reflective papers on their views and on how their own cultural lens can influence how they teach; one participant commented that these reflections allowed for creativity in addressing various topics around equity in education. Survey data indicate that 85.7% of preservice teachers in the Teaching for Equity course most developed their personal competencies with creativity (see Table 1).

Preservice teachers in the Teaching Mathematics course described creativity as the most developed 21st-century skill within that course, citing examples of developing math games for students that provided opportunities to use their creative problem-solving skills. Preservice teachers valued the chance to share their new games with each other during class time because the feedback highlighted how they interpreted the game in a variety of ways: “You get other differentiated ideas that you can create and modify” (Participant 4).

Areas for improvement, referred to as the delta in the focus group, appeared with preservice teachers in the Teaching for Equity course. Although they understood the importance of critical reflection, participants indicated that they would have appreciated learning creative activities to use with their students as well. Another suggestion emerged from the discussion of the course for education specialist participants. A major component of this class was learning how to develop Individual Education Programs (IEPs); preservice teachers discussed the creativity required in writing IEPs in general but cited a need to discuss a variety of classrooms and settings, not just special day classes or younger, elementary-aged students.

**Table 8**  
*Impact of Program Design Assignment on Preservice Teachers’ Ability to Incorporate the 21st-Century Skills in Their Teaching*

<i>21st-century skill</i>	<i>A great deal (%)</i>	<i>To some extent (%)</i>	<i>Minimally (%)</i>	<i>Not at all (%)</i>	<i>Mean (SD)</i>
Communication	52.6	42.1	5.3	—	3.47 (0.61)
Collaboration	52.6	36.8	10.5	—	3.42 (0.69)
Critical thinking	68.4	10.5	15.8	5.3	3.42 (0.96)
Creativity	36.8	36.8	21.1	5.3	3.05 (0.91)
IMTS	15.8	36.8	15.8	31.6	2.37 (1.12)
CCSS	26.3	26.3	21.1	26.3	2.53 (1.17)

Note. *n* = 19. CCSS = Common Core State Standards. IMTS = information, media, and technology skills.

### **Critical Thinking**

Preservice teachers reported that all anchor assignments greatly impacted their competence in critical thinking skills and in their ability to incorporate these skills into their teaching (see Tables 1–8). The Teaching Mathematics anchor assignment, analysis of elementary student work samples, demonstrated the strongest results, with nearly 90% of preservice teachers reporting that their competency in critical thinking was further developed “a great deal” (see Table 3). Focus group data supported these results, as preservice teachers saw the importance of critically reflecting on their own teaching practices. One participant commented that examining student work for strengths and needs prompted consideration of what future instruction should look like to ensure student success and that this was “one of the most helpful activities” within the teacher education program (Participant 5).

Nearly 70% of preservice teachers in the Preparation for Student Teaching course found that the anchor assignment of designing and teaching two lessons increased their competency in critical thinking (see Table 5). One participant commented, “It was the reflection piece afterwards that really got me thinking critically about what went well, what needs improvement, and the . . . overall scope of the lesson” (Participant 6). Others discussed the benefits of practicing their lesson plans with their peers in class and receiving critical feedback, which improved the lesson when implemented with secondary students. Preservice teachers in the Program Design and Curriculum Development course agreed that developing lesson plans for their case study students required them to think critically about the diverse needs of students and, in particular, required careful consideration of the accommodations students would need to access the curriculum. Of the preservice teachers enrolled in this course, 68.4% indicated that the anchor assignment (developing an IEP) aided their competency and ability to incorporate critical thinking skills in their practice (see Tables 7–8).

The Teaching for Equity course required preservice teachers to “question our own thinking, like the way that we have been thinking for our whole lives. It really inspired a lot of critical thought about yourself and how you do things and how you treat other people” (Participant 2). In terms of the delta, another participant from that course commented that “98% of that class involved critical thinking . . . what I found in myself is that I felt a little weary on the case studies for some reason” (Participant 1). The participant suggested readjusting a three-part assignment to be more varied and have different directives.

### **Communication and Collaboration**

As in prior research, preservice teachers found it hard to distinguish between communication and collaboration. The survey data mirrored this, as communication and collaboration were often identified as providing the same amount of impact on the development of these skills (see Tables 1–8). For example, 71.4% of the preservice teachers enrolled in the Teaching for Equity course indicated that the

anchor assignment, a diversity statement, impacted their personal competencies “a great deal” in both communication and collaboration (see Table 1). In addition, 92.9% of these preservice teachers identified the anchor assignment as developing their abilities to impart both of these skills in their future teaching (see Table 2).

Several examples appeared throughout the focus group of how preservice teachers developed the specific 21st-century skills of communication and collaboration. For example, in the Teaching Mathematics course, preservice teachers were provided time to share their various assignments (such as math games, rubric development, and lesson plans) and offer one another feedback. One preservice teacher commented that she appreciated sharing her own thoughts and talking with peers for the sake of improved learning activities for her elementary students. Preservice teachers in the Preparation for Supervised Teaching course commented on the benefit of communicating and connecting with their classmates about their experiences in real classrooms and schools as they prepared for their student teaching. Within the Program Design and Curriculum Development course, preservice teachers described how the writing of IEPs developed communication and collaboration skills with small groups in university classes as well as with parents and school personnel in field placements. For example, one participant commented, “It was a good experience to be able to work with other people on an IEP, which is the reality of it” (Participant 7).

Finally, preservice teachers recognized the benefits of collaboration in groups with peers who were at different places in the credentialing program and identified the benefit of communication in classes where all credentialing programs were represented. For example, one participant commented, “It brought me back to what it feels like to work on a group project where everyone is kind of at different places in their learning” (Participant 7). They identified how hearing from peers focusing on different grades or ability levels provided them with ideas they had not previously considered.

The delta on development of communication and collaboration skills was identified by preservice teachers as a need for more opportunities to practice difficult conversations they might encounter with other teachers, specialists, and parents. Particularly, education specialist preservice teachers asked for guidance and practice in communicating with general education teachers to ensure coordinated, quality instruction and access to necessary accommodations across classrooms.

### ***Information Media and Technology Skills***

Focus group participants identified IMTS as a supportive tool for use in conjunction with the other 21st-century skills. For example, the Preparation for Student Teaching course used wiki pages to elicit communication and collaboration during class. The pages were projected on a screen, and preservice teachers worked in groups to contribute relevant Web sites on curriculum planning. The wikis were

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then saved on the course Web site so all participants could access these resources after class.

A specific example of collaboration and technology use occurred in the Teaching for Equity course. Preservice teachers were required to present first collaboratively in a group on equity policies and then individually on a chosen topic. A focus group participant commented that she felt “rusty on the technology” (Participant 1), so it was helpful to lean on peers during the first presentation. By the individual presentation, the preservice teacher felt more confident, as she noted, “I had a better grasp of instructional technology to present on my own.”

Connections between IMTS and the other 21st-century skills of critical thinking and creativity also emerged in the data. For instance, the professor in the Program Design and Curriculum Development course brought in iPads to explore applications for special education classrooms and students. The professor allotted time in class for preservice teachers to investigate various applications and to discern which they felt comfortable applying in the field. This exercise tapped into their creativity and critical thinking skills as they explored useful applications to accommodate various learning needs and abilities.

Notably, the descriptions of IMTS in the focus groups centered mainly on class activities (exploring online rubrics and Web sites, investigating applications for use with whole classes and for special needs students) and professors modeling its use (through the use of online classroom platforms and apps used for instruction). Fewer statements linked anchor assignments to technology, which is reflected in the survey data. Only one anchor assignment indicated an increase in IMTS competencies above 25%, which was the Preparation for Student Teaching Seminar, at 61.5% (see Table 5).

Focus group participants made some suggestions on the role of IMTS in their course work, which serve as a delta in this area. Some indicated a desire for more hands-on time with the technology, more specifically iPads. Overall, focus group participants cited the importance of professors modeling the use of various technologies; however, they requested more on how to integrate IMTS in the classroom before their supervised teaching experiences.

### ***Simultaneous Integration of the 21st-Century Skills***

Arguably, the most compelling emergent finding was the integration of various 21st-century skills simultaneously (see Figure 4). Participants repeatedly commented on their engaged and improved learning when it specifically involved more than one aspect of these vital skills. While previous research has identified ways in which teacher education programs have supported one or two 21st-century skills (Dong et al., 2015; Hagevik et al., 2012; Jones & Jones, 2013; Pamuk, 2011), this study was purposeful in examining how teacher education courses developed all of these skills. Indeed, the researchers anticipated that some skills may prove

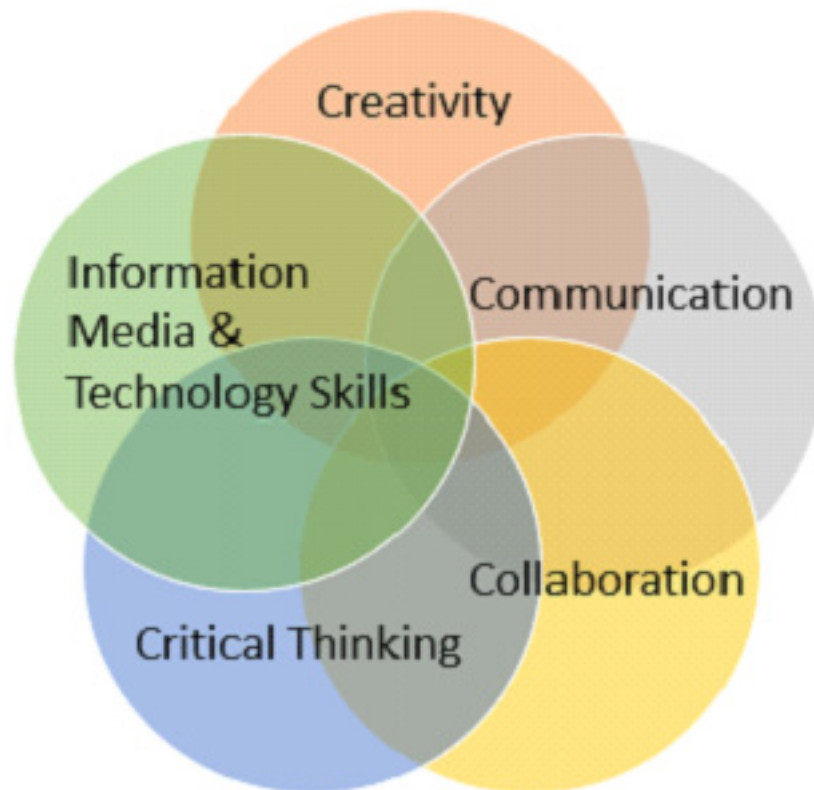
more influential in the different courses, based on curriculum content, classroom activities, and assignments. However, the preservice teachers indicated that the simultaneous integration of all the 21st-century skills had the most effect on their learning. For example, preservice teachers identified the benefits of collaborating and communicating in small groups, in various courses, for varied purposes, such as developing creative lesson plans for a case study student; presenting content to their peers via technology; or communicating with parents, administrators, and other school personnel.

In the Teaching for Equity course, preservice teachers were required to collaborate on a topic, which they then presented via technology. This first collaborative presentation was designed to support and scaffold preservice teachers in their

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**Figure 4**

*Simultaneous integration of 21st-century skills. When 21st-century skills were intrinsically linked, the most effective teaching and learning occurred. This process of integration allowed preservice teachers to develop these skills both personally and professionally.*





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learning of both the content and IMTS. One preservice teacher commented that when presentations were disjointed, it was obvious that there had not been smooth collaboration. She further commented that as a future teacher, she would “have to recognize when a collaboration doesn’t work” and determine the contributions of individuals (Participant 1).

In the Program Design and Curriculum Development class, preservice teachers were required to collaborate as a small group to develop IEPs. They commented that working as a group prior to developing an IEP independently was beneficial for sharing ideas and receiving critical feedback, which helped to expand their thinking. Within the Preparation for Student Teaching course, preservice teachers collaborated on content using an iPad application, whereby they were all able to contribute to the discussion.

Furthermore, preservice teachers in the Teaching Mathematics course identified the simultaneous integration of all of the 21st-century skills through coordinated assignments across the semester. Preservice teachers developed a math game and rubric, using online sources, and then presented it to their classmates. In particular, a preservice teacher commented on the benefits of researching the rubric, presenting it to the class, and learning from peers how they interpreted the rubrics for the assignment. Once the preservice teachers had designed the game, they then taught their classmates how to play it. Another participant identified this as “the most effective piece of creativity” (Participant 4) because they were creative with their games and learned ideas for differentiation and modification of the games from each other. As part of their fieldwork requirements, preservice teachers taught their math game to a small group of elementary school students. Afterward, the preservice teachers were asked to critically reflect on what worked and what did not, with classmates and the professor providing constructive feedback. Preservice teachers then taught the same math game to a different group of elementary students, relying on their own critical reflection and peer and professor feedback to improve upon the lesson. In addition, all the math games were posted on the class Web site as a resource.

Notably, not only was simultaneous integration of the 21st-century skills evident in the Preparation for Supervised Teaching course but they were almost evenly disbursed (see Tables 5–6). This course was linked directly to fieldwork, so preservice teachers applied those skills in weekly class discussions, utilized them in their own preservice teaching, and then reflected on them in course assignments. For example, focus group participants cited the use of technology to collaborate and communicate in class, using creativity to devise and implement their own lesson plans, and then reflecting on their lessons and observing other teachers in the field in a critical manner.

## **Discussion**

Although this study reviewed the literature and analyzed the results for each

component of 21st-century skills separately, the emergent finding was the power of simultaneous integration (Figure 4). Overwhelmingly, preservice teachers indicated that the most powerful learning took place through integrated learning experiences. As exemplified in the findings, when 21st-century skills were intrinsically linked, the most effective teaching and learning occurred. Moreover, this process of integration allowed preservice teachers to develop these skills personally, while applying them to educational settings. Scholars have argued for establishing strong teacher education programs that develop teachers who continue to learn throughout their careers (Darling-Hammond, 2006).

Arguably, it is imperative for teacher educators to enhance their own 21st-century skills in order to transfer this skill set to their students (Rust & Bergey, 2014; White & Chant, 2014). Grounded in cognitive apprenticeship theory (Collins, 2006; Collins et al., 1987), this process starts with foundational course work upon entrance into the program, followed by applications to the field and continued development as in-service teachers. This theory focuses on teaching methods that include modeling, coaching, scaffolding, articulation, reflection, and exploration and is therefore applicable to teacher education. The current study reflects the transferability of these skills to teacher education, as the research identifies how and to what extent teacher educators influence the development of 21st-century skills in preservice teachers.

