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MAINSTREAM TEACHERS LEARNING TO

TEACH ENGLISH LANGUAGE LEARNERS:

UNCOVERING THE SYSTEMS OF TEACHER PROFESSIONAL LEARNING

A DISSERTATION

Submitted to the Faculty of

Montclair State University in partial fulfillment

of the requirements

for the degree of Doctor of Philosophy

by

ALMA MOREL

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Upper Montclair, NJ

May 2019

Dissertation Chair: Dr. Ana María Villegas

MONTCLAIR STATE UNIVERSITY THE GRADUATE SCHOOL DISSERTATION APROVAL

We hereby approve the Dissertation

MAINSTREAM TEACHERS LEARNING TO

TEACH ENGLISH LANGUAGE LEARNERS:

UNCOVERING THE SYSTEMS OF TEACHER PROFESSIONAL LEARNING

of

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Candidate for the Degree:

Doctor of Philosophy

Gradua	te Program:
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ABSTRACT

MAINSTREAM TEACHERS LEARNING TO TEACH ENGLISH LANGUAGE LEARNERS: UNCOVERING THE SYSTEMS OF TEACHER PROFESSIONAL LEARNING by Alma Morel

In this qualitative study, I followed three teachers as they participated in a sheltered English instruction professional learning initiative planned and implemented by their school district for purposes of preparing middle school science and social studies teachers to teach English language learners (ELLs). I explored the professional learning process of these teachers and how the ideas to which they were exposed in the professional learning initiative moved into their classroom practices, if at all. The study was guided by a complexity perspective, from which teacher professional learning was conceptualized as emerging from nested systems. In general, the study sought to uncover the systems comprising the overall system of teacher learning and their elements as they interact with one another, combining in complex and unpredictable ways to enable or constrain teacher learning and the transformation of classroom practice. Specifically, I sought to find research-based answers to the following question: What do three middle school mainstream teachers seem to gain from professional learning opportunities focused on sheltered English instruction, and how do those insights appear to play out in their practice?

Findings were presented as three themes, each giving nuanced insight into the processes of teacher learning and change: (1) walking in their students' shoes and attending to the "deeper things" rather than focusing solely on "English language learning;" (2) being content area and language teachers simultaneously: (not) knowing what to do with language learners' English

proficiencies; and (3) from the known to the new: refining the already-in-place and trialing the not-yet-in place for the benefit of ELLs and other students.

Keywords: professional development, mainstream teachers, English language learners

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DEDICATION

I dedicate this dissertation to three strong women from my family who through their actions helped me get to this moment. To my mother, Julia Báez, may she rest in peace, who continuously stressed the importance of an education. She modeled for me what being a strong, independent woman is, and promoted the importance of a strong work ethic and drive towards a better life. To my maternal grandmother, Luz Natal, may she rest in peace, who without knowing helped improve my vocabulary with our endless games of Scrabble, which began when I was 8-years old. She always had kind, supportive, and encouraging words for me and also encouraged me to further my education. Lastly, to my aunt Rosa, who we affectionately call Titi Cochi. I will be forever appreciative that during a difficult time in my life she opened her home to me, providing me with a safe and supportive environment to live in. There are not enough words to fully express my gratitude, love, and appreciation for everything they each contributed to making me the person I am.

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PREFACE

One of the readings that made the most profound impression on me during my doctoral studies was Opfer and Pedder's *Conceptualizing Teacher Professional Learning* (2011), an article in which the authors draw on complexity thinking to explain teacher learning and change. Admittedly, the first time I read this article, I had difficulty understanding what I had read. Luckily, the article was also assigned in a few other classes, although used for different purposes each time (e.g., example of a literature review, approaches to understanding teacher learning). In one of those courses the professor instructed us to read the piece with the purpose of exploring how complexity thinking, as used by Opfer and Pedder, framed the reader's understanding of the problems of teacher learning and change. It was through this reading assignment and subsequent class discussion, and perhaps because I had already read the article multiple times that I began to more deeply grasp Opfer and Pedder's rich conceptualization of teacher professional learning.

The Opfer and Pedder reading was closely aligned with my research interests, which have always been situated in the teacher professional learning domain. Specifically, I have been interested in using professional learning as a mechanism to induce educational change by enabling teachers to adopt more reform-minded instructional practices. In my past professional roles as school and district administrator I was often tasked to develop, organize, and facilitate professional learning activities for teachers. My goals in developing these experiences was to ensure that the ideas introduced in these activities were consistent with current thinking about teaching and learning aligned with policy reform efforts. I also wanted to ensure that these activities were also meaningful and relevant to the teachers, allowing them to learn new practices, and then faithfully enact them in their classrooms. Over the years, it both concerned and perplexed me that some of the practices introduced in these professional learning initiatives were enacted in one teacher's classroom but not in another teacher's class, considering that both

had experienced the same professional learning opportunities. It was my expectation that if I provided teachers with theoretically grounded and carefully crafted learning opportunities, and they seemed to understand the targeted pedagogical ideas and practices, the teachers would all use them in their respective classrooms. The uneven results I observed frustrated me because I invested considerable time, energy, and resources into developing these professional learning experiences. Opfer and Pedder's work gave me a window into understanding those uneven results. They helped me realize that I was working under the flawed assumption that there is a cause and effect, linear relationship between professional development experiences and teacher learning and classroom change, all the while ignoring the powerful influence that the context within which teachers work exerts on their practices.