Limitations of this study should be considered when interpreting the results. The definitions of 21st-century skills that the researchers developed were not provided to participants prior to the study, and as a result, participants' preconceived understandings may have influenced their responses. Participants may have over- or underestimated their competencies in each of the measured skill areas. Anchor assignments were not grounded in the 21st-century skills framework, which limited researchers' assessment of these areas. Finally, the current study was conducted at one university. Future research that includes a larger sample of university teacher preparation programs will enhance the reliability of results.

On the basis of the results, researchers will collaborate with teacher education faculty to provide consistency around the conceptualization of 21st-century skills. First, they will embed definitions in all syllabi. Second, to assess these developing competencies, faculty will collaborate to design rubrics for anchor assignments to deliberately measure these skills. Finally, as it is imperative to assess how preservice teachers are applying and facilitating the skill development during supervised teaching fieldwork, observation forms will intentionally measure the effective application of these skills. Future research will develop into a longitudinal study to measure and assess graduates' application of 21st-century skills as they transition to in-service teaching in their own classrooms.

Results of this study indicate future directions for teacher education programs. As learning can occur not only from professors but from peers as well, there is a need to create opportunities for preservice teachers across various programs to

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interact and engage together in learning. Preservice teachers need guidance in applying their knowledge to learning activities for their students as well as support in how to do so in various educational contexts (Darling-Hammond, 2006). Teacher education programs need to provide more hands-on experience with technology and guidance on how to implement IMTS into teaching. Therefore teacher educators need to consistently integrate new technologies to enhance their instruction and model these techniques for their students. It is imperative for teacher educators to remain current in the rapidly changing field of IMTS (Hora & Holden, 2013; Nicholson & Galguera, 2013).

Implications of this research are twofold. The results indicate that teacher educators need to be strong models of the simultaneous integration of 21st-century skills. It is essential to consistently develop, model, and assess these skills in preservice teachers throughout all aspects of their program to graduate teachers and leaders (Gibson, 2010). Preparing preservice teachers consistently throughout their preparation programs ensures a more seamless transition to in-service teaching, creating a cadre of confident and effective educators in our 21st-century society.

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## **Building Teacher Interculturality Student Partnerships in University Classrooms**

**Elizabeth Smolcic & Jessica Arends**

The “achievement gap” for English learners and those of marginalized groups has been documented for well over a decade (Banks, 1995; Gándara & Maxwell-Jolly, 2006; Gay, 2000; Sleeter, 2001, 2011). Culture is a critical factor in the learning process (Cazden & Mehan, 1989; Heath, 1983), and when teachers use knowledge about students’ cultural, social, and linguistic backgrounds in planning and implementing instruction, students’ academic achievement is strengthened (Gándara, 2002). It is widely recognized that socioeconomic status, language, and the fluid construct of culture play significant roles in school learning. However, despite the dismal academic progress of students learning English in U.S. classrooms and the rapidly diversifying student demographic, teachers who enter the profession continue to be predominantly White and monolingual with little or no intercultural experience (Gay, 2000; Sleeter, 2001). Such a critical lack of experience may lead teachers to view diversity as a problem rather than a resource. Teachers may have difficulty understanding or relating to those who do not benefit from the White, middle-class privilege that they themselves enjoy (Gomez, 1996;

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Villegas & Lucas, 2002). Therefore part of the desired preparation for teachers who will work with English learners (and, more broadly, *all* teachers working in public school classrooms) should include knowledge, skills, and experience that contribute to intercultural competence and the development of a teaching practice that is responsive to students of other linguistic and cultural backgrounds.

### **Building Teacher Interculturality**

Scholars have outlined what teachers need to know to develop culturally responsive pedagogies (Gay, 2000; Ladson-Billings, 1995a, 1995b, 2006). Furthermore, institutional bodies concerned with teacher preparation have formulated explicit goals for teacher candidates to understand diversity and equity and to develop cultural competencies to work with diverse student populations (Darling-Hammond & Bransford, 2005; NCATE, 2008). Teachers (like all of us) tend to see the world from their own racial, gendered, and cultural locations. Teacher education should help teachers develop a reflective process, a goal that requires critical analysis of one's own culture and a consciousness of how human differences are used by people in power to rationalize inequities and maintain their position in society (Castro, 2010; Merryfield, 2000; Paris, 2012). Central to successful implementation of pedagogies for instruction of English learners is a capacity to recognize how cultural and linguistic background shape learning and to utilize cultural differences to develop meaningful learning experiences for all students. This capacity may be included in the notion of *intercultural competence* or *interculturality*, for which there exists a range of theoretical constructs, emerging from a variety of fields (Spitzberg & Changnon, 2009). Recent reviews of the literature on how to prepare all teachers to teach English learners (Lucas & Grinberg, 2008; Palmer & Martínez, 2013) have argued that teachers need to experience other cultures and have contact with people who speak languages other than English to develop "affirming views of linguistic diversity" and "an awareness of the sociopolitical dimensions of language use" (Lucas & Grinberg, 2008, pp. 612–613).

Teacher educators who have taken up the call to move teachers toward interculturality face a complex challenge. It can be especially daunting in a university that is predominantly White (situated within a mostly culturally and racially homogeneous community), in part because these conditions afford few openings to question one's own cultural, racial, and linguistic identity and the privilege that comes with it. To respond to this challenge, our university offers a cultural/language immersion program in another country for preservice teachers to study another language, immerse themselves in another culture, and engage in a field experience teaching bilingual learners. Unfortunately, this international experience is not accessible to all students owing to the cost of study abroad and the time commitment of study in the summer. And, while the large public university in which we teach welcomes many international students (who likewise are engaged in their own process of



language/cultural immersion), they are often not well integrated into the social fabric of campus life, particularly those who are enrolled in the Intensive English program before matriculating to their chosen degree program.

### **Purpose of the Study**

In responding to these issues, the authors decided to collaborate to develop a course-embedded student partnership among students in their respective courses: preservice teachers and international students who were learning English themselves. The two courses were (a) an intermediate-level Intensive English course for nonmatriculated international students and (b) an undergraduate teacher preparation course that is the initial course of an add-on credential for teaching English learners in our state. A course goal for both groups was learning from personal interaction and project-based work with cultural/linguistic others. Specifically, we aimed to better equip preservice teachers to work with culturally and linguistically diverse learners, through an opportunity to note the complexity and ever-changing nature of “culture,” to grapple with their own linguistic and cultural privileges, and to move beyond essentialist representations of those who come from backgrounds different from their own. Thus we designed a learning experience that would encourage the students to explore the cultural practices, histories, and contemporary experiences of people from different national cultures and linguistic backgrounds and simultaneously provide a means of support for the international students in their adjustment to life on a U.S. university campus.

Our teacher education program is located in one of the most rural areas of the United States; however, the state (Pennsylvania) is now considered a *new destination state* because of a significant upswing in immigrants settling in the state (Massey & Capoferro, 2008). While the raw numbers of immigrants arriving to Pennsylvania schools may not match those of the traditional “gateway” states of California, Florida, Texas, or New York, new immigrant populations frequently result in stresses on local communities that have not received immigrant populations since the early 1900s. Significantly, both in-service teachers and teacher candidates in these new destination areas often do not have life experience with bilingualism; academic preparation to understand the second language acquisition process; or exposure to the cultural, racial, and linguistic differences that people who grow up in more multicultural communities experience as a part of daily life.

The purpose of this study was to articulate, from the perspective of the preservice teachers, themes related to (inter)cultural learning arising out of their reflections on the student partnership over the course of the semester. Our intent was to describe the intercultural development of prospective teachers of English learners; therefore the data we present focus exclusively on the preservice teachers.



## **Theoretical Framework**

### ***Defining Interculturality***

Theoretical understandings of intercultural competence have grown out of a wide range of disciplines, including applied linguistics, sociology, social psychology, speech communication, and cultural studies. Within the literature on language teaching and learning, the process of intercultural learning and its assumed goal of intercultural competence or interculturality are frequently investigated, while their exact meanings are also debated (O’Dowd, 2003). A comprehensive framework to outline teaching objectives for intercultural competence was developed by Byram and colleagues (Byram, 1997; Byram, Gribkova, & Starkey, 2002) within the area of second language education. Much commentary and further theorizing have proceeded from Byram’s framework, including analyses of cultural complexity and flow (Risager, 2004, 2006), third space theorizing (Gutierrez, Baquedano-López, & Tejada, 1999; Gutierrez & Rogoff, 2003; Kostogriz, 2005; Kramsch, 1993, 2009, 2011), intercultural language learning (Liddicoat, 2002; Lo Bianco, Liddicoat, & Crozet, 1999), and assessing intercultural competence (Deardorff, 2006). Recent critiques of Byram’s model of intercultural competence emphasize that we need to move away from approaches that focus on cultural difference and learning about the “facts” of a target culture and toward a dynamic conceptualization of “culture” that acknowledges its co-constructed and fluid nature (Dervin, 2015).

We have adopted the concept of *interculturality*, which expresses a more fluid understanding of culture, acknowledges intersectionality, and views intercultural interactions as inherently instable and prone to discomfort and failure, while moving away from an individualistic perspective on intercultural learning (for a comprehensive explanation, see Dervin, 2016). For this analysis, James (2008) has offered a succinct definition:

a dynamic process by which people from different cultures interact to learn about and question their own and each other’s cultures. Over time this may lead to cultural change. It recognizes the inequalities at work in society and the need to overcome these. It is a process which requires mutual respect and acknowledges human rights. (p. 1)

This definition recognizes the fluid nature of culture and societal inequalities that exist between groups of people. We highlight the ongoing and dynamic nature of the process of intercultural learning—one without a definite end point, as the word *competence* implies. We also acknowledge that we are all culturally diverse as individuals as well as within the national, regional, and microcultural communities in which we participate.

Interculturality is also defined as both a critical look at how people with whom we interact are represented and an introspective process on the part of the student (Dervin, 2016). It involves an awareness of one’s own biases and being able to

shift one's perspective to analyze values, beliefs, and representations arising from intercultural experiences and social group membership, revealing aspects of cultural identities and complexity that heretofore may have been unconscious or invisible. Our goal was to support students in questioning a typical overemphasis on national cultures that can hide unequal power relations and structural inequalities that result in poverty, violence, and racism. We hoped that they might begin to see culture as the possibility of multiple identities and identifications.

### ***Sociopolitical Consciousness***

Additionally, interculturality entails the critical study of one's own cultural lens and a willingness to recognize culturally centered thinking, which may encompass awareness of one's own ethnocentrism, White privilege, or racism. The process of developing interculturality, therefore, necessitates not only exposure to those who are culturally different to create pause or judgment (a student writes, "my partner is weird") but also a willingness to ask why ("why do I think my partner is weird?") and to be open to the possibility that one's own cultural stance is not necessarily normal or right and may actually be oppressive to others. In outlining what fosters intercultural competency, Hanvey (1982) stated that neither temporary nor sustained contact with cultural others will achieve this; there must be a "readiness to respect and accept" and a "capacity to participate" on behalf of the student; "some plasticity in the individual, the ability to learn and change, is crucial" (p. 15). Research into student teachers in overseas teaching experiences have documented that as participants reflected on their experiences in another culture, they began to consider aspects of their own cultural identities that were invisible to them previously (Colon-Muniz, SooHoo, & Brignoni, 2010; Mahon & Cushner, 2002; Palmer & Menard-Warwick, 2012).

Likewise, the conceptualization of culturally sustaining or relevant pedagogy includes the objective of sociopolitical consciousness, which for teachers refers to understanding the linkages between macro-level political, economic, and social variables and subordinated groups' academic performance at the micro level of classrooms (Bartolomé & Balderrama, 2001; Zion, Allen, & Jean, 2015). In sum, the definition of interculturality is consistent with the framework of culturally responsive pedagogy that attempts to bring preservice teachers to understanding the power of hegemonic dominant cultures and the values and practices of subordinate cultural groups in immigrant nations.

## **The Study Context**

### ***Course Linkage and Student Partnership***

A group of 16 preservice teachers was enrolled in Language, Culture, and the Classroom, the first course in a sequence of five three-credit courses that make

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up the state-approved English as a second language (ESL) certificate program, an add-on endorsement to elementary/secondary certification in our state to prepare K–12 educators to teach English learners. Each course included a field experience, such as tutoring an English learner, shadowing an English learner during several school days, interviewing local immigrant families, or a semester-long student teaching experience in a public school classroom supervised by an ESL teacher. Learning goals for the course examined in this study included the following: (a) understand culture-general concepts, such as representation, cultural identities, cultural hybridity, cultural complexity, and essentialist versus nonessentialist notions of culture; (b) develop an awareness of one's own cultural identity/identities; (c) understand the power of cultural/linguistic identity and its impact on student learning and classroom interactions; (d) explore and reflect on the dynamics of stereotyping, racism, and White privilege as they relate to intercultural interactions and school contexts; and (e) analyze the concept of culture and differing views of cultural change in a globalized world.

Two projects required the preservice teachers to interact with international student peers outside of the classroom:

1. *Autobiography, biography, and cultural analysis (ABC) project.* Students first wrote a cultural autobiography supported in class with cultural exploration activities and readings (Schmidt, 1998), then interviewed a person perceived as culturally/linguistically different to produce a biography of that individual. (The interviewee was not part of the cultural partnership explained later.) Finally, students compared the two papers and wrote a third analysis paper in which they highlighted cultural similarities and differences and any new awareness or reflections on culture-general concepts.

2. *Student partnership.* International students and preservice teachers were matched in groups of three, and the following learning objectives guided the student interactions within the partnership: (a) interact over a sustained period of time with international students from a linguistically and culturally different nation; (b) explore the sociocultural and historical contexts that the partner(s) grew up in and become aware of their cultural values and worldviews as well as your own; and (c) examine how the theme of globalization interfaces with cultural change, global migration, and English language learning.

### **Reflective Practices to Guide Learning**

The instructors matched the students randomly, and a joint class meeting brought both groups together for one 2-hour class period to facilitate the partner introductions and identify learning objectives that the students wanted to explore. Thereafter the partners met weekly outside of class for at least an hour over a period of 8 weeks; the students reporting frequently going beyond an hour-long meeting.

The instructors gave both class groups the same cultural topic and initial guiding questions to help structure the weekly meetings. Examples of the topics included

their respective experiences adjusting to life on a college campus, their histories learning other languages, and personal experiences with stereotyping and language bias. The preservice teachers wrote weekly blog entries to summarize new awareness or questions arising from the weekly meetings (and the international students wrote brief reflection papers, which the ESL instructor responded to directly). The writing prompts directed students to notice specific aspects of intercultural communication during the meetings, for example, their attitudes toward nonnative speakers, cultural stereotypes they had about people of particular nationalities or regions of the world, and cultural expectations of how to interact in a discussion in the U.S. university context. In other words, the process of *interacting* across cultures was emphasized rather than knowledge or facts about specific cultures. Observations that were posted on the blog posts were then brought into the classroom for small- and large-group discussion. At times, the comments discussed were selected by the students (and read aloud in class as texts), and at other times, the instructor developed questions or pulled specific pieces of student-written text from the blog as a basis for discussion.