According to Opfer and Pedder, teacher learning and change is a complex system that occurs within a set of nested systems (Davis & Sumara, 2006), including the individual teacher herself, the school in which she teaches, and the teacher professional learning activity she experiences. These systems interact with one another in recursive and dynamic ways to shape teacher professional learning and change. In the view of these scholars, understanding and supporting teacher learning and subsequent change in classroom practices demands attention to specific elements in those nested systems that either support or hinder the desired change in practice. The idea that teacher professional learning is contextually situated was also reinforced by my reading of other scholars (e.g., Anderson, Greeno, Reader, & Simon, 2000; Avalos, 2011; Borko, 2004; Clarke & Hollingsworth, 2002; Jurasaite-Harbison & Rex, 2010). Once I understood this, I knew that my dissertation would incorporate a systems approach; one respectful of the complexity of teacher learning and change in real settings. Furthermore, this approach allows one to examine how teachers involved in a series of professional learning

activities implement (or not) the ideas and practices to which they were exposed; and identify factors in their specific context that facilitated or hindered the teachers' use of those ideas in their classrooms. In so doing, my hope is to contribute to the field of teacher professional development a better understanding of the dynamic mechanics of contextual influences on teacher learning and change, and develop concrete suggestions about how to thoughtfully plan professional learning opportunities for teachers that take into consideration the nested contextual conditions in which teachers work.

After developing this broad conceptual terrain for my dissertation study, a second major step—one more practical in nature—was to identify professional development experiences accessible to me, considering that while I previously worked in a school district that gave me access to such experiences, I recently had accepted a new position with the Northeast State (pseudonym) Department of Education and no longer had direct involvement with teacher professional learning. I recalled that the Northeast State Department of Education offered a three-day training-of-trainers program for representatives from school districts and charter schools interested in organizing and facilitating their own professional learning initiatives to cultivate the capacity of their teaching staff to instruct English language learners, a rapidly growing student population across the state. Clearly, this state sponsored training-of-trainers program was a fruitful venue within which to identify potential school districts for my study. Not only would it afford me the opportunity to find a site within which to explore the dynamics of professional learning and change, but the substantive focus of the training-of-trainer program on preparing teachers for ELLs addresses a glaring gap in both research and practice. This gap is, in short, concerned with the preparation of mainstream teachers to teach ELLs (Ballantyne, Sanderman, & Levy, 2008; García, Arias, Murri, & Serna, 2010; Genesee, Lindholm-Leary,

Saunders, & Christian, 2006; Knight & Wiseman, 2006; Lucas, Strom, Bratkovich, & Wnuk, 2018; Samson & Collins, 2012). This topic is also of personal interest to me since as a U.S. born child in a home where Spanish was frequently used for communication, and my early school experience resembled that of students who are now identified as ELLs. As such, I communicated with Mr. Jones (pseudonym), who also worked at the Northeast State Department of Education and was responsible for facilitating the ELL-focused training-of-trainers program, to discuss my developing research idea with him. Luckily, Mr. Jones responded favorably to my idea, seeing it as an opportunity to learn more about the application of ideas presented in the state's three-day professional development initiative in actual practice, and perhaps gleaning from these possible applications and their outcomes for making changes in future sessions.

Thus, the subsequent chapters in my dissertation detail my dissertation journey. Chapter one gives the reader information about the importance and need to educate and support mainstream teachers' work with ELLs by contextualizing and situating the study within the broader educational field. The chapter concludes with the research question that guided the study. Chapter two discusses the relevant scholarly literature. One strand in this review of teacher professional learning literature focused broadly on what is known about professional learning experiences for practicing teachers, and the other focused more specifically on professional learning experiences for mainstream teachers of ELLs. This second chapter also provides an overview of the conceptual framework that guided my investigation. The third chapter details the methodology used in my study, explains the methodological decisions I made, describes the selection of a research site and teacher participants, summarizes the data collection strategies used, and describes data analysis methods employed. Chapter three also details the steps taken to enhance the credibility and reliability of the study. Chapter four offers the reader a

detailed description of the context for this study, giving attention to relevant demographic and policy developments at the state level, the district that served as the larger study site, the professional learning experiences study participants engaged in, and the participating teachers themselves as well as their respective school and classroom contexts. Chapter five presents and discusses the findings from this investigation. The final chapter—chapter six—summarizes the main ideas I learned from my inquiry and offers recommendations for future research and practice.

CHAPTER ONE: PROBLEM STATEMENT

The shift from a manufacturing to a global, knowledge based-economy that has occurred over the past 50 years in the United States and other developed nations, but most palpable since the onset of the 21st century, has profoundly shaped the educational systems of these countries (Cochran-Smith & Villegas, 2015). Around the early 1990s, the term "knowledge-based" economy began to be used with increasing frequency to describe an economy in which "knowledge" was viewed not just as a commodity, but as an integral driver for economic development (Gee, Hull, & Lankshear, 1996). While basic literacy and numeracy skills were considered sufficient for adults to successfully participate in an industrial-based economy, where the majority of jobs required manual labor or in-person service skills, to succeed in a knowledgebased and technological world, all workers—not just some—are expected to have skills in evaluating and using information, framing and solving problems, and collaborating with others to develop new ideas (Darling-Hammond, 2010). Beyond the need for these different skill sets, Lankshear (1997) argued that this economy, which he termed "new capitalism," had greatly influenced conceptions about language processes and literacy practices. Not surprisingly, schools have experienced growing pressure to reform their practices in line with economic shifts noted over the past few decades.