### **Collaborative Research Project and Presentation**

After the first year of the course partnership, we saw the benefit of moving the partnership from a weekly conversation to a more collaborative relationship among the students. To increase engagement and accountability, each student group collaborated on a research project structured with mini-assignments for each weekly meeting. The partners researched and presented a topic of their choice related to the course themes of analyzing and understanding cultural identities. Student groups then orally presented their findings on posters in a public exhibition at the campus student center during the final week of the semester. The preservice teachers completed a final written reflection to synthesize what they had learned from the class discussions and their interactions with their partners.

### **Methodology**

Our purpose was to uncover possible indications of intercultural learning on the part of the preservice teachers as they explored cultural identities and practices and their partners' experiences with second language learning. We hoped to delimit how the partnership experience, when supported by class discussion and reflective practices, contributed to the development and awareness of interculturality for preservice teachers.

Data sources included written blog postings completed weekly by the 16 preservice teachers, a cultural analysis paper (which was the final step in the three-phase ABC assignment), and a final reflective paper in which the preservice teachers were prompted to reflect on their experiences during the semester with their partners.

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We began by conducting a qualitative analysis to observe what themes arose from the assignments written by the preservice teachers. Our intent in this research was not to claim a causal effect between course activities and student learning but to illustrate how the preservice teachers' reflections on the partnership experience might help them begin to develop a critical perspective of their culture(s), their own positioning in society, and the systematic nature of inequalities in society and in schooling for immigrant English learners.

#### **Study Participants**

Early in the course, the preservice teachers wrote a cultural autobiography in which they considered questions of family, national and individual identity, and values as well as linguistic heritage and language learning experience. From these biographies we constructed detailed profiles of the study participants. Generally, of the 16 preservice teachers, 14 were women and 2 were men; one student was an international student from China, and all were undergraduates aged from 19 to 22 years. Many students had some high school language learning experience but frequently indicated that their learning experiences had not been effective or motivating. Three of the students were working toward teacher certification as world language teachers and planned to study abroad in the future as a requirement of their program. Although the majority of the students identified as monolingual, White, and of European American descent, four students had significant cultural/linguistic experience.

Helen grew up in a Korean American immigrant family. Her parents did not speak much English when Helen was a child, and Helen often acted as the translator. She related her struggles as a child constantly trying to fit into a mostly Anglo community, but she ended her autobiography by claiming, "I have come to love being Korean as well as American and I feel special that I have both of those cultures with me."

Harriet moved to Switzerland in the ninth grade, when her father got a new job. She attended an international school, learned German, and now wants to be a teacher of German or ESL. She discussed how she has come to see her cultural identity as hybrid and struggles against a reified idea of national cultures. She asserted, "To me, Americanism is hybridity."

Veronica identified as Hispanic of Puerto Rican/Italian/Colombian/Spanish heritage. She explicitly wrote about being the victim of racism as a child and was very aware of her familial cultural heritages.

Wendy was an international student in the United States for 1 year and has bilingual competencies in Mandarin and English. She identified as Chinese.

The ESL class numbered 22 students from many parts of the world, including nations of the Middle East, Asia, and South America. Most had recently graduated from high school and were new arrivals to the United States aiming to matriculate to undergraduate programs at the same university. The international students were

proficient in conversational English, as they had tested into and were enrolled in the highest level available in the Intensive English program. Previous students enrolled in the Intensive English program requested the opportunity to engage authentically with native English speakers; thus this partnership aimed to provide a service that students desired and that was previously absent from the English language curriculum. The Intensive English course topics included American culture and cross-cultural communication so that students could link ideas they were discussing in class to their partner interactions. In class, the students explored the role of culture in communication and were asked to think meta-cognitively about their own English skills. This partnership added unique value to the program, because both curricular and co-curricular interaction between ESL students and local native speakers is often rare (Chang, 2009; Daly & Brown, 2004). Research has shown that intentional programming to connect the two groups would prove beneficial (Sakurai, McCall-Wolf, & Kashima, 2010), including student pairing for projects (N. Glaser, Hall, & Halperin, 2006; Stone, 2000; Westwood & Barker, 1990).

On student evaluations, the ESL students responded very positively to the partnership, indicating that it increased their communication skills and awareness of American culture, and requested that the partnerships be expanded to include all ESL classes in the Intensive English program.

### **Data Analysis**

We first generated conceptual categories or their properties from concepts or themes arising out of the data (Flick, 2002; B. G. Glaser & Strauss, 1967). This first phase of data analysis entailed “no interpretation, but simply the attribution of a class of phenomena to a segment of text” (Miles & Huberman, 1984, p. 56). Open coding, or examining the data line by line to define actions or events, led to the refinement and specification of evidence in the data. In this process of selective coding, we consulted conceptual memos written during the coding process to develop theoretical categories that arose directly from the concerns and experiences of the students and related to the research questions (B. G. Glaser & Strauss, 1967; Glesne, 2011). Each author analyzed the data separately, and ongoing comparisons were made to clarify codes and condense categories into themes and subthemes. The authors were intentional about preserving the voices of the preservice teachers and representing them as accurately as possible. Pseudonyms were used to refer to both the preservice teachers and international students to maintain anonymity.

The subjectivity of the authors was uncovered by two methods: by maintaining research memos and through sustained engagement with the data. Subjectivity was monitored through careful observation over time (Peshkin, 1988) and by maintaining sensitivity toward aspects of the analysis to provide a window into how our own interests, values, assumptions, and biases may influence the research process (Glesne, 2011). We each maintained a researcher memo during the process of

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analysis to observe ourselves in a focused way and to capture reactions, emotions, and questions the analysis process caused. This is especially pertinent because we came to the study with a clear commitment to this pedagogical approach as instructors, and for this reason, we intentionally separated our roles as instructors and researchers.

The most substantive data emerged from the blog entries, in which the pre-service teachers discussed their interactions with the student partners online in small groups. We acknowledge the situational factors that may influence student responses to course assignments, such as instructor expectations and academic standing; however, in the case of the blog activity, the preservice teachers were writing to each other—the blog space was constructed as a place where they could share their experiences with other preservice teachers in this course. The instructor neither graded nor evaluated the blog entries, and the blog space was closed to outsiders. Additionally, the data were analyzed after the course had concluded, grades had been submitted, and students had left campus for the summer. Finally, the interactions between the international students and preservice teachers took place outside of class. Thus we were not present to observe or influence partner interactions during their meeting times.

### **The Findings:**

#### **Building Cultural Awareness Through Interaction**

The partnership experience was not always comfortable for the preservice teachers, but their reflections made clear that the work with international partners stimulated an introspective process and cultural self-awareness that may not have come about through traditional course readings and discussions, nor through field experience in public school classrooms, where the attention is appropriately focused on teaching and the learners. We argue that it was the combination of reading, writing, and talking about concepts related to cultural self-awareness and issues of equity in education in class, along with the actual life experience of conversing (and then working together) with culturally and linguistically different English learners, that led students to new understandings.

In the analysis that follows, we turn first to how students began to explore their own cultural backgrounds and identities. We then present the preservice teachers' emerging understandings of cultural complexity and the dynamic nature of cultural identities. Finally, we share student comments that demonstrate a beginning "critical cultural awareness" (Byram, 1997) of power relations within society, including the privileges of first language speakers of English. Our conclusion offers reflections on the value of preservice teachers examining and articulating their own cultural identities and the importance of course linkages to field experience within intercultural spaces.



### **Cultural Self-Awareness**

An early writing assignment in the course, a cultural autobiography requiring students to articulate characteristics and origins of their cultural identities, was a task that many found challenging. Although a few of the U.S. students in the class initially claimed that, as Americans, they have no culture, when they began writing a draft of the paper and talking in class about shifts in cultural values over generations, many aspects of the regional, national, and familial cultural frameworks in which they grew up came into focus. In commenting on the process of writing her autobiography, Andrea said this explicitly: “I used to think of myself as someone with little or no culture. I didn’t understand that no matter where you are from, or who you are, you have a culture.”

As a way to help them begin to think about this task, the students shared in class symbols or artifacts that represented their home cultures and discussed values that underlie cultural traditions or familial norms. A first draft of this paper was shared in a peer-review process, and the instructor gave individual written comments. Still, much of the writing at this point focused on superficial aspects of culture, such as preferred holiday traditions or a family history of participation in organized sports. Over time, as students began interacting informally with international students in the partnership, they began to describe and specify their cultural identities even further.

Engaging with international partners in a conversation in which they were asked to describe their home cultures began to make the abstract and amorphous concept of culture a bit more concrete. Veronica (one of the students with a more recent immigrant family heritage) said,

I think I learned more about myself by trying to explain my own culture to him [student international partner]. It made me think about it in a clearer way. Explaining yourself is sometimes a difficult task, but it made me reflect and figure out the right words to say. (partnership blog)

As students began to outline and describe their cultural traditions, values, and common attitudes, the role that culture has on producing particular perceptions of the world became more clearly visible. Diane, who was partnered with a Saudi woman, assumed her partner would embrace U.S. gender roles; she commented,

I found out that although I felt like I knew so much, in actuality I knew very little. Because I initially did not understand how my partner and her country looked at their culture, I felt that deep down, every person, every woman who did not receive my rights felt oppressed. . . . My beliefs were, in a way, keeping me from fully seeing all interpretations. . . . What I gained from this experience was the openness to listen and understand multiple sides to a culture. My partner did not exclaim her love for this culture; instead she said she felt uncomfortable. She did find it to be freer, just another way of going about life. I realized that my initial expectations were naïve. I was projecting my experiences and feelings from my culture and thinking that it was exactly what she desired. (partnership blog)



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This example illustrates how Diane began to see that her perspective on a woman's role in society is culturally determined rather than natural. She acknowledged that there may be another view on the "freedoms" of U.S. culture and that another cultural perspective may prioritize distinct values from the ones that inform her own worldview. The choice of words "I realized" also demonstrates that the process of reflection allowed her to see that she was actually projecting her own values onto her partner. Another cultural awareness that developed over time through conversations with partners is seen in Josie's final reflection on the partnership experience:

Although I considered myself "culturally competent" before this assignment, I now realize I did not know exactly what that meant. Before I thought that since I had studied two other languages and two other "cultures" in my language classroom, I was both knowledgeable about and accepting of "otherness." My thoughts on this have changed, however. Throughout my discussions with my partner, I would, on occasion, think about how "strange" her thoughts or practices were. Certain things that were extremely important in my life did not matter to her life. . . . Somehow, through our studies and through my meetings . . . I began to realize that her views were not "weird." . . . They were simply *different*. (final partnership paper)

Josie changed her perspective from an evaluative stance, in which she considered her partner's thoughts and practices as "strange," to one where she realized they are "simply *different*," an indication that she was beginning to see other cultural experiences as valid.

Another type of cultural learning that came of the partnership experience was an awareness of stereotyping and identity representations. Jake acknowledged that he had a particular stereotypical representation of how his African partner would look and would be like:

In retrospect, my image of who he would be and what he would look like was pretty stereotypical of how I envision a man from Africa. On the one hand, this was helpful because he actually did fit the image that I had, so that I could find him semi-easily. On the other hand, I felt a little guilty about how quick I was to make a judgment about a person from a different culture. . . . I think that even though this is not a particularly negative stereotype, my reflection about it allows me to understand and be wary of my future initial meetings with people from other parts of the world. (partnership blog)

Class discussion throughout the semester gave students the opportunity to explore new awareness that came up when talking with their partners. In class, we read about bias toward nonnative English speakers based on accent (Lippi-Green, 1997). We discussed a tendency to dismiss international speakers due to accent or nonstandard grammatical usage while not recognizing the rich educational backgrounds and life experiences of those same speakers. Holly acknowledged judgments she made because she saw her partners as part of this nondominant group of nonnative English speakers:

No matter how nonjudgmental I claim to be I realized that there is really no such thing. I'm sure I made unconscious assumptions about their culture, religion, and race, but [sic] I did realize that after a certain point I started to judge them on how well they spoke English. (partnership blog)

Hearing that they were not alone in holding these biases and noting the depth of experience of their international partners, the preservice teachers began to appreciate the challenges that English learners face in their educational trajectories in the U.S. university. This awareness is critical for public school educators in a context in which teachers often hold a "deficit" perspective about their English-learning students (Delpit, 2006; Garcia & Guerra, 2004; MacSwan & Rolstad, 2003).

Conversely, many students who at first regarded their partners as exotic and "foreign" began to note common interests and even similarities in values or life experiences. Harriet realized that cultural stereotypes led her to expect many areas of difference between herself and her partner, but instead she found more similarities than differences:

Starting this assignment I was very closed minded. I had expectations of the answers I would receive and ideas of how Leslie's life was. Quickly I learned I was completely wrong. I had a stereotype of students that came from another culture and I assumed that many were the same, but I was very far off in my thinking. Leslie was almost more like me than different. (partnership blog)

### ***Awareness of the Dynamism and Complexity of Cultural Identity***

As explained earlier, the students not only interacted in conversation with the campus international partners during the semester but also recorded interviews with culturally different people (not their partners) in the ABC project. The process of questioning and documenting allowed them to witness cultural hybridity through the life histories of others, as many of the interviewees were immigrant individuals who had been living in a culturally different context over a period of years (in contrast to the student partners, who were newly arrived to the university). Also, many of the interviewees and some of the student partners were raised in multilingual families and communities or had previous cross-cultural life experiences in which they had recognized their cultural values or been positioned as a cultural others. Additionally, the ABC project required an explicit comparison of the values, beliefs, and practices of the learner's culture with those of the person interviewed. Many learners found the task of making cross-cultural comparisons helpful to understanding the complexity of cultural identity as well as thinking about the shifting nature of their own cultural identifications:

The differences I found definitely allowed me to further understand what I find important to myself. I was able to recognize what I consider to be a "normal" parent-child relationship in most families when Anya explained to me what her relationship is with her parents. As she explained and I recognized my feelings of

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disagreement, I realized this was a part of my cultural identity that differed from Anya and most likely other people, as well. (Maria, partnership blog)

For some students, the work with their partners helped them to see that cultural practices and beliefs are not static or fixed and that individuals have some degree of agency in how they identify or choose to move away from the primary cultural norms of their home cultures:

I was lucky enough to talk with someone who has a strong sense of her cultural identity even though she has been exposed to multiple cultures. Priya helped me understand my own culture a little more, and she mentioned that picking one culture over another in reference to her identity would be unfair. This statement made me think about my own newly developed sense of cultural identity and how I have tried to distance myself from some aspects that I found “unfavorable” such as the Pennsylvania Dutch influence from my hometown. (Laney, ABC project)

In the following quotation, Randi compares the person she interviewed for the ABC project, Al, who moved to the United States from Mexico as a young adult, and her student partner, Ally, who was Saudi. In this excerpt, she asks herself questions about concepts discussed in class (cultural pluralism and cultural hybridity) as she contrasts the life experience of her partners:

Understanding the differences between cultural pluralism and hybridity has both enhanced and complicated my grasp on cultural identity as well. For Al, I feel he is continuing toward a sense of cultural hybridity, where he draws from both Mexican and American culture. Yet, my partner Ally, for example, seems to more closely experience cultural pluralism, by enjoying American culture while still adhering mostly to her Saudi Arabian culture. So, I wonder why this differentiation exists—is it because of language (English) proficiency? Is it because of what our larger cultures have taught us? Or is it something innate within us as individuals? These are questions that I don’t have answers to, but I think they are all important to consider as we try to see ourselves culturally. (ABC project)

In another example, Josie reconsidered her own cultural identity in light of the changes that she saw her partners having made in how they defined themselves and which cultural norms they accepted:

By realizing that doing things differently in different cultures is a result of thinking about things differently, I realize that there is much more to cultural awareness and cultural competence than I originally thought. . . . I can try to work their views of life into my own. This has helped me question the priorities that I currently have in my own life. . . . The most powerful thing that I have learned through this experience, through talking to my partner and seeing that we do not always place importance on the same things, is that I am not required to view things in any particular way. . . . Even more amazing, I can constantly change the order in which I place my priorities to what works best for me as an individual. (ABC Project)

Josie realized that she has some choice in deciding how cultural norms might con-

strain her. As she prepared for a study abroad experience, she felt “a new sense of empowerment as a human being.” Josie had gained not only awareness about how her cultural identities shift but the sense that a change in her own cultural identity is possible. This is a significant point, because it signals what Dervin (2016) has called the *liquidity of culture* and the importance of looking at discontinuities and culture as process rather than as something stable. Josie saw that cultural identity is not a given based on which country one is raised in and acknowledged her individual agency in shaping who she is and might be.

### ***Empathy and an Emerging Critical Cultural Awareness***

Over the course of the semester, there were moments when the preservice teachers appeared to be heading toward sociopolitical consciousness; however, there were few examples where they acknowledged larger social structures or systematic inequalities or expressed intentions to take action to work against those inequalities. The students expressed empathy for language learners, and we can note how they attempted to link what they were learning about cultures and their partners to thinking about their future English learners.

For many students, the societal privilege of English-speaking individuals within an English-dominant society became visible. In the following excerpt, Andrea explained that she hadn't felt a need to learn another language; however, she also made a connection to her future role as a teacher of culturally diverse students and her desire for future life experiences with other cultures and “the world”:

Although there are opportunities for me to learn other languages and about other cultures I have never taken the time to do these things, because other than pure interest, it is not necessary for me to learn English. This leaves people who do not know English to be the “other” in my life. Throughout the semester, I've begun to really notice the “other.” . . . As a future ESL teacher I know that I need to further my competence in knowing about other cultures. . . . I understand that I need to explore the world around me and begin to learn about other places. (partnership blog)

Additionally, some students discussed how issues of who has power in society are not easily discussed or readily examined. In fact, these issues may be silently avoided in curriculum, teacher education programs, and daily life (Kumaravadivelu, 2008; Liggett, 2009). As illustrated in the following extract, Laney discovered a tendency to avoid sensitive issues, such as race and racism, and noted that her Whiteness and linguistic privilege are factors that may make these issues invisible:

I do not think I was aware of my discomfort with racism until activities in this class. I knew I did not agree with it, but I was always afraid that it was too touchy to talk about. I do not feel like I have a right to talk about it because I have never experienced it first hand. Along the same lines of feeling uncomfortable, I certainly did not realize until my interview with Priya that I am even hesitant to ask questions about someone else's culture for fear of being rude or prying too much. (ABC project)

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We also see some indications that the students were linking the experience of working with their partners and their learning about cultural concepts to their future teaching of English learners:

A discussion we held in class involved cultural stereotypes and how we tend to use them to categorize students. It is good to be aware of these characteristics but sometimes a problem is that these preconceived notions determine or affect how we treat a student. And, we cannot let these generalizations get in our way from truly learning how this student is as an individual. . . . I had never considered it before, but when we single out a student in order to gain insight, we are pressuring that student to be the face of an entire complex culture. (Diane, partnership reflection)

Holly thought about how she might react to future English learners in her class based on her initial reactions to her partners. She described the frustration she experienced when she had to repeat herself or avoid topics because she was afraid her partners would not understand her: “I feel terrible thinking this, because I’m afraid I might project this same impatience with my students, when in reality it is my job to help them instead of shut them down” (partnership blog). In the same way, Mindy claimed an early awareness that equal treatment in a classroom is not achieving equity in education:

Before this class, I thought that every child should be looked at as the same. I thought it was bad to see them as different, but taking this course has made me realize I was wrong. Now, I see the importance of recognizing cultural differences in the classroom, and it is my mission as a future ESL teacher to not ignore it [sic]. (partnership blog)

Other students gained sensitivity and a deeper awareness of processes of second language learning and use in another cultural/linguistic context through developing personal relationships with their partners and actually working with them to collaborate on a research project and presentation. Helen began to use a communication strategy, paraphrasing, that will be useful in her interactions with other second language speakers. And Maria acknowledged the greater challenge of completing academic work in another language. Finally, Randi noticed the social power inherent in being the native English speaker and recognized the value of building personal relationships with her future students:

When we first began to meet, I had trouble understanding what both of my partners were saying because of their accents. I remember having to ask them to repeat things a few times and also remember them struggling with trying to find the right words. What I found helpful was to paraphrase things they said and make sure that what I got was what they meant to say. (Helen, partnership blog)

My partners explained to me that there is absolutely a component of an extra difficulty in completing assignments in English, as opposed to their native language. However, as they have spent more time doing assignments using their “L2,” they have gotten more and more used to it. Lucia explained to me that she finds herself

translating from German to English less and less and Ahmad agreed. (Maria, partnership blog)

I have learned from this project that it is easy to help Ally learn in a situation where we are considered equals. She may feel more intimidated or shy if there is a clear hierarchy existing between us, such as one where I am the superior native English speaker. However, since this is not the relationship we have formed, I think Ally feels comfortable with me and does not recognize our time together as explicitly a learning environment. This has taught me a lot about my own expectations as a future ESL teacher. Our conversations are very interactive and I benefit from her as much as she benefits from me. While my role as an ESL teacher will obviously position me more in the role of a leader, I still would like to maintain this relationship founded on interpersonal communication. (Randi, reflection student partnership)

The breadth and range of awareness about culture, cultural complexity, and a more nuanced understanding of the second language learning process seem to hold value as first steps in preparing these students for the diverse classrooms they will surely encounter in their careers as educators. While we cannot claim that any of the students approach *sociopolitical consciousness*, which would entail recognizing systematic social inequities and an intention to act to change those inequities, reflection through the blogs and papers allowed these students to integrate their experiences with culturally different people and begin to relate learning about cultures to their emerging understanding of teaching in diverse classrooms. We suggest that the concept of *critical cultural awareness* might be more appropriate to conceptualize the learning in this one-semester experience. Byram (1997) defined this awareness as “an ability to evaluate critically and on the basis of explicit criteria perspectives, practices and products in one’s own and other cultures and countries” (p. 53).

## **Implications and Recommendations**

Culturally responsive pedagogy has inspired teachers and teacher educators alike to consider what it means to teach responsively in respect to the language, discourse, and cultural practices of students from minority backgrounds. Pray and Marx (2010) observed that although teachers may care deeply about their students and truly want to “help” them, they often have little empathetic knowledge of what their English learners are experiencing linguistically and culturally. Clearly learning that can unfold through a course that includes teaching cultural concepts, guided cultural analysis, and relationship building with international partners is only an initial step and must be followed by field experiences in classrooms with English learners and within multilingual/multicultural communities. Nevertheless, this study illustrates the potential of collaborative work and conversational interactions among international students and preservice teacher peers.

In our analysis of the data and looking back on the experiences of the course

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linkage, we argue that several practices are essential: (a) explicit teaching of cultural concepts, such as the liquid qualities of culture, the changing nature of cultural identities, cultural stereotypes and essentialized ideas of cultures, and globalization and its effects on culture (among others); (b) reflection through writing shared with classmates and writing that requires students to consider their own cultural histories and life experiences; (c) opportunities to bring student reflections into the classroom space for discussion and to develop shared understandings; and (d) a collaborative assignment (in this case, an investigative project and oral presentation) in which both power dynamics and cultural expectations come into play and where cultural conflicts and challenges arise.

Partner meetings allowed for both informal interaction and a collaborative task, which have been identified as critical mediational means for intercultural relationships to develop. The collaborative nature of the student partnership required sustained interaction over time and cooperation toward a potentially mutually beneficial goal (Dewey, 1933; Kolb, Boyatzis, & Mainemelis, 2001; Mezirow, 1981). Interestingly, when these students began their work together to investigate a cultural topic of their choosing and create an oral presentation to display what they found, the dynamic shifted from informal conversations to cooperative work, which quickly uncovered levels of dissonance or cultural disequilibrium. Rather than simply noticing cultural differences, they had to interact within those differences to produce something mutually valuable (and worthy of presentation in a public space). In other words, the stakes became higher. Some of the challenges included varying expectations of what “research” for this assignment might entail and what an oral presentation would look like, differing levels of motivation among group members, fear of offending or violating cultural norms, how group work would be distributed, and power dynamics around being a native English speaker.

These data illustrate how going beyond studying culture in the classroom to collaborate with cultural others helped our students to develop greater cultural self-awareness. Future research might be concerned with how students develop critical views of cultural representations and how attitudes and awareness translate to classroom interactions with their own students. Productive research directions in this area might follow students over the course of their entire teacher preparation program (or, better yet, into their classrooms) to track their responses within differing types of field experiences and to be able to explain in more detail the development of critical cultural awareness and how these skills can act as a bridge toward sociopolitical consciousness and the development of interculturality.

It would have been valuable to have had additional sources of data, and our plan was to involve external researchers to conduct interviews with the students in the subsequent year of the partnership; however, circumstances of our respective teaching schedules changed, and we were, unfortunately, not able to carry out that plan. These limitations mean that our findings must be viewed as initial findings. Nevertheless, this study uncovers the potential of creating a collaborative space be-



tween prospective teachers of English learners and international students, especially to build awareness of the students' own cultures, behavior, and assumptions. We assert that this is essential learning for both preservice teachers and international students developing English proficiency in U.S. university contexts. Thus future research would also benefit from analysis of data that more fully incorporate interaction within the student partnerships and that would represent all voices in a dialogic fashion to highlight the challenges of immersion in a new cultural context.

The primary impetus for this study was to explore the development of interculturality among preservice teachers when collaborating with international students in a semester-long partnership. We acknowledge that it is not a realistic expectation that preservice teachers develop interculturality or sociopolitical consciousness in one course and through an initial field experience within a teacher preparation program. However, this study gives hope that intercultural learning can occur through a structured course-based interaction that involves conceptual learning about culture in combination with personal interaction to locate those concepts within the routines and daily lives of individuals. The analysis uncovered indications of developing cultural awareness, cultural identity, and an emerging critical cultural awareness. Neither personal, cross-cultural experiences alone nor, on the other hand, learning about cultural concepts in classroom situations seem to be sufficient for shifts in views of the self and cultural identities. What this study underscores is the benefit of personal experience with cultural others, complemented by the critical mediation of conceptual and guided reflection, both of which are necessary to the development of interculturality.

Finally, from a programmatic teacher education perspective, any pedagogical intervention that structures experiential learning with the goal of intercultural learning must be developed within a coherent teacher education program that shares common goals among faculty, cooperating teachers, and school administrators. Sleeter (2008) has outlined a three-pronged approach to prepare preservice teachers to teach in diverse contexts and asserted that all three components are necessary and essential elements of teacher preparation. First is a coherent set of courses that emphasizes equity and that values diversity and, in turn, has direct linkages to school-based fieldwork. Both of these activities, courses and field experiences, should intentionally develop students' conceptual foundations and culturally responsive teaching skills and be informed by a shared vision that values diversity and the resources it brings to classrooms. A third component is cross-cultural community-based experience in which prospective teachers are equipped with listening skills, observational skills, and skills of interacting across cultures and which then support their capabilities to interact effectively in intercultural spaces.

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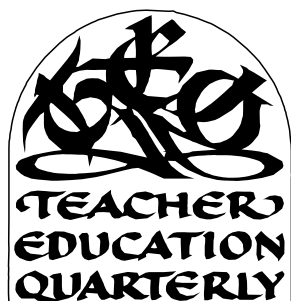
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## **Student Teachers' Preparation in Literacy Cooking in Someone Else's Kitchen**

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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-

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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



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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<sup>a</sup></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

<sup>a</sup> All names are pseudonyms.

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### **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

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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's<sup>1</sup> 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<sup>a</sup></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.

<sup>a</sup> Pseudonyms.

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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,



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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<sup>a</sup></i>
				<i>Diversity</i>	<i>Literate Environment</i>	<i>Professional Learning and</i>	
Carin	M (H) <sup>b</sup>	MH (H)	M (H) <sup>b</sup>	M (M)	M (M)	L (L)	H
Charla	MH (H)	H (H)	M (H) <sup>b</sup>	L (M) <sup>b</sup>	H (M) <sup>c</sup>	ML (M)	M
Elana	MH (H)	M (H) <sup>b</sup>	M (H) <sup>b</sup>	L (MH) <sup>b</sup>	MH (M) <sup>c</sup>	ML (M)	L
Elise	L (H) <sup>b</sup>	M (H)	L (H) <sup>b</sup>	L (H) <sup>b</sup>	M (L) <sup>c</sup>	L (L)	L
Eryca	ML (H) <sup>b</sup>	H (H)	M (H) <sup>b</sup>	L (L)	MH (M) <sup>c</sup>	L (M) <sup>b</sup>	H
Holly	MH (H)	MH (H)	M (M)	L (M) <sup>b</sup>	MH (M) <sup>c</sup>	L (M) <sup>b</sup>	M
Jill	M (H) <sup>b</sup>	M (H) <sup>b</sup>	ML (H) <sup>b</sup>	L (L)	MH (MH)	MH (MH)	M
Joan	MH (MH)	H (H)	MH (H)	ML (L) <sup>c</sup>	M (M)	MH (H)	H
John	MH (MH)	MH (H)	H (M) <sup>c</sup>	ML (L) <sup>c</sup>	MH (M) <sup>c</sup>	ML (H) <sup>b</sup>	H
Kristie	M (MH)	H (H)	M (H) <sup>b</sup>	L (L)	H (M) <sup>c</sup>	M (H) <sup>b</sup>	H
Katie	MH (H)	MH (H)	ML (H) <sup>b</sup>	L (MH) <sup>b</sup>	H (M) <sup>c</sup>	ML (M)	M
Lily	MH (H)	H (H)	MH (H)	M (M)	H (M) <sup>c</sup>	ML (M)	H
Melinda	ML (H) <sup>b</sup>	MH (H)	ML (H) <sup>b</sup>	M (H) <sup>b</sup>	M (L) <sup>c</sup>	L (L)	L
Rachel	MH (H)	MH (H)	MH (M) <sup>c</sup>	L (M) <sup>b</sup>	H (M) <sup>c</sup>	ML (M)	H
Sabrina	ML (H) <sup>b</sup>	MH (H)	L (H) <sup>b</sup>	MH (H)	MH (L) <sup>c</sup>	L (L)	L

Note. Program emphasis for each standard is in parentheses.