Concerned largely with improving schools to keep the U.S. competitive in the new global economy, reformers in this country have called for a variety of school changes including raising academic standards in all content areas (Coburn, Hill, & Spillane, 2016), but especially in science and mathematics, disciplines considered vital to the health of a knowledge economy (Supovitz, Mayer, & Kahle, 2000); revising the school curriculum to enable students to attain new academic standards and ensure that instruction is consistent with those standards or what

some educators have called standards-based instruction (Jenkins & Agamba, 2013; Porter, McMaken, Hwang, & Yang, 2011); teaching students for understanding, rather than engaging them in mere memorization of facts, to enable them to transfer ideas learned in schools to settings outside school (Pellegrino & Hilton, 2012); using technology as an instructional tool and promoting students' facility with technology (Barron, Kemker, Harmes, & Kalaydjian, 2003); and using instructional practices that give the growing number of English language learners (ELLs) enrolled in U.S. schools access to the curriculum while simultaneously promoting their proficiency with English in order to facilitate their integration in the new economic order (Bunch, 2013; de Jong & Harper, 2005).

The study reported herein focused on this last-mentioned school reform—improving instructional practices for ELLs. Reports show that the student population in U.S. public elementary and secondary schools has become more linguistically diverse than ever before (Kena, Hussar, McFarland, de Brey, Musu-Gillette, Wang, Zhang, Rathbun, Wilkinson-Flicker, Diliberti, Barmer, Bullock Mann, & Dunlop Velez, 2016; Samson & Lesaux, 2015). In 2013, for example, more than 4.5 million English learners were enrolled in U.S. schools, accounting for over 10% of total enrollments (Kena et al., 2016). While ELLs are concentrated in some states—such as California, Colorado, Nevada, New Mexico, and Texas—their presence has been growing in states that historically have not served large numbers of ELLs such as Georgia, Nebraska and North Carolina (Kena et al., 2016; Camarota & Ziegler, 2015). At present, ELLs living in the U.S. are mostly from Latin America and Asia and bring with them myriad, complex experiences with poverty and oppression, parental education levels, school attendance, academic preparation, and literacy (Cadiero-Kaplan & Rodríguez, 2008). These factors could help explain

the sizeable achievement gap that exists between ELLs and their non-ELL peers (Hemphill & Vanneman, 2011; Samson & Lesaux, 2015).

While in the past ELLs were taught mostly in bilingual and English-as-a-second language (ESL) programs by specialists in those fields until considered sufficiently proficient in English to benefit from full instruction in English without language support, they are now increasingly placed in non-specialized or "mainstream" classes for a variety of reasons, including a shortage of bilingual and ESL teachers (American Federation of Teachers, 2004); and the adoption of English-only educational policies by many states since the late 1990s, which has virtually eliminated the use of languages other than English in schools (e.g., California Proposition 227, Arizona Proposition 203) and has led to the dismantling of many bilingual education programs (Harper & de Jong, 2009). As a result, "mainstream teachers" across the nation are now finding a growing number of ELLs in their classrooms (Lucas & Grinberg, 2008; Lucas, Villegas, & Freedson-Gonzalez, 2008; Samson & Collins, 2012). As used in this study, mainstream teachers are those who instruct in English and are either specialists in a content area in middle and secondary schools or generalists in elementary schools. Lamentably, because they previously were not expected to teach ELLs, most mainstream teachers lack preparation for teaching this student population.

Making matters more complex, the Common Core State Standards (2010), already adopted by 42 states (Common Core State Standards Initiative, n.d.), have dramatically raised the academic expectations and language demands for all students, including ELLs. For example, schools are now expected to teach students to support claims with logical reasoning, synthesize complex ideas, compare results, explain concepts, and develop arguments based on evidence. While these new requirements are challenging for all students, they can be daunting for ELLs

who must perform these academic tasks while learning conversational and academic English simultaneously. Thus, teaching ELLs in mainstream classrooms is highly complex and demands sophisticated pedagogical expertise. Adding further to an already complex situation, beginning with the No Child Left Behind Act of 2001, which was recently reauthorized as the Every Student Succeeds Act (ESSA) of 2015, the Federal government has applied increasing pressure on schools and teachers by holding them accountable for student performance on standardized tests, including ELLs who are no longer excluded from testing requirements as they were prior to 2001 (Echevarría, Short, & Powers, 2006; Harper & de Jong, 2009; Ovando, 2003; Salomone, 2012).

Because preservice teacher education historically did not provide mainstream teachers with any preparation whatsoever for teaching ELLs (de Jong, 2013; Lucas & Grinberg, 2008; Samson & Collins, 2012), a practice that continues even at present in many preservice programs (Cochran-Smith & Villegas, 2015), it is not surprising that the vast majority of practicing teachers report feeling unprepared to teach ELLs (Ballantyne et al., 2008; Gándara, Maxwell-Jolly, & Driscoll, 2005; Lucas, 2011; Reeves, 2006; Samson & Collins, 2012). This lack of readiness among mainstream teachers coupled with current accountability pressures have made school districts increasingly responsible for developing the capacity of their teaching staff to teach ELLs (Gándara et al., 2005; Hopkins, Lowenhaupt, & Sweet, 2015; Lucas & Villegas, 2013; Samson & Collins, 2012). In fact, professional development has come to be seen by some scholars as a central vehicle for implementing desired educational reforms of all types (Borko, 2004; Darling-Hammond, Wei, Andree, Richardson, & Orphanos, 2009; Desimone, Smith, & Phillips, 2013; Garet, Porter, Desimone, Birman, & Yoon, 2001; Gulamhussein, 2013), including

the preparation of mainstream teachers to teach ELLs (Brooks & Adams, 2015; Choi & Morrison, 2014; Hopkins et al., 2015; McIntyre, Kyle, Chen, Muñoz, & Beldon, 2010).