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

<sup>a</sup> Total 18 possible; high = 14–18; moderate = 12–13; low = 9–11.

<sup>b</sup> Evidence of enactment at least two levels below program emphasis.

<sup>c</sup> 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*

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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

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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

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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.

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## **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.

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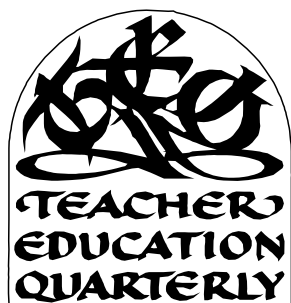
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2. Based on your student-teaching placement . . .
  - a. what would you expect to see in an ideal classroom where literacy is valued?
  - b. describe the tasks and instructional routines you might use to prepare students to begin reading text. What 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?



## **Learning to Teach Disciplinary Literacy across Diverse Eighth-Grade History Classrooms within a District-University Partnership**

**Chauncey Monte-Sano, Susan De La Paz, Mark Felton,  
Kelly Worland Piantedosi, Laura S. Yee, & Roderick L. Carey**

Writing is crucial to success in high school, college, the workplace, and civic life. Yet, little time is spent on writing in schools, and teachers seldom learn how to teach writing in their preservice or in-service experiences (National Commission on Writing, 2003). Perhaps as a consequence, only one-quarter of adolescents demonstrate proficiency on national writing assessments (National Center for Education Statistics, 2003, 2012). In addition, college instructors report that only half of their students are prepared for college-level writing, business leaders say that 65%

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of their employees write adequately, and 62%–65% of high school graduates feel they are prepared for either endeavor (Achieve Inc., 2005; National Commission on Writing, 2004).

One recent response to this challenge has been to expand literacy instruction beyond English language arts classrooms into other subject areas. The Common Core State Standards (CCSS) emphasize disciplinary literacy by making literacy instruction every teacher's responsibility (National Governors Association Center for Best Practices & Council of Chief State School Officers, 2010). The CCSS require content area teachers to adapt curriculum and pedagogy to support disciplinary literacy development. Therefore, teachers accustomed to stressing only factual knowledge must shift to emphasize the disciplinary learning and thinking that undergirds literacy practices in their subject areas. In addition, they must learn to teach the reading and writing central to their disciplines.

In this article, we share one school-based effort to support teachers' learning of a disciplinary literacy approach to social studies instruction and what their analysis of student work—one pedagogy used to support teachers—tells us about their learning. The curriculum department in one of our partner districts invited us to support their transition from textbook-based instruction focused on information recall to inquiry-oriented teaching focused on disciplinary literacy. We worked with teams of eighth-grade social studies teachers in multiple schools where many students had scored below grade level on statewide assessments. As university partners, we worked in conjunction with the district and across participating schools to provide learning opportunities consistent with the district initiative and school-level instructional goals. We developed an 18-day U.S. history curriculum designed to teach eighth graders to write evidence-based historical arguments and created a 1-year professional development (PD) course for teachers who elected to implement the curriculum.

We grounded decisions about the structure, activities, and context of our efforts to support teacher learning in current ideas about best practices in PD. In terms of structure, the PD focused on specific content (U.S. history), classroom practice (in its emphasis on student work analysis as well as on understanding and using new curriculum materials), and active engagement with ideas and teachers' eighth-grade U.S. history colleagues (e.g., Ball & Cohen, 1999; Desimone, Porter, Garet, Yoon, & Birman, 2010; Hill, 2009; Little, 1993). The work took place over 1 year and included teams from the same school when this was possible or individuals when it was not (e.g., Wilson, 2009). In our PD activities, we used two practices to support teacher learning that show promise: (a) representing, decomposing, and approximating practice (Grossman, Hammerness, & MacDonald, 2009) and (b) attending to students' thinking through analysis of their work (Kazemi & Franke, 2004; van Es & Sherin, 2008). Although we presented the initial curriculum that embodied the disciplinary literacy reform effort, we worked with teachers to implement the curriculum in ways that made sense given their students and school contexts (e.g., McLaughlin &

Mitra, 2001). We thought beyond a sole focus on PD activities or individual practice to considering the different groups and systems teachers participated in (e.g., grade level, subject area, school, district) and the ways in which those aspects of context are both “interdependent and reciprocally influential” when it comes to teacher learning and changing teacher practice (Opfer & Pedder, 2011, p. 379).

In these ways, we hoped our PD would (a) help teachers respond to a district-wide reform initiative based on the best practices from the literature on teacher learning, (b) help teachers make sense of a concept new to many of them (disciplinary literacy), and (c) translate the meaning of the new concept to instructional practices. In this article, we discuss teachers’ learning about history and literacy development within the contexts that affected their work by considering their analysis of student writing.

## **Theoretical Background**

### ***Disciplinary Literacy in History***

We define disciplinary literacy as the ways of thinking, reading, and writing that are embedded in the production, consumption, and communication of knowledge in a discipline (e.g., Conley, 2012; Moje, 2008). In history, for example, one aspect of disciplinary literacy involves questioning and weighing evidence found in primary sources, constructing interpretations of the past based on analysis of evidence, and conveying interpretations in writing (Monte-Sano, 2008, 2011; Wineburg, 2001). Historical, or disciplinary, thinking is embedded in historians’ reading and writing as they develop interpretations (e.g., consider authors’ purposes and audiences, situate primary sources in their original context, analyze significance and causation). Interpretations make the case for a particular account of past events or people based on evidentiary support, thus we highlight the goal of writing evidence-based argument within the context of a disciplinary literacy intervention.

Contrary to popular thought, research demonstrates that history learning goals related to disciplinary literacy are attainable for a wide range of students, including students as young as fifth grade (VanSledright, 2002), students with disabilities (De La Paz, 2005), and English learners (Zwiers, 2006). But such goals are not easy to attain: If students are to achieve the promise of disciplinary literacy, they must learn to think in disciplinary ways and learn discipline-specific ways of reading and writing. Why? In his seminal work, Wineburg (2001) argued that students do not naturally tend to think like historians. In reading historical texts, they often focus on the literal meanings and miss the opportunity to use intertextual reading strategies that would promote interpretive work (Afflerbach & VanSledright, 2001). Nor do students tend to write as historians do. In the only study to compare the writing of students and experts, students tended to list and arrange facts rather than analyze information (Greene, 2001). Results from the National Assessment of Educational Progress in the United States highlight additional literacy challenges (Salahu-Din,

Persky, & Miller, 2008). Yet, with instruction that emphasizes disciplinary thinking and argument, students' writing can improve in the context of history classrooms (De La Paz et al., 2014; De La Paz, Monte-Sano, Felton, Croninger, & Jackson, 2016; Monte-Sano, 2008, 2010; Young & Leinhardt, 1998).

Despite the energy focused on disciplinary thinking and writing in the history education research community, many history teachers are not necessarily prepared to teach these aspects of the discipline. Large-scale analysis confirms that when teachers in the United States assign reading and writing in history classrooms, the focus typically involves basic levels of reading comprehension and summary of information (Kihara, Graham, & Hawken, 2009; Nokes, 2010). When history teachers in the United States often do not even have a minor in the discipline (Westhoff, 2009), this lack of attention to disciplinary thinking and writing is hardly surprising. Current social studies state standards and assessments as well as the use of authoritative textbooks likewise discourage an emphasis on disciplinary literacy (e.g., Bain, 2006). As a consequence, efforts to influence the teaching and learning of history must give teachers opportunities to develop content knowledge and practice.

### **Teacher Learning**

Teacher education research has helped us think about teacher learning opportunities. In seminal research conducted as part of the Center on English Learning and Achievement, Grossman and her colleagues (Grossman, Smagorinsky, & Valencia 1999; Grossman et al., 2000) considered two kinds of pedagogical tools that support English teachers' learning: conceptual tools and practical tools. *Conceptual tools* are "principles, frameworks, and ideas about teaching, learning, and English/language arts that teachers use as heuristics to guide their instructional decisions" (Grossman et al., 2000, pp. 633–634). *Practical tools* include strategies, practices, or resources used in teaching that "have more local and immediate utility" (Grossman et al., 1999, p. 14). This work has guided our approach to PD as we have emphasized conceptual understandings and practical tools in supporting teacher learning.

To help teachers learn practical strategies for teaching disciplinary literacy in history, we drew on Grossman et al.'s (2009) work on cross-professional perspectives. Grossman and colleagues highlighted representations, decompositions, and approximations as specific concepts underlying pedagogies of practice in professional education. In preparing teachers, representations of practice involve using examples of expert teaching practice and making hidden components that contribute to expert enactment visible. Decompositions of practice involve identifying the components that are integral to particular practices so that novices can see and enact them. Approximations of practice include simulations of different aspects of practice so that novices can rehearse, gather feedback, reflect, and continue to improve. Together, these concepts support the teaching of specific practices by giving learners opportunities to understand and enact them (e.g., Ball & Forzani, 2009).



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Research on PD and veteran teachers' learning provided additional ideas for shaping our work. Wilson (2009) led a National Academy of Education committee to investigate what researchers have learned about fostering teacher quality. The committee argued that PD has been effective when it enhances teachers' subject matter knowledge, provides extended learning time, actively engages teachers, involves teams of teachers from the same schools, and links to what teachers are asked to do. Other researchers have highlighted similar structural features (Blank & de las Alas, 2009; Desimone et al., 2010; Hill, 2009; Yoon, Duncan, Lee, Scarloss, & Shapley, 2007) and also framed teacher learning as a complex system situated in the interplay between teachers' multiple contexts (e.g., grade level, subject area, school, district) and PD activities (Opfer & Pedder, 2011).

One promising way of linking PD to teachers' work and actively engaging teachers is to analyze student work with the goal of reflecting on and improving practice (e.g., Ball & Cohen, 1999; Wilson, 2009). Little (2004) looked across PD efforts to highlight the different purposes for student work analysis: deepening teacher knowledge, increasing external control of teacher education, and generating community and commitment to reform among teachers. Our own work focuses on deepening knowledge because teachers are better prepared when they understand student learning and use analysis of student learning as a way to reflect on practice. Little reported some evidence that teaching and learning improve when teachers analyze student work in PD, but this evidence is limited to a handful of studies that do not capture the range of practices used for student work analysis. Windschitl, Thompson, and Braaten (2011) presented one exception, arguing that the promise of analyzing student work in novice teacher inquiry groups can be attained with specific protocols and rubrics to guide the analysis, provide a common language for teachers, and emphasize disciplinary goals. Additional studies have also found that teachers can learn to attend to their students' mathematical thinking in the context of supportive PD (Kazemi & Franke, 2004; van Es & Sherin, 2008).

Learning to teach disciplinary literacy involves many considerations. Here we examine teachers' analysis of students' writing during PD meetings that coincided with a history curriculum intervention focused on developing students' disciplinary use of evidence in writing historical arguments. In prior work, we shared the effects of the curriculum intervention on student learning and found that students whose teachers participated in this PD and intervention grew significantly in their capacity to write historical arguments as compared to students whose teachers did not (De La Paz et al., 2014; De La Paz et al., 2016). These results were even stronger when teachers ensured that students had opportunities to apply what they had learned about disciplinary literacy during instructional time. Gains were significant for students at every reading level as well as for students with disabilities and English learners.

These findings prompted us to consider whether teacher learning during PD might relate to student learning and teacher fidelity. In this article, we explore teachers' analysis of student essays at four points in the year to identify patterns in their

attention to students' disciplinary thinking and writing as one way of gaining insight into teachers' learning in this school-based PD program. In our analyses, we look for evidence of teachers' learning with regard to the conceptual understanding and pedagogical approaches that are the foundation for teaching disciplinary literacy in history. We ask three questions: (a) What do teachers notice in their students' argumentative historical essays? (b) Is there evidence of change in what teachers notice in their students' argumentative historical essays? (c) What do teachers' reflections on students' essays tell us about their knowledge of disciplinary thinking and writing as well as student learning?

## **Method**

### ***The Intervention***

**Participants and context.** We assumed multiple roles in this project as the designers of the curriculum intervention, researchers, and PD facilitators. In these roles, we designed the 18-day curriculum, observed and interviewed teachers, collected students' writing and interviewed them, and designed and taught the PD sessions.

The eighth-grade U.S. history teachers and students in our study work and learn in a large, mid-Atlantic U.S. school district. Each year we worked with a different cohort and refined our intervention based on successes and challenges identified previously. Here we report on the project's second year.

Our 1-year intervention targeted middle schools identified by the district as having significant numbers of struggling readers (about 33% of all participants were significantly below grade level in reading, even though 45% were proficient and just over 20% were advanced readers). Demographic and economic data indicated that 45% of the students received free and reduced-price meals, about 10% received special education services, and 8.5% received English services for speakers of other languages. Students were primarily Black (76%) or Latino/a (15%).

We invited social studies teachers at target schools to join our project, and 20 teachers chose to work with us in some capacity. Fifteen teachers implemented the curriculum with high fidelity (De La Paz et al., 2016), participated full time in PD, and administered pre- and posttests to their students. Five teachers did not implement the curriculum, but administered pre- and posttests to their students to provide data for comparison purposes. Here we focus on 13 teachers who implemented the curriculum because 1 teacher did not have a complete set of data (i.e., she was missing three of four notebook entries focused on her students' work) and 1 was excluded from the final pool of data due to inappropriate administration of students' posttests.

**The curriculum.** The curriculum we created includes six 3-day investigations focused on a central question and two conflicting primary sources. We selected topics for each investigation (e.g., the Mexican–American War) in coordination with

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district leadership. Day 1 of each investigation involved reading and annotating historical sources, Day 2 involved deliberation about the documents and question, and Day 3 involved planning and composing an essay. Students used two disciplinary literacy tools throughout (“IREAD” and “How to Write” or “H2W”) to support their reading, thinking, and writing (for more details about the curriculum, see Monte-Sano, De La Paz, & Felton, 2014). Using a cognitive apprenticeship approach, we asked teachers initially to model how to use the disciplinary literacy tools and give students practice using them. In the last three investigations, we asked teachers to promote students’ independence with the supports built into the curriculum.

**The professional development program.** We met with teachers for 66 contact hours across 11 all-day PD sessions. Teachers earned six graduate credits for completing the yearlong course. We grounded PD experiences in literature on effective PD (Wilson, 2009): Our PD was sustained; used extended amounts of time; linked to teachers’ work with students in the classroom; actively engaged teachers with curriculum materials, student work, and each other; and gave them opportunities to enhance their knowledge of the discipline and practice. We observed teachers’ implementation of the curriculum, discussed challenges and opportunities in their classroom contexts, and talked through how to work effectively with the curriculum in those contexts. The PD targeted three goals: develop teachers’ conceptual understanding of disciplinary literacy in history and cognitive apprenticeship, develop teachers’ facility with using practical tools to support students’ disciplinary literacy learning, and foster teachers’ conceptual and practical understanding of teaching disciplinary literacy by analyzing students’ work.

In the first four sessions of the course, we aimed to develop teachers’ conceptual understanding of history as an evidence-based interpretive discipline, historical thinking, and disciplinary approaches to reading and writing. Such attention was necessary to build a foundational understanding of our approach, which was a major shift from district norms. After these initial sessions, we introduced a cognitive apprenticeship approach to instruction and practical tools (e.g., IREAD, H2W) by sharing the curriculum with teachers, one investigation per meeting. We used Grossman et al.’s (2009) framework of sharing representations, decompositions, and approximations of practice to help teachers learn to use each investigation and the practical disciplinary literacy tools. We modeled the use of the materials for the next investigation, debriefed the key elements of each investigation, talked through how teachers might enact these elements, and gave teachers opportunities to practice teaching key aspects of the investigation to their peers with attention to their classroom contexts (cf. Ball & Forzani, 2009; Grossman et al., 2009). In addition, teachers debriefed their work with the previous investigation and shared ideas with colleagues about how to work with the materials effectively in their classroom contexts. Because we observed teachers, we also attended to teachers’ developing understanding of cognitive apprenticeship and disciplinary literacy by

publicly sharing examples of when teachers worked with the materials effectively in their classrooms.

Analyzing student work was the third teacher learning opportunity designed to build conceptual understanding and practical facility. Early on, we identified and explained key features of good historical arguments and looked for their presence or absence in student writing samples. Based on this discussion, we generated a list of key features of historical argument that we returned to each session. Subsequent discussions included attention to how we could support particular students and analysis of students' growth trajectories. Once teachers began using the curriculum, they spent 1–2 hours during each PD session considering their students' writing using a student work analysis protocol alongside a list of key features of historical arguments and our written feedback on previous notebook entries (cf. Windschitl et al., 2011). Teachers tracked the progress of three to five purposefully selected students over the course of the year, looking for strengths and areas for improvement and wrote reflections in notebooks. We encouraged teachers to choose students with learning profiles that encompassed the range of performance across their classes by identifying students who were below, at, as well as above average in reading and general literacy skills, as well as choosing students who were learning English or who had identified disabilities. Teachers then shared their findings with colleagues and discussed how they could help their students improve.

By mid-year we found that students' essays included aspects of historical thinking and writing that demonstrated growth; however, teachers did not always notice these qualities. We suspected that teachers did not notice qualities of historical argument in part because of their understanding of these concepts. Therefore, after the fourth investigation, we initiated analysis sessions by sharing two preselected student work samples, generating discussion of the strengths and weaknesses in these essays and exploring what particular aspects of historical argument involved. The preselected samples highlighted key aspects of historical writing that were noteworthy accomplishments or that posed challenges. We modeled and discussed how to identify student needs and work with these students.

### **Data Sources**

The main source of data for this article includes teachers' written reflections on student work from specific investigations in response to four writing assignments given during PD. To support teachers' thinking, we varied the assignments (see Table 1) but maintained a consistent list of key features of historical argument within each assignment. Teachers wrote their responses in a notebook. We collected notebooks after each class, wrote feedback on the reflections in the margins, and altered the PD writing assignments in response to their insights.

**Data Analysis**

We brought a conception of historical writing to our analysis of teacher notebooks and student essays that integrates argumentation and historical thinking (Monte-Sano, 2010). We focused on the disciplinary use of evidence in writing historical arguments, including taking an interpretive position; selecting relevant evidence to support this position; explaining how evidence supports this position; justifying one's use of particular documentary evidence by considering the author's reliability, an author's perspective, the relationship of the evidence to its historical context, or comparison of the value of the available evidence; interpreting evidence appropriately; and recognizing conflicting evidence. This analytic frame guided our interpretation of the data.

Initially, we summarized what teachers wrote about students' work in each reflection, transcribed excerpts of reflections that illustrated teachers' main ideas, and summarized the essays teachers reflected upon. We reviewed these notes and developed a list of recurring themes that were common across teachers' reflections. We then reread a subset of notebooks, organized the data according to theme, debriefed this second pass through the notebooks, and revised the original themes so that they were precise and reflective of the data. Through this process, we created a coding protocol that involved 10 parent codes in teachers' four reflections, tabulating the number of times we observed the code in each reflection, transcribing examples that illustrated teachers' tendencies related to each code, and tracking researcher commentary. Parent codes included the specificity of statements about students or

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**Table 1**  
**Assignments to Elicit Teachers' Thinking About Students' Essays**

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<i>Reflection assignment</i>	<i>Prompt description</i>
Investigation 1	<ul style="list-style-type: none"><li>• Consider students' strengths and weaknesses.</li><li>• Share examples of each.</li><li>• Look for particular aspects of historical writing.</li><li>• Share ideas for next steps with students.</li></ul>
Investigation 3	<ul style="list-style-type: none"><li>• Compare your focal students to other students in the class.</li><li>• Consider students' strengths and weaknesses.</li><li>• Share ideas for next steps with students.</li></ul>
Investigation 5	<ul style="list-style-type: none"><li>• Select and share excerpts of student writing to illustrate their strengths and weaknesses.</li><li>• Identify goals and feedback for students.</li></ul>
Final comparison	<ul style="list-style-type: none"><li>• Compare students' work from across the year.</li><li>• Share examples of improvements and difficulties.</li><li>• Consider how they could help students improve.</li></ul>

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student work; consistency of teacher analysis with student work; specific statements about student growth; focus on aspects of historical writing; focus on completion, goal setting, and ideas for helping students; feedback to give students; adapting the curriculum intervention; and consistency of teachers' goal setting, feedback, and proposed next steps with student work. Each of these parent codes had child codes. For example, the parent code "focus on aspects of historical writing" was broken down into child codes including "focus on aspects of historical writing *not related* to the intervention" (e.g., grammar, paragraph indentations) and "focus on aspects of historical writing *related* to the intervention" (e.g., answered the historical question, provided evidence, included rebuttal, evaluated evidence, noted authors/time period). We coded each individual notebook using this coding scheme, which we developed inductively through multiple passes of the data.

We completed our analyses by creating different data displays (Miles & Huberman, 1994) to compare and synthesize findings across all notebooks. One series of charts tabulated teachers' tendencies for each code and highlighted where teacher tendencies were more (green) or less (red) consistent with the intervention. This view highlighted the number of teachers who demonstrated each pattern and how those numbers changed according to journal entry. Within the code "focus on aspects of historical writing related to the intervention," researchers noted which particular aspects of historical writing teachers attended to in each reflection. Another chart specified how many teachers noticed each aspect of historical writing (e.g., provided evidence, historical thinking) and in which reflection. We also transcribed all of the examples of teachers' attention to evaluation of evidence (e.g., "[The student] continues to work hard citing quotes, explaining and writing out her evaluation, but still cannot explain why people disagree") and historical thinking (e.g., "In most cases they recognize the author and the situation in which the investigation is taking place") so that we could identify patterns within this code, compare what teachers noticed when writing about evaluation or historical thinking, and tabulate the number of teachers who attended to either.

## **Findings**

Overall, we found that teachers learned to notice and comment on their students' historical thinking in writing, but several had great difficulty specifying next steps for working with their students on historical thinking and writing, and our language in PD sessions in some cases complicated teacher learning.

### ***What Teachers Noticed***

**Attention to key aspects of disciplinary writing.** As the year progressed, teachers increasingly focused on aspects of historical writing when analyzing student work and noticed more sophisticated aspects of it. Initially, teachers' attention

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was diffuse, spread across a range of considerations without any overarching frame for thinking about student writing. After Investigation 1, only 54% of the teachers noticed aspects of historical writing that related to the curricular goals even though they had already participated in almost one-third of the PD meetings. And those teachers paid attention to different aspects of historical writing without a common focus—some noticed whether students annotated documents, answered the question, or used evidence (e.g., see the appendix, Ms. Blue); others focused on students' historical thinking and evaluation, or critique, of evidence (e.g., see the appendix, Mr. Addison). At the same time, teachers paid attention to students' engagement, lack of paragraph indentations, word choices, style, and length of responses (e.g., see the appendix, Ms. Tilney). Three teachers (23%) did not focus on students' writing when prompted and instead scrutinized their teaching of the first investigation.

In reflecting on Investigation 3, and for every reflection thereafter, teachers' attention showed greater consistency of focus and emphasis on historical writing. In these reflections, every teacher noted some aspect of historical writing in students' work. Forty-six percent of teachers concentrated on whether students answered the historical question, and 69% focused on students' inclusion of evidence in their essays. Mr. Jacobs (all names are pseudonyms) emphasized strengths and weaknesses in a student's response to the historical question when he wrote, "[The student] failed to use the introduction to inform the reader of his conclusion . . . [his] strength is that he did 'early' in the essay, though in the second paragraph, answer the historical question." Mr. Addison attended to students' inclusion of evidence in their essays when he wrote that the student "included support for his conclusion, using two quotes."

By Investigation 5, 77% of teachers continued to focus on whether students answered the question, and 85% focused on students' use of evidence. In addition, 69% concentrated on students' explanation and evaluation of evidence, and 77% focused on students' historical thinking. When teachers compared students' work across investigations on the final assignment, 69% concentrated on students' use of evidence and evaluation of evidence, 62% attended to students' rebuttals and explanations of their evidence, and 31% noticed students' thinking about the historical content and historical thinking in their essays. Teachers increasingly attended to students' historical writing. Although only 31% noticed students' historical thinking at the beginning of the year, 69% noticed students' historical thinking and evaluation of evidence by Investigation 5.

**Attention to disciplinary thinking.** In our curriculum, we used two terms to refer to disciplinary thinking: *evaluation of evidence* and *historical thinking*. We see these as related concepts: Historical thinking includes evaluation of evidence using disciplinary norms such as consideration of an author's purpose (Wineburg, 2001). At the same time, evaluation of evidence can include attention to logic and argument structure in a way that's not specific to a single discipline (e.g., Toulmin, 1958).



We introduced the phrase “evaluation of evidence” in our text structure (H2W), which included supporting paragraphs with a quotation or example to support a claim, an explanation of that evidence, and an evaluation that indicates the value of the evidence for the argument. It occupied a specific place in H2W (the last sentence of a supporting or rebuttal paragraph) as a reminder for students to integrate judgments of evidence in their essays. Evaluative statements incorporate historical thinking and can also emphasize the logic of an excerpt or how an excerpt supports an argument. We initially built historical thinking into the curriculum via reading and annotating primary sources through the IREAD tool and often referred to this as “historical thinking.” We hoped the text structure specification to evaluate evidence (in H2W) would encourage students to integrate historical thinking into their essays. Over the year, the curriculum exposed students to sourcing and contextualization, recognizing multiple perspectives, and evidence-based writing. In PD meetings, we explored these aspects of historical thinking with teachers.

When we asked teachers to assess their students’ writing, we asked them to consider students’ “evaluation of the evidence” in their essays. In response, teachers wrote about the substance of students’ evaluations (beyond just noting that students did or did not evaluate evidence), and they framed evaluation as a consideration of author reliability (63% of the time), historical context (16%), or the significance of evidence (21%)—all of these represent disciplinary ways of thinking and show that evaluation of evidence in writing overlapped with historical thinking while reading as we had intended. For example, after Investigation 1, Ms. James found that students were “able to evaluate the sources independently to determine if they trusted them.” She shared a specific example: “In his evaluation, [he] weighed if someone would be more likely to lie in a diary or sworn statement.” Ms. James highlighted author reliability issues in evaluations by noticing students’ thinking about the genre of sources and author credibility. Mr. Addison was among a minority of teachers whose attention to evaluation emphasized historical context. A student struggled to explain why the evidence she presented in her Investigation 5 essay about nonviolent approaches to abolitionism was convincing. Addison wrote, “I would have [her] evaluate why fighting doesn’t work with a concrete example of a slave uprising that did not work.” He recognized what failed in her evaluation and suggested using the historical context—examples of failed slave revolts—to bolster the student’s evidence about the ineffectiveness of violent action. Mr. Bismark attended to evaluation by looking for why students selected evidence and the relevance of evidence to their arguments. After Investigation 1, Bismark wrote, “Some of the students struggle with explaining why that evidence is important and how it relates to their side or why they chose some evidence over other evidence.” He continued this focus after Investigation 3, noting, “Most [students] struggle to evaluate why they chose the evidence they did.” Asking students to justify their selection of evidence can highlight how a piece of evidence relates to the argument or the value of the evidence selected as compared to other evidence.



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In contrast, one-third of teachers' comments about students' evaluations only stated whether students had evaluated their evidence and did not consider the substance of students' essays. After Investigation 5, Ms. Chester wrote, "Overall, the majority of students have improved and are getting the 3 steps of the support (eval can still be weak)." The three steps of supporting paragraphs in H2W included evidence, explanation of the evidence, and evaluation of the evidence. It's not clear from her reflection why Chester said that students' evaluations were weak. Her reference to the three steps makes us wonder whether she checked sentences off for completion rather than focusing on their quality. Other teachers made vague comments about students' evaluations. In reflecting on student work from Investigation 5, Ms. Blue wrote, "Most of her evaluation needs some more work." Although the majority noted students' evaluations, teachers' attention did not always indicate an understanding of evaluating evidence.

We did not directly use the term "historical thinking" in teacher reflection prompts, but the prompts refer to many aspects of historical thinking in their attention to students' claims, evidence, evaluations of evidence, multiple perspectives, and rebuttal. Regardless, teachers increasingly described students' historical thinking in ways that demonstrated disciplinary understanding. Overall, teachers made 26 comments about students' historical thinking in reflections we analyzed, and each of these comments demonstrated understanding of such thinking. Whereas 31% of teachers attended to students' disciplinary thinking in Investigation 1, 69% of teachers commented on their students' disciplinary thinking by Investigation 5. Teachers highlighted students' comments about author reliability most often (54% of the time). When noticing her students' lack of consideration for author reliability, Ms. James shared, "Goals I would set for these students would be to work on explaining why they believe or disbelieve an author."