Given the pivotal role that professional learning is thought to play in supporting desired school reforms, researchers have devoted considerable attention over the past two decades to identifying features of professional learning activities that support teacher learning and subsequent change in classroom practices (Opfer & Pedder, 2011). In general, this line of research offers some evidence that teachers tend to learn and change their classroom practices when professional development is sustained over time and is intensive in nature (Banilower, Heck, & Weiss, 2007; Garet et al., 2001; Penuel, Gallagher, & Moorthy, 2011; Supovitz et al., 2000; Wolbers, Dostal, Skerrit, & Stephenson, 2017; Yoon, Duncan, Lee, Scarloss, & Shapley, 2007), is relevant to teacher practice and contexts (Armour & Makopoulou, 2012; Flores, 2005; Penuel, Fishman, Yamaguchi, and Gallagher, 2007; Penuel et al., 2011), is ongoing and includes follow-up on-site support (Johnson, Kahle, & Fargo, 2007; Supovitz & Turner, 2000), allows for teacher collaboration and collective participation (Armour & Makopoulou, 2012; Garet et al., 2001; Main, Pendergast, & Virtue, 2015; Penuel et al., 2007; Penuel et al., 2011; Wolbers et al., 2017), and offers varied learning opportunities that engage teachers actively for purposes of increasing their content and pedagogical content knowledge (Armour & Makopoulou, 2012; Garet et al., 2001; Lieberman & Pointer Mace, 2008; Penuel et al., 2011; Putnam & Borko, 2000).

While the search for features of successful professional development (that is, professional development that leads to desired teacher learning outcomes) has the potential to improve practice by offering guiding principles for the design of professional learning initiatives, critics have pointed out that adherence to the identified features does not consistently produce the

desired teacher practices (Clarke & Hollingsworth, 2002; Opfer & Pedder, 2011; Putnam & Borko, 2000). According to Opfer and Pedder (2011), this problem stems from the simplistic conception of teacher learning and change that informs the features-oriented line of research on professional development, which tends to examine the effects of those features (e.g., intensity of professional learning opportunities, use of active learning activities, presence of on-site support, collaborative professional learning activities, opportunities for reflection) as isolated factors, without attending to elements and conditions in the broader context within which teacher learning occurs that work jointly to mediate or shape the outcomes of professional development (Clarke & Hollingsworth, 2002; Opfer & Pedder 2011; Rahman, Hoban, & Nielsen, 2014). Such elements and conditions include teacher beliefs (e.g., sense of efficacy in her general teaching ability or ability to implement the targeted instructional strategy, disposition regarding direct instruction and/or student centered instruction, view regarding students' ability to learn); teacher prior knowledge (e.g., prior preparation for or exposure to the instructional strategy targeted by the professional development initiative); student response to the targeted instructional strategy (e.g., receptivity or resistance to the new practice); school leadership (level and type of administrative support for teacher learning); and school culture (e.g., negative school climate in the form of peer resistance or lack of commitment to sought pedagogical change).

Opfer and Pedder (2011) specifically cautioned against the linear, process-product thinking embedded in conventional models of teacher learning and change that conceive of these processes as a direct outcome of professional learning activities; that is, the belief that professional development directly results in teachers learning new pedagogical strategies to be later implemented faithfully in their teaching, ultimately producing improved student learning. In brief, Opfer and Pedder argued that this conventional perspective on professional development

is flawed because it fails to elucidate the "multicausal and multidimensional nature of teacher learning" (2011, p. 394).

A study by Barlow, Frick, Barker, and Phelps (2014) illustrates the features-oriented line of research and its inherent problems, as seen by researchers who view learning to teach from a complex perspective. Barlow and colleagues studied the effectiveness of a professional development initiative focused on increasing secondary teachers' science content knowledge and learner-centered pedagogical practices. The researchers noted that the professional learning initiative incorporated key characteristics (content focus, active learning, collective participation, duration, and coherence) identified by Desimone (2009) as effective features of professional development that positively influence teacher learning and practices. Barlow and colleagues found that the teacher participants varied in their implementation of the intended outcome, which "revealed a complicated relationship between internal and external challenges" (p. 24). The internal challenges were teacher beliefs, disposition regarding inquiry-based learning; while external challenges included student response to teacher practice and misalignment with pacing of the district curriculum with the desired inquiry-based instructional practices. Although, the professional learning initiative included features previously reported as related to teacher learning, the researchers failed to consider contextual factors that may have influenced teacher learning. In the view of Opfer and Pedder (2011), Clarke and Hollingsworth (2002), Clarke and Collins (2007), and Collins and Clarke (2008), all of whom take a complexity perspective on teacher learning, the results of this study can only be seen as partial and incomplete.

Because the practice of placing increasing numbers of ELLs in mainstream classrooms is relatively new, research on professional development designed specifically to cultivate mainstream teachers' ability to teach ELLs is still in its infancy. Examination of this limited but

expanding body of research reveals that mainstream teachers are being prepared to use a variety of pedagogical approaches to teach ELLs. The majority of studies have focused on preparing participating teachers to use sociocultural approaches that emphasize apprenticing ELLs into academic practices (e.g., Brooks & Adams, 2015; Choi & Morrison, 2014; DaSilva Iddings & Rose, 2012; Green, Gonzalez, Lopez-Velasquez, & Howard, 2013; Hardin, Lower, Smallwood, Chakravarthi, & Jordan, 2010). For instance, DaSilva Iddings and Rose (2012) conducted a year-long study with two fourth grade teachers from a rural school that had an influx of immigrant students. The teachers did not understand, nor were they prepared to meet the linguistic and academic needs of these students. The researchers met weekly with the teachers to help them improve ELLs' reading comprehension by helping the teachers understand the facilitative role of ELLs' native language and leverage it as a resource to support ELLs' English language development and their reading comprehension. The researchers also worked with the teachers to understand the sociocultural factors that influence and mediate ELLs' learning.

Other studies have examined the preparation of teachers to use systemic functional linguistic (SFL) to guide ELLs in their classes through the analysis of linguistic features of academic texts and tasks (Aguirre-Muñoz, Park, Amabisca, & Boscardin, 2008; Brisk & Zisselberger, 2011; Schleppegrell, Achugar, & Oteíza, 2004). This approach is evident in the in the Aguirre-Muñoz et al. (2008) study where teachers attended a week-long professional development initiative guided by an SFL framework. Language Arts teachers were actively engaged, collaboratively developed lesson plans, and collectively reviewed student work with the purpose of improving teachers' instruction of genre writing. More specifically, the instructional approach advocated in the professional development looked to improve teachers' ability to consider and explicitly teach the linguistic features and grammatical functions of

literary analysis tasks for different genres in an effort to develop and support ELLs' academic language, and the linguistic choices they make in their writing. Aguirre-Muñoz and colleagues found the professional development helped improve two-thirds of the teachers' instructional practices and improved the quality of feedback teachers provided to ELLs, which was specific and targeted to improve their writing.

Still others have investigated the results of preparing mainstream teachers to use sheltered instruction to teach ELLs by which they purposefully integrate language and content teaching while using a variety of scaffolding strategies to support student learning (Crawford, Schmeister, and Biggs, 2008; McIntyre et al., 2010; Short, Echevarría, & Richards-Tutor, 2011; Short, Fidelman, & Louguit, 2012). To illustrate, Crawford et al. (2008) conducted a study to examine the effects of a two-year professional development initiative on teachers use of sheltered instruction strategies. Twenty-three Pre-K through fifth grade teacher participants, which included both ESL and mainstream teachers, increased their understanding and use of sheltered instruction, as measured by the Levels of Use Interview protocol and classroom observations. The teachers reported a change in their perception of ELLs, increased awareness of ELL needs, and reported a desire to continue learning and refining their skills to differentiate instruction to meet the needs of their ELL students.

Interestingly, the professional development research on preparing mainstream teachers for linguistic diversity overwhelmingly reflects mostly conventional models of teacher learning that rely on linear, process-product thinking criticized by Clarke and Hollingsworth (2002), Putnam and Borko (2000), Opfer and Pedder (2011), and Rahman et al. (2014). I was able to locate only a few studies, such as those conducted by Johnson and colleagues (e.g., Johnson, 2007; Johnson, 2011; Johnson, Bolshakova, & Waldron, 2016; Johnson & Fargo, 2010; Johnson

et al., 2007; Johnson & Marx, 2009) that incorporated a systems approach to explore how professional learning opportunities helped middle school mainstream teachers' become culturally relevant science teachers of Latinx students, many of whom were ELLs. Broadly speaking, to improve teacher learning and practice, Johnson and colleagues developed a professional development model focused on factors or elements they believed shaped teacher learning in an urban setting. For instance, in the study by Johnson and Fargo (2010) the authors stated that their teacher learning model "addresses teachers' personal, professional, and social development, climates of schools, needs of diverse students" (p. 9) through sustained and collaborative participation of all the science teachers in the participating schools with the intent of facilitating teacher learning. While the authors did not explicitly adopt a complexity and/or systems thinking approach, they nonetheless recognized that teacher learning and change are complex processes which are influenced not just by features of the professional development effort in which teachers participate, but are also shaped by elements and conditions inherent in teachers lives and work settings.

The study reported herein was designed to extend the professional development research literature by breaking with the linear, process-product model of teacher learning that dominates scholarship on this topic and adopting instead an alternative conception that attends to what Opfer and Pedder (2011) described as the "multicausal and multidimensional nature of teacher learning" (p. 394). Guided by complexity thinking, this study seeks to explore teacher learning and change as occurring within nested systems—the teacher and her beliefs, prior knowledge, and experiences; the teacher learning activities and practices; the classroom, school and district contexts; and the wider state context. From a complexity perspective, components or elements of each system interact and combine in different ways to shape teacher learning and change.

This study also sought to expand our understanding of teacher professional learning focused specifically on sheltered instruction, a pedagogical approach that shows promise for improving the education of ELLs in mainstream classes (Brancard & QuinnWilliams, 2012; Carrejo & Reinhartz, 2014; Crawford et al., 2008; Echevarría, Richards-Tutor, Canges, & Francis, 2011; Echevarría et al., 2006; Green et al., 2013; Lys, Ringler, & O'Neal, 2009; McIntyre et al., 2010; Short et al., 2012).

The Study

The study was conducted in a state in the Northeastern region of the U.S. where ELLs have a major presence in elementary and secondary public schools. According to the latest figures reported by Northeast State (pseudonym) Department of Education, 80,678 ELLs were enrolled in Pre-K through high school in the 2017-2018 school year, accounting for 5.9 percent of the overall student population that year. Since 2010, the number of ELLs increased by approximately 26,000 students, a nearly 32 percent growth in their overall enrollment over only seven years. Collectively, these students spoke 315 languages, with Spanish, Arabic, and Chinese being the three most frequently spoken. ELLs were widely distributed throughout the state, present in five of every six school districts.

According to regulations approved by the Northeast State Department of Education in 1974, districts with 20 or more students of the same language are expected to provide those students a full-time bilingual program (Northeast State, 2017). However, districts can obtain a waiver for this requirement and offer one of several instructional alternatives for ELLs, if they can demonstrate it is impractical to provide a full-time bilingual program due to the students' age range, grade span, and/or geographic location spread. Because the ELL student population is widely dispersed throughout the state and numerous languages are represented, during the 2017-

2018 school year, 178 school districts obtained waivers to providing a full-time bilingual program and implement alternatives instead, such as a part-time bilingual program, a sheltered English instruction program, or a high-intensity ESL program (Northeast State, 2018). As mentioned above, sheltered English instruction (also called sheltered instruction in the literature) is an approach to teaching ELLs that integrates language and content instruction, builds on students' prior knowledge, and makes wide use of scaffolding strategies to support students' learning (Markos & Himmel, 2016; Short et al., 2011; Sobul, 1995).

Following the reauthorization of the Elementary and Secondary Education Act (ESEA) in 2015, each state was required to submit a plan to the U.S. Department of Education outlining student accountability measures, and the identification and support of low-performing schools. ESSA required states to include two additional student accountability measures, one related to an indicator of school quality or student success, and the other, which is most relevant to this study, is the monitoring of ELLs English language proficiency (Education Commission of the States, 2016). Under NCLB, the federal government held schools accountable based on their ability to meet adequate yearly progress targets for students' academic proficiency and graduation rates, but only those schools receiving Title III funds were required to show evidence of ELLs' progress. Specifically, Title III recipients were expected to meet Annual Measurement Achievement Objectives (AMAOs) focused on ELLs' progress in learning English, their attainment of English proficiency, and their academic achievement on content area tests. In contrast, ESSA broadened the impact of this new requirement of measuring ELLs English language proficiency by applying it to all schools/districts receiving Title I funding, a much larger number than those receiving Title III moneys (Council of Chief State School Offices, 2016; Fránquiz & Ortiz, 2016). ESSA provides states greater flexibility in determining the

indicators and targets used to measure the performance of schools as part of their accountability systems. Using this new flexibility, the plan Northeast State adopted broadened the indicators in its accountability system to include: academic proficiency, graduation rates, academic growth on statewide tests, progress toward English language proficiency, and chronic absenteeism rates. The state reduced the "N" size for accountability purposes to 20 from the 30 previously required under NCLB. These changes have substantially increased the number of schools/districts in Northeast State that are now held accountable for demonstrating ELLs' progress. Furthermore, while Northeast State's ESSA plan considers the initial English language proficiency level of ELL students, schools/districts in the state are given up to five years from the date an ELL student is first enrolled to achieve a composite English language proficiency score of 4.5 on the ACCESS 2.0 test (an annual assessment aligned to the WIDA English Language Development Standards widely used to monitor students' progress in learning academic English (Northeast State ESSA plan, 2017). It should be noted that a composite score of 4.5 is one of the criteria used to exit ELLs from English language services or programs. Schools or districts who struggle to meet academic proficiency or growth targets, which include ELLs English language proficiency targets, are identified as low-performing schools; as such, the plan submitted by the Northeast State Department of Education, has placed increasing pressure on schools in the state to provide appropriate services to develop ELLs' English language.

To support districts and schools in developing mainstream teachers' capacity to teach academic content to ELLs, the Northeast State Department of Education partnered with a Regional Assistance Center to design and implement a three-day training-of-trainers program.

As described in the training-of-trainers Handbook (Northeast State, 2013), this initiative focuses on SEI strategies and builds on a sociocultural view of teaching and learning. Representatives of

districts that apply and are selected for participation in the training-of-trainers program must commit to designing a plan that includes a minimum of 15-hours of professional development to enable mainstream teachers in their local settings to use SEI strategies to teach ELLs in their classes.

Using the nested systems perspective advocated by Opfer and Pedder (2011) to deliberately examine the complexities entailed in teacher learning, this study explored the unfolding of a particular professional development initiative designed by representatives from one of the districts that participated in the Northeast State Department of Education's training-of-trainers program in the Summer of 2017. Specifically, I sought to answer the following question: What do three middle school mainstream teachers seem to gain from professional learning opportunities focused on sheltered English instruction, and how do those insights appear to play out in their practice?

CHAPTER TWO: LITERATURE REVIEW

As discussed in the previous chapter, the study proposed herein aims to examine the professional learning of middle school mainstream social studies and science teachers who participated in their district's professional learning initiative designed to develop their capacity to teach ELLs. For reasons previously explained, mainstream teachers—a group that historically has not received formal preparation to teach ELLs—are now finding a growing number of ELLs in their classrooms. Yet, the vast majority of these teachers report low self-efficacy with respect to teaching academic content to students who are still developing proficiency with English (Ballantyne et al., 2008; Gándara et al., 2005; Lucas, 2011; Reeves, 2006; Samson & Collins, 2012). As such, school districts have become increasingly responsible for developing the capacity of their teaching staff to teach linguistic diverse students. In this chapter, I discuss the scholarly literature relevant to the proposed study and present the conceptual framework that informs and shapes it. In brief, the study draws on two separate bodies of scholarly works—one focused broadly on professional learning for practicing teachers, or what has traditionally been referred to in the literature as teacher professional development, and the other focused more specifically on the professional learning of mainstream teachers for teaching ELLs.

The chapter is comprised of three sections. In the first, I examine works on teacher professional learning, giving focused attention to features of professional development considered effective and the role of professional development in teacher learning and use of ideas learned in their practice. This is followed by a review of the research on professional development initiatives designed to cultivate mainstream teachers' knowledge, skills, and dispositions to teach ELLs in their classrooms. The latter is a more recent area of scholarship that has developed in response to the growing numbers of ELLs enrolled in U.S. schools and

changing policies that now favor the early mainstreaming of this student population. The final section presents the conceptual framework that guided my study, and which locates it within a particular theoretical orientation concerning teacher professional learning.

Teacher Professional Learning

Since the late 1990s, U.S. schools have experienced considerable pressure to reform their teaching practices in light of the goal of preparing students more efficaciously for the growing workforce demands of the 21st century (Darling-Hammond et al., 2009; Darling-Hammond, 2010; Hochberg & Desimone, 2010; Kasey 2018) and eliminate achievement gaps that have historically existed between White, middle-class (Standard) English speaking students and their non-mainstream peers, including language minority students (Aguirre-Muñoz et al., 2008; Fry, 2008; Ho & Kao, 2018; Hopkins, Thompson, Linquanti, Hakuta, & August, 2013). As previously discussed, the successful implementation of any educational reform depends largely on the ability of teachers to learn, adapt, and teach in ways that support the newly envisioned practices, and professional development has come to be seen as the central mechanism for supporting teacher learning and the incorporation of the targeted new practices in their teaching (Darling-Hammond, 2010; Desimone, 2009; Hochberg & Desimone, 2010). In fact, teachers' involvement in professional development activities is now considered an integral component to their professional growth throughout their career (Avalos, 2011; Beijaard, Verloop, Wubbels, & Feiman-Nemser, 2000; Guskey, 2002; Webster-Wright, 2009). Given the importance widely attributed to professional development in the context of school reform, researchers have focused considerable attention over the past two decades on studying the relationship between professional development, teacher learning, teacher change, and student learning outcomes. Much of this activity has centered on identifying features of professional development that

correlate with teacher learning and subsequent use of desired instructional practices in their classrooms. Before reviewing this research, a discussion of the recent shift in the literature regarding the use of the term *professional development* is in order.

Transitioning from Professional Development to Professional Learning

Professional development terminology has changed in recent years to reflect ideological changes regarding the role and purpose of professional development and the manner in which teachers experience these activities. While some contend that the use of "professional development" was an improvement over previously used terminology, such as "training," "inservice," and "staff development," the term nevertheless evokes images of teachers as passive learners and implies a deficit view of them. That is, "something must be done" to improve or remediate teachers (Easton, 2008; Labone & Long, 2016).

More recently, the term "professional learning" has appeared in the literature in place of professional development (Easton, 2008; Fullan, 2007; Mizell, Hord, Killion, & Hirsh, 2011; Webster-Wright, 2009). This shift signals a new way of thinking about teachers and their ongoing *learning*. That is, this orientation is underpinned by the assumption that teachers should take an active role in constructing their own learning through experiences that are based on actual needs (personal and organizational), have relevance to their daily practice and contexts, and are focused on improving student learning (Bostock, Lisi-Neumann & Colucci, 2016; Easton, 2008; Labone & Long, 2016; Lieberman & Miller, 2014; Stein, Smith & Silver, 1999; Webster-Wright, 2009).

As teachers give voice to their needs, they are actively creating learning opportunities, and, acting on this, often are engaging in collaborative inquiry and reflection. Lieberman and Miller (2014) noted that professional learning, whether formal or informal, is not bound to the

traditional workshop model that involves attending sessions and passively listening to a presentation, but rather can take place through networks, coalitions and partnerships (e.g., Coalition for Essential Schools, National Writing Project); and the increased use of multimedia and technology provide additional opportunities for professional learning. Jones (n.d.), a professor from the University of Wales-Trinity Saint David, usefully distinguished professional learning from professional development as follows:

Crucially, the essence of professional learning focuses less on the qualities or deficits of teachers and more on the need to make a difference for learners. Too often the process of professional development has focused on what the *teacher* needs to do rather than what and how *pupils* need to learn. So, to generate effective pupil learning we have to ensure purposeful *teacher learning* and then translate this into effective practice (para. 4).

Along similar lines, Knobel and Kalman (2016) noted that "professional learning," understood from a sociocultural perspective, describes learning situated within the learner's context (e.g., classroom, schools, communities) and professional experience. As such, a commitment to professional learning seeks to directly support teacher learning and enrich teacher practice.

While the terms 'professional development' and 'professional learning' are often used interchangeably by practitioners, in this study I used professional learning when discussing those activities that move beyond the decontextualized, one-time workshop approach that place teachers in a passive learning role. As used here, professional learning can be derived from informal and/or formal opportunities that promote teacher learning (e.g., knowledge, methods, skills) while engaging teachers in reflecting on and rethinking their instructional practices to make changes that will benefit their students' learning. However, when the literature I reviewed used the term "professional development," I included the term in my review here in this chapter.

Similarly, when study participants used "professional development" in their responses to my interview questions, I reported it as such (see Chapter Four).

Effective Features of Professional Learning

While there are different theoretical perspectives on and models about professional learning, some consensus nonetheless exists among researchers regarding characteristics or features of 'successful professional development' experiences (Banilower et al., 2007; Borko, Jacobs & Koellner, 2010; Desimone, 2009; Soine & Lumpe, 2014). An often-cited influential study by Garet et al. (2001) provided empirical support for a small number of features of effective professional development. In this U.S. based investigation, the researchers used a national probability sample of 1,027 teachers of mathematics and science to examine the relationship between six features of professional development previously identified in the literature as representative of "best practice" and self-reported changes in teacher knowledge and pedagogical practices. Garret and colleagues labeled three of the features they found as structural (referring to the design of the activity) and three as core (referring to the substance of the activity). The three structural features included the *form* of the activity, whether traditional (e.g., workshop, conference) or reform-oriented (e.g., coaching, study group, action research); the duration or contact hours and time span over which the activity took place (e.g., a single activity of short duration or a prolonged activity sustained over time); and whether or not the activity involved collective participation of teachers from a school, grade level and/or department. The three core features Garet et al. (2001) identified were content focus; that is, the extent to which the activity deepened teachers' content knowledge and enhanced their facility with pedagogical practices; engaged teachers through active learning activities; and reflected a

coherence between the professional development activities with teachers' contexts and professional goals and were aligned to state standards and assessments.

Using regression analysis, Garet and collaborators found that five of the six features tested for effectiveness improved teacher learning and resulted in changes in their classroom practices. Specifically, professional development activities that were sustained and intensive, promoted collective participation of teachers, engaged teachers in active learning, were focused on increasing teachers' content knowledge and facility with specific instructional strategies, and were coherent to teachers' daily lives typically resulted in improvements in teacher knowledge and skills as well as changes in instructional practices. Based on their findings, the researchers concluded that these five features of professional development activities exerted more influence on teacher learning and change than the sixth feature, *form of the activity*; although they noted that reform-oriented approaches (e.g., study groups, networks, coaching) seemed somewhat more likely to produce positive outcomes for both teachers and students than traditional approaches.

Subsequent studies (see Banilower et al., 2007; Desimone, Porter, Garet, Yoon, & Birman, 2002; Ingvarson, Meiers, & Beavis, 2005; Penuel et al., 2007) have provided additional empirical support for the findings reported by Garet et al. (2001). Expanding this line of research somewhat, more recent studies have identified an additional feature of professional development that correlates with teacher learning and change in classroom practices—offering participants follow-up and feedback in the context of their settings, including engaging them in discussions about their practice and in self-reflection and self-evaluation of their teaching (e.g., Archibald, Coggshall, Croft & Goe, 2011; Choi & Morrison, 2014; Desimone, 2009; Ingvarson et al., 2005; Labone & Long, 2016; Opfer & Pedder, 2011).

In a recent review of empirical research on effective professional development practices, Darling-Hammond, Hyler, and Gardner (2017) confirmed the features discussed above, expanded on one of those, and added a new one. They provided greater specificity about the follow-up support feature previously mentioned, which they labeled "coaching and expert support." As the authors explained, coaching and expert support can be offered to individual teachers, typically in their classrooms, by an instructional coach, an administrator, or an educator from outside the school. Alternatively, the coach can work with a larger group of teachers, guiding and facilitating discussions, peer observation debrief sessions, and/or collaborative analysis of student work. A critical element of this practice is meeting the needs of individual teachers by providing them with content expertise and evidenced-based practices. Darling-Hammond and collaborators also found that the use of models and modeling, previously not reported in the effective features of professional development literature, was supportive of teacher learning and change. This new feature involves giving teachers examples of best practices (e. g., model units of study and lesson plans, videos of classroom teaching demonstrating targeted instructional practice, samples of student work, and curricular samples.

Taking a somewhat different approach, other researchers have attempted to link effective features of professional development reported in the literature to improved student learning outcomes (e.g., Blank, de la Alas, & Smith, 2008; Desimone et al., 2013; Fishman, Marx, Best, & Tal, 2003; Polly, McGee, Wang, Martin, Lambert, & Pugalee, 2015; Yoon et al., 2007). However, this work has been inconclusive. As Yoon and colleagues (2007) explained, establishing the link between professional development and student achievement is extremely difficult given the multiplicity of factors that contribute to student achievement and the complexity of teacher learning and change. The complexity of teacher learning and change was

discussed in a report by Jacob and McGovern (2015), in which the authors assess the effectiveness of professional development in supporting teacher's professional growth. Based on data collected from teachers and administrators from three large public-school districts and a charter school network, the researchers concluded that despite a large investment of resources (e.g., money, time, personnel) in formal professional development, teacher improvement in professional practice was minimal and any improvements made were not easily causally linked to any specific professional development strategy or intervention (Jacob & McGovern, 2015). The authors noted:

Every development strategy, no matter how intensive, seems to be the equivalent of a coin flip: Some teachers will get better and about the same number won't. What separates them may be a host of highly individualized variables or a combination of many we have not yet pinpointed. (p. 22)

This statement gives credence to undertaking a complexity approach to teacher professional learning, one that aims to uncover the myriad of influencing elements that shape and mediate teacher learning. The conceptual framework I use to frame my study views teacher learning as emerging through numerous interactions between and among these influencing elements. I discuss the framework in greater detail later in the chapter.

Role of Professional Development in Teacher Learning and Change

The overriding ideal goal of professional development is to positively impact teacher learning and ultimately bring about a change in their teaching (Borko, 2004; Desimone, 2009; Hochberg & Desimone, 2010). This goal is underscored