Teachers also attended to students' contextualization (15%), recognition of historical perspectives (11.5%), use of authors' names or locations (11.5%), and full consideration of evidence (8%). Mr. Addison noticed that one student shared details about the treatment of slaves in the 1800s as a way to bolster his argument that abolitionists would need to fight to free slaves. He wrote, "This shows [he] thought about the conflict and he contextualized the documents." With regard to historical perspectives and citing authors' names, teachers noticed when students recognized that an author or person in the past had a particular worldview. For example, Ms. Kady wrote, "[The student] referred to both authors by name rather than saying doc A/B. This is good because it shows that she understood that the documents were written by someone and they are expressing the views of certain groups/individuals." Other times when teachers noted a student's use of an author's name or location, their commentary was more surface level, as when Ms. Chester wrote, "Many are not doing well with opening/closing paragraphs and detail things like naming author, background, being specific." We also saw teachers think about the importance of considering counterevidence, such as when Mr. Bismark set a

goal for students to “focus more on using the evidence presented and trying to rid themselves of previous bias/judgment.” In this example, the teacher attended to students’ full consideration of the evidence, a part of historical thinking that Wineburg (2001) referred to as “suspending judgment.”

**Attention to quality and completion.** In addition to their growing attention to aspects of disciplinary writing and thinking, teachers increasingly noticed the quality of students’ work and students’ ideas. After Investigations 1 and 3, most teachers focused on whether students had completed particular aspects of writing. After Investigation 3, Ms. Blue wrote, “The Proficient and Advanced students were able to answer the historical question, identify where the events took place and also take a position . . . both have supporting details and quotes.” Blue catalogued students’ achievements without attending to examples or visibly engaging with students’ thinking. Most teachers (77%) took a similar approach in Investigation 3, and only 15% commented on the quality of students’ writing or thinking. Although 69% of teachers focused on completion in the last reflection, 54% focused on the quality of students’ work (46% focused on both). Mr. Lagard demonstrated attention to students’ ideas. A student argued that nonviolence would “solve the problem [of slavery] . . . the problem is gone and it won’t come back.” Lagard wrote in his reflection,

He shows that he has thought and evaluated the quote before. However I would speak to him about the loopholes that he did not account for. Ex: Civil Rights Movement and who went to jail and how problems took a while to resolve.

Although Lagard jumps time periods—from abolitionism in the mid-1800s to the civil rights movement of the 1950s and 1960s—he does recognize what his student says and responds with ideas to push the student further. Teachers increasingly focused on the quality of students’ work and completion as opposed to only noticing completion of different pieces of an essay. As they did so, teachers showed greater engagement with students’ thinking.

### ***How Teachers Thought About Next Steps in Response to What They Noticed***

Over the year, teachers made progress in identifying student needs and specifying how to help students. Part of what teachers noticed were students’ strengths, but they also increasingly identified areas for improvement that were directly aligned with the intervention.

After Investigation 1, fewer than half of the teachers identified student needs related to the intervention; instead, many focused on things like whether students indented paragraphs or the length of essays. By Investigation 3, however, 77% of teachers began to focus on needs directly related to historical writing. These included statements such as those by Ms. Kady, who noted her students’ struggle “with the rebuttal paragraph and evaluation of the evidence.” We considered identifying students’ needs as a first step in thinking about how to help students meet

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disciplinary literacy goals. But teachers' ideas for how to help students lagged behind their identification of student needs.

Even by Investigation 3, 31% of teachers did not suggest next steps for students. Of those who did offer next steps, only 31% offered specific, concrete next steps that teachers could enact. Teachers offered more specific details for next steps as the intervention progressed, but there were some lapses in this trend toward the end of the school year. After Investigation 5, 62% of the teachers provided specific next steps, whereas only 46% did so on the final reflection. This trajectory is interesting particularly given the teacher reflection prompts. In Investigations 1 and 3 and the final reflection, we asked teachers to state what they could do to help their students improve. In contrast, in Investigation 5, we asked teachers to identify goals for students and feedback they might give. In Investigations 1 and 3 and the final reflection, the language of the assignment was more consistent with coding for identifying next steps, yet the percentage of teachers who specified ways to help was lower across these time points than in Investigation 5.

Instead, the majority of teachers focused more on student initiative rather than steps they could take to drive student improvement. Ms. Reston noted that a student needed to "evaluate with better support" and suggested that she would support her by telling her to "carefully read and evaluate the source." General ideas about what to do, rather than specific details for how the student or teacher would execute next steps, were common.

In contrast to Ms. Reston, when Ms. Tilney identified students' needs, she frequently proposed specific and well-developed next steps to address them. In proposing next steps for one student who rarely considered the value of her evidence, Ms. Tilney wrote,

To assist [this student], I would have her refer back to the [graphic organizer] to help her not to omit the evaluations. Then, I would tell her to explain why she chose certain quotes (forcing her to evaluate when she doesn't realize it).

Nevertheless, Ms. Tilney was in the minority. Although teachers improved in their ability to identify student needs as the year progressed, their ideas for how to support those needs remained less developed.

### **Discussion and Conclusion**

Analyses of teachers' reflections on student work give us insight into their thinking and the efficacy of our PD efforts. We see several promising signs in teachers' analysis, including an increasing focus on key aspects of disciplinary writing, attention to evaluative and historical thinking, consideration of the quality of students' work (not just completion), and skill in identifying students' needs. In important ways, participating in a 1-year PD course focused on disciplinary reading, thinking, and writing with opportunities to develop conceptual understanding, practice with

feedback, and analyze student work appeared to expand teachers' understanding of historical writing (alongside teachers' work in implementing the curriculum). With minor exceptions, the results from this study and our broader analysis of student outcomes (De La Paz et al., 2014; De La Paz et al., 2016) indicate that teachers who consistently focused on disciplinary thinking in their analysis of student work were the most effective, in terms of their students' writing outcomes, as long as they also provided time for students to write independently. A yearlong school-based PD focused on new concepts (disciplinary literacy, cognitive apprenticeship) and a new curriculum supported teacher learning. This study has implications for those who work with teachers in today's high-stakes standards environment, for those who integrate literacy into subject area classrooms, and for those committed to supporting teacher learning in the context of their school-based work.

Why do we think teachers increasingly focused on aspects of historical writing, disciplinary thinking, the quality of student work, and students' needs? We look to the structure, activities, and context of the PD to understand this question and compare our work with the literature as we consider teachers' learning. First, structural features of the school-based PD provided learning opportunities highlighted in the literature: The PD was content-focused, based on classroom practice, and involved collective participation of teachers from the same grade level (and in several cases from the same school) in active learning opportunities (e.g., Desimone et al., 2010; Hill, 2009; Wilson, 2009).

Second, several activities provided learning opportunities for teachers, all of which were focused on the goal of improving students' historical argument writing and their disciplinary use of evidence in developing and supporting arguments. A common goal gave the following activities coherence: implementing new curriculum materials and teaching practices and reflecting on them (e.g., Desimone et al., 2010; Hill, 2009); offering and receiving feedback from colleagues and PD instructors about using the new materials in their classroom contexts (Blank & de las Alas, 2009; Little, 1993; Opfer & Pedder, 2011); developing conceptual understandings of disciplinary literacy and cognitive apprenticeship (in addition to practical tools offered in the curriculum; Grossman et al., 2000); representing, decomposing, and approximating new teaching practices that support key aspects of disciplinary literacy (Grossman et al., 2009); and analyzing student work (Windschitl et al., 2011). Over the course of the year, these activities collectively focused classroom practice on student learning.

The PD activities helped teachers become more sophisticated instructors of history and writing. They grew in their knowledge about specific topics, conceptual understanding of history as evidence-based interpretation, and historical thinking with primary sources. We asked teachers to "do" the investigations themselves and, in doing the intellectual work of the investigation, to develop an understanding of the specific topic and ways of thinking that were especially important to attend to with the particular primary sources from that investigation. In this way, teachers deepened their

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understanding of historical thinking with regard to the specifics of each investigation. Regarding writing, we highlighted argument writing as centrally focused on claims and evidence and as a process rather than a single product at the end of a unit. We asked teachers to execute the writing process for each investigation by annotating texts, discussing them, completing a plan for writing, and drafting a written response to the central question; these elements of the writing process in particular have been found especially effective in prior research (Graham & Perin, 2007). Through these activities, teachers developed their background knowledge of complex concepts that they hadn't necessarily engaged with before (e.g., Westhoff, 2009).

Third, several aspects of the learning environment aligned with the focus of the PD, whereas other contextual factors were constraints. The district initiative to embrace disciplinary literacy across subject areas meant that the PD helped teachers meet this goal rather than adding a different goal to their plate. The district allowed teachers to take 1 day off per month to attend PD. And the grant supporting this work paid for substitute teachers, graduate course credit, and a teacher honorarium, reinforcing accountability to the work and allowing teachers to spend time on it. At the same time, the larger context presented them with multiple and varied challenges and constraints, something they mentioned repeatedly. The devaluing of social studies in the district schools meant less time for U.S. history, bigger class sizes, more classes per teacher, fewer U.S. history teachers in any one building, and repeated interruptions during the school day. Although the district was shifting toward a history curriculum that emphasized disciplinary literacy, the curriculum standards for U.S. history in the district at the time of our study emphasized breadth over depth and a pacing guide. Teachers felt they had to cover what was in the district curriculum and did not have much time to devote to our lessons. Finally, teachers repeatedly shared that our approach to teaching history was quite different than how they were prepared. Although they welcomed the shift, it was indeed a shift for many. Competing influences meant that teachers had to find ways to integrate our curriculum and ideas from PD into their existing, complex work lives. Given the nature of the project, however, we were able to directly observe and discuss how teachers could manage these constraints and teach disciplinary literacy to their students in their particular school settings. In this way, the school-based PD was grounded in the complex system that influenced teachers (Opfer & Pedder, 2011) and perhaps was more likely to have an impact on teachers' practice and knowledge as well as student outcomes.

Turning to examine the school-based learning opportunities in more depth, we believe that student work analysis served as a concrete way of inquiring into practice by regularly asking what students were learning and as a means of helping teachers to differentiate instruction because they explored ways to support all students' growth in historical writing (including those who read above and below grade level). The use of protocols, tools, and feedback to structure student work analysis may have contributed to the improvements noted in teachers' reflections as well as some of the

areas for growth we observed. At the beginning of the year, we presented teachers with a list of important qualities of historical writing (e.g., supports the argument with evidence, evaluates evidence, rebuts opposing evidence) and explored these different aspects of writing by examining student work examples from the previous year. We included this list with the student work analysis protocols during the year as a way to prompt teachers to focus on qualities of historical writing in students' essays. Throughout the year, we gave written feedback to teachers by responding to their reflections in their notebooks and emphasized aspects of historical writing in our comments.

However, including a list of historical writing qualities without greater written elaboration may have encouraged some teachers to look for completion of essay segments rather than notice the quality of students' ideas, misinterpret or overlook disciplinary aspects of their students' writing, or make only vague references to disciplinary writing. One way to develop this tool further would be to create an elaborated rubric that describes different levels of historical writing (e.g., Windschitl et al., 2011). During the year, we addressed this issue by sharing preselected samples of student work to explore particular aspects of historical writing that we noticed during our observations and launch more in-depth discussion of them.

To encourage more specific, in-depth reflection on students' historical writing, we also varied our student work analysis protocols by prompting teachers to attend to specific excerpts of student essays and compare students' essays across time. Of those we analyzed, the Investigation 5 assignment generated the strongest reflections (e.g., specific statements about student work, analyses grounded in examples, articulation of next steps for helping students, consistency between reflection and student work). Although previous prompts asked for examples, this prompt asked teachers to include excerpts from students' work. For the final assignment, teachers compared the same students across time. Here teachers' reflections showed greater depth by focusing on the quality of students' work more than completion and identifying student needs that emphasized aspects of disciplinary writing. Prompting teachers to look at student work over the year may have helped them notice incremental student progress. Comparing individual student's work across time may be another strategy to generate stronger reflections, although it's possible that teachers improved in these areas as a function of time. Consistency across assignments would allow us to make more claims about growth. And some balance of open-ended responses and specific prompts would give us an opportunity to see what teachers attend to on their own and how well they attend to what we've identified as important. As is, we believe that additional opportunities for explicit attention to growth in the quality of students' essays may have helped a larger proportion of teachers make progress toward a more learner-centered focus on next steps.

The language in our list of historical writing qualities tool and some of our curriculum materials may have made it difficult for teachers to understand that historical thinking and evaluation of evidence were related concepts. The discrepancies between

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teachers' comments about historical thinking and evaluation were notable. Similarly, in our observation data, teachers struggled most consistently with explaining evaluations and the role of evaluation in an essay to students, yet they did not have the same struggle in explaining historical thinking during reading. Since we used the term "evaluation of evidence" to signal students (and teachers) to bring the historical thinking they engaged in with reading into their essays as they moved through the process of writing, we were pleased to see overlap between evaluation and historical thinking in teachers' reflections. That is, teachers attended to author reliability, contextualization, and evidence selection when noting evaluation. However, the pattern of vague references to students' evaluations and greater attention to whether (rather than how) students completed the evaluation step calls into question the utility of using "evaluation" as a signal for integrating disciplinary thinking in writing. Furthermore, teachers' comments about students' completion of the evaluation step were vague enough that we were not certain that teachers understood the concept of evaluation and that it was another way of considering historical thinking. Having a common language in this kind of work is important, but so too is maintaining simplicity. In our third year we substituted the word "judge" or "judge your evidence" to stand in for historical thinking while reading and writing rather than using different terms. Using the same term signals to students and teachers more clearly that this kind of analytical thinking is something you do when reading and when composing—using the same term in IREAD and H2W (as well as the analysis of student work tool) indicates the connection between the reading and writing processes.

Student work analysis helps teachers focus on how students respond to instruction and diagnose students' writing but doesn't necessarily generate a clear set of next steps for teachers, particularly if the concepts and strategies are new to them. Teachers increasingly attended to students' historical writing but didn't always know what to do to develop that writing further, especially without the curriculum supports (e.g., once a lesson from the curriculum is taught or when students' needs fall outside one of the lesson plans from the curriculum). We thought about how to develop teachers' capacity to support students' development as thinkers and writers and incorporated these ideas into PD efforts for the third year. We continued to look at student work but added discussions of how to respond to a class and practiced figuring out feedback that might support students. As we reviewed each investigation in the third year's PD, we prompted teachers to make notes in the margins of the lesson plans about how to help particular students or classes based on our discussions of the challenges students faced. We also suspect that sustained attention—through additional PD or tools and activities that teacher collectives can continue to organize around on their own—to developing teachers' conceptions of historical writing and cognitive apprenticeship would support their decision making beyond any one set of lessons (e.g., Whitney & Friedrich, 2013).

Through careful design and coordination, PD experiences can advance teachers' learning in meaningful ways and build teachers' capacity to support middle



school students' disciplinary literacy practices. Such work is complex but critically important to preparing teachers and their students for the demands they face. Our 66-hour PD experience and curriculum supported teachers' learning through systematic attention to student outcomes and relevant supports for teachers. Real benefits for students came when teachers were able to apply what they had learned in their instruction.

The agenda to develop students' disciplinary literacy is both robust and, we believe, worthwhile. Without teachers who are prepared to support this agenda in all content areas at the middle school level, we will not be able to move forward. How, then, are we to prepare content area teachers to integrate disciplinary thinking and literacy instruction? Helping teachers frame school subjects around disciplinary thinking and embrace the primacy of literacy can equip them to teach disciplinary literacy effectively. We share our school-based effort to explore these issues and spark conversation so that researchers and practitioners can think together and address one of the biggest challenges facing education in the CCSS era: teacher learning.

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**Appendix**  
**Student Writing Samples and the Aspects of Disciplinary Writing**  
**That Teachers Noticed in Reflections**

**Investigation 1**

*Mr. Addison (example of a teacher who attends to disciplinary writing from the start)*

*Example of student writing*

“I think the british fired first because America has more evidence saying the british started the war if you think why would the british be crossing a river in 2 in the morning I would think they are try to attack me. More reason I belive the british fired first lieutenant john barker said he could not regroup with the army because men were so wild they could here no orders that makes me belive they shot first because they did not follow orders. Im saying no one told the british to do anything to fired first because they did not follow orders.”

*What the teacher wrote in his notebook about this student's writing*

“Strengths—uses evidence from the documents + explains why it answers the question. Ex—He uses the evidence that the British crossed at 2 am and then explains how this seems like an aggressive move . . .”

“Weaknesses—He does not directly address the types of sources. Ex—He doesn't say why the minutemen should be believed . . .”

“He answers the question well and gives evidence with explanations. He mostly uses one document however and does not give credit to the minutemen, who support his perspective.”

*Aspect of historical writing*

Teacher noticed:

- Claim
- Evidence
- Reliability of one source
- Inattention to reliability of second source
- Student's historical thinking about context

**Investigation 5**

*Mr. Addison (example of a teacher who attends to disciplinary writing from the start)*

*Example of student writing*

“The argument is about if slaves should be violent or nonviolent. I choose they should be violent because the master is always being violent to them and talking to them about letting the slaves be free they would laugh so in order to free them they should fight for freedom. Another quote is ‘Remember the whippings your father's suffered. Think how many tears you have cried upon the soil that you have fanned.’ It is a deadly mistake to belive that the only way to maintain peace is always to be ready for war. The Bible greatest enemy is of war. I picked [side] A because back then in those times people did not listen to slaves so the only way I can see slaves being free by fighting for their rights. The other side B I did not pick because not everybody is peaceful some dont care what people have to say thats why I picked side A.”

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*What the teacher wrote in his notebook about this student's writing*

“Improvements/strengths—He has evidence of a rebuttal, he said why he chose his side.”

“Areas for improvement—Writing in 5 paragraphs, explaining why the evidence is trustworthy.”

“Strength excerpts: ‘I picked A because back then in those times people did not listen to slave so the only way I can see slaves being free by fighting for their rights.’—This shows he thought about the conflict and contextualized the documents.—I would have [the student] explain why this is his thought by supporting it with information from the documents.”

“Weak excerpts: He just randomly listed quotes, not tying them to anything. I would suggest he follow the format and use the graphic organizers.”

*Aspect of historical writing*

Teacher noticed:

- Counterargument
- Claim
- Use of quotations but need to use quotations purposefully to support the claim
- Inattention to reliability of evidence
- Student's historical thinking about context

**Investigation 1**

*Ms. Tilney (example of a teacher who shows strong improvement in attending to key aspects of students' disciplinary writing)*

*Example of student writing*

“I believe the Patriots fired the first shot at Lexington green because there statement seems false. I think they were angry at the British and some of them could not control there selfs. The false points in there story are we turned out backs to leave if you all knew that you are going to defend against british and were ordered to why wen the drum beat sounded and the british was there why would you go back what was the point of you all coming visit to see if they were coming I believe some had the intention of shooting or killing British soldiers or the shot could have been on accident”

*What the teacher wrote in her notebook about this student's writing*

“His reading level is extremely high, but he has not been very productive in any of his classes. He wrote the beginnings of a good essay, however, did not follow through to the end. . . . I am a little frustrated with [this student] because he is capable of so much more. However, I do know that reading and writing are two separate entities.”

*Aspect of historical writing*

Teacher did not comment on:

- Student's claim
- Student provides evidence and reasoning in support of claim
- Student considers reliability of one source

**Investigation 5**

*Ms. Tilney (example of a teacher who shows strong improvement in attending to key aspects of students' disciplinary writing)*

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### *Example of student writing*

“The Articles are about Slaves trying to find ways to escape slavery during the Civil War. In some states it was finally illegal to hold slaves and they were demanded to be let free. The Problem is slaves cant decide wether to use Peace or Power to get there freedom. I think a more aggressive approach will work out because after reading information from both sides Henry Highland Garnet wrote that ‘as a result of Veseys threatening plan, the slave states seriously considered freeing the slaves. But once the threat of a slave revolt went away the slave holders stopped talking about freeing slaves.’ His quote shares that they have tried to use aggression and it worked but they decided to give the slave holders a break and that’s when slave holders tried to hold slaves longer. After reading this quote I think it’s very—”

### *What the teacher wrote in her notebook about this student’s writing*

“He continues to provide the bear minimum when it comes to supporting and incorporating direct quotes from the documents. [He] does answer the question but does not persuade the reader at all. I have realized that he has not been completing his graphic organizers, which probably contributes to him not finishing or writing effectively.”

“Strengths – answered the question (stated a position) – used some sentence starters – gave credit to one author.”

“Improvements – use ‘How to Write’ and graphic organizer to plan writing – use sentence starters to guide his ideas.”

“‘The problem is slaves can’t decide whether to use Peace or Power to get their freedom.’ This excerpt shows me that [the student] has a clear understanding of the issues the slaves are facing. I will encourage him to make sure to expound upon his statements as if he is explaining everything to someone who has not read the documents.”

“His quotes shows that they have tried to use aggression and it worked until they decided to give the slave owners a break and hold the slaves longer.’ His explanation is all over the place and says ‘give the slave owners a break’ which was not eluded to in the documents. I will tell [the student] to be sure to use his graphic organizer to increase the readability of his writing and force him to read confusing excerpts aloud to see if he thinks they make sense. PROOFREAD!”

### *Aspect of historical writing*

Teacher noticed:

- Student’s use of quotations to support his claim
- Student responds to the question and makes a claim
- Student notes author of source cited
- Student provides little rationale, reasoning or justification

Teacher did not comment on:

- Historical inaccuracies and misunderstanding of the topic (e.g., the sources did not focus on escaping slavery during the Civil War but on abolitionism before the Civil War)

### **Investigation 1**

*Ms. Blue (example of a teacher who shows modest improvement in attending to key aspects of students’ disciplinary writing)*

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*Example of student writing*

“I believe the neither one of them fired first. they both fired at the same time. Because the aritcal B says Both minuteman and British fired at the same time.”

*What the teacher wrote in her notebook about this student's writing*

“[The student] claimed that each fired first which shows [the student] cannot come up with a clear idea of who did the shooting. She claimed both did and it is found in the article, I believe she misread the information or paid little attention to the discussion that was held with her partner.”

“[The student] generally puts little or no effort into her work. She believes she will advance to the next grade level no matter what because this is all she has been doing and every year she moves on, she told me.”

*Aspect of historical writing*

Teacher noticed:

- Faulty claim in response to question

Teacher did not comment on:

- Even though the teacher disagrees with the claim, the student has a claim
- The student supported her claim with evidence from one source and names that source (but doesn't use the source accurately—needs to use both sources to make this point)

**Investigation 5**

*Ms. Blue (example of a teacher who shows modest improvement in attending to key aspects of students' disciplinary writing)*

*Example of student writing*

“I say more aggressive because by being aggressive you get to fight and the others may give up and they'll get what they want. In document A Henry Highland Garnet's he tried to end slavery by being aggressive. The slavery began near the Civil War. This happen in the United State.

‘It is better to die as a free man then to live as slaves.’ I choose this quote because in the time of slavery the days were terrible. Also they make them work and get treated like animals. On the other hand as a free man you don't have to do any of those stuff working for other like slaves or be treated like animal. My evaluation is the men who said this was a slave once, so he knows how the slaves were treated. He also know that as a free man you don't have to be anything of those things.

‘Brother, your oppressors try to make you as much like animals as possible.’ This means that their masters punish the slaves when they do something wrong. They hit them like animals. My evaluation is that they wanted to make the slaves soft, so that they can be controll easily.

In document B their answer goes against mine because ‘they must place their faith in god to protect them from danger.’ This means that they want to make the slaves to put their mind to god so that they'll be protected. Also because they don't want the slaves against them so that's why they tell them a lie to believe in god.

My answer is aggressive because they get to fight win the battle and get what they want freedom. They want to die as a free man because slavery was terrible. They were treat bad by being punish and treated like animal.”

### *Learning to Teach Disciplinary Literacy*

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*What the teacher wrote in her notebook about this student's writing*

“[The student] has made great strides. He is an ESOL student who at first cannot write a paragraph but who was able to write five after several lessons. He spends more days than an average student but gets his facts together. [The student] has grown tremendously but needs to work on why people disagree and how to explain a conflict. Also, he needs to work on how to convince his audience why his side must be the right fact to accept.”

“Several goals to work on will be – emphasizing paragraphs (visually) – getting them to explain why people have a problem with/disagree about the investigation question, listing them – encouraging them to use more strong conviction at the end for their audience to support their claims – on the whole working on their evaluation and conclusions”

*Aspect of historical writing*

Teacher noticed:

- Need to explain the conflict and different interpretations—this would provide more context for the argument and clarify the claim.
- Need to support his “side” or claim

Teacher did not comment on:

- Historical inaccuracy (e.g., slavery began near the Civil War)
- Student uses quotations to support his claim (but does not explicitly link them to the claim or introduce them)
- Attempt at rebuttal or recognition of alternate perspective (when referring to Document B)

Note. All quotations are given exactly as originally written.

## Information on the California Council on Teacher Education

Founded in 1945, the California Council on the Education of Teachers (now the California Council on Teacher Education as of July 2001) is a non-profit organization devoted to stimulating the improvement of the preservice and inservice education of teachers and administrators. The Council attends to this general goal with the support of a community of teacher educators, drawn from diverse constituencies, who seek to be informed, reflective, and active regarding significant research, sound practice, and current public educational issues.

Membership in the California Council on Teacher Education can be either institutional or individual. Colleges and universities with credential programs, professional organizations with interests in the preparation of teachers, school districts and public agencies in the field of education, and individuals involved in or concerned about the field are encouraged to join. Membership entitles one to participation in semi-annual spring and fall conferences, subscription to *Teacher Education Quarterly* and *Issues in Teacher Education*, newsletters on timely issues, an informal network for sharing sound practices in teacher education, and involvement in annual awards and recognitions in the field.

The semi-annual conferences of the California Council on Teacher Education, rotated each year between sites in northern and southern California, feature significant themes in the field of education, highlight prominent speakers, afford opportunities for presentation of research and discussion of promising practices, and consider current and future policy issues in the field.

For information about or membership in the California Council on Teacher Education, please contact: Alan H. Jones, Executive Secretary, California Council on Teacher Education, Caddo Gap Press, 3145 Geary Boulevard, PMB 275, San Francisco, California 94118; telephone 415/666-3012; email [alan.jones@ccte.org](mailto:alan.jones@ccte.org); website [www.ccte.org](http://www.ccte.org).

The next semi-annual conference of the California Council on Teacher Education will be:

*October 19-21, 2017, Kona Kai Resort, San Diego*



## **Officers of the California Council on Teacher Education**

### *Elected Officers*

President - Sharon Russell, CalStateTEACH (2018)  
President-Elect - Virginia Kennedy, California State University, Northridge (2018)  
Vice-President for AACTE - Linda Hoff, Fresno Pacific University (2018)  
Vice President for ATE - Susan Westbrook, California Federation of Teachers (2018)  
Past President - Juan Flores, California State University, Stanislaus (2016)

### *Elected Members of the Board of Directors*

Monica Boomgard, California State University, Northridge ((2020)  
Donald Cardinal, Chapman University (2019)  
Cynthia Geary, University of La Verne (2018)  
Victoria Graf, Loyola Marymount University (2020)  
Deborah Hamm, California State University, Long Beach (2019)  
Nicol Howard, University of Redlands (2020)  
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Raina Leon, Saint Mary's College of California (2018)  
Pia Wong, California State University, Sacramento (2019)

### *Editors and Staff*

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Co-Editors of *Issues in Teacher Education* - Bradley Porfilio, Seattle University  
& Richard Kahn, Antioch University Los Angeles  
Editor of *Teacher Education Quarterly* - Mary Christianakis, Occidental College  
Executive Secretary - Alan H. Jones, Caddo Gap Press

## **Semiannual Call for Proposals for Presentations at CCTE Conferences**

The California Council on Teacher Education (CCTE) invites submission of proposals which address: (1) Research related to teacher education, including policy issues, classroom-based issues, teacher effectiveness, or other related topics; (2) Projects or programs reflecting best practice; and (3) Other innovative sessions related to teacher education. Proposals are invited for several diverse formats: presentations, roundtables, demonstrations, interactive sessions, and poster sessions.

**General Procedures:** CCTE is interested in receiving proposals from faculty directly involved in teacher education programs, school district personnel engaged in teacher development efforts, and graduate students conducting research related to teacher education.

**How To Submit Proposals:** Go to <https://goo.gl/forms/LXEEEIjBhHuiBC4r2> to complete the online proposal submission with the following information: proposal title; lead author name; affiliation; address; work and home telephone numbers; and email addresses; along with an indication of whether the proposal focuses on research, practice, or policy analysis; and the preferred session format (traditional, roundtable, or poster presentation). Then email your blinded proposal as a Word file attachment to Cynthia Geary at [cgeary@laverne.edu](mailto:cgeary@laverne.edu)

**Content of the Proposal:** Include the following: A brief overview of the study/project/program session including purpose/objectives, theoretical framework, methods, data source, results/conclusions/points of view, and significance to the field of teacher education.

**Criteria for Selection:** The criteria are: the proposal contributes to the knowledge base of preservice and inservice teacher education; the proposal is methodologically or theoretically sound; the proposal format is well organized and clearly described; and the proposal clearly states its significance for teacher educators.

**Upcoming Deadlines:** The deadline for proposals for spring conferences is January 15 of the year of the conference. The deadline for proposals for fall conferences is August 15 of the year of the conference.

**Questions:** Questions may be addressed to the chair of the CCTE Research, Policy, and Practice Committee, Cynthia Geary. e-mail: [cgeary@laverne.edu](mailto:cgeary@laverne.edu)



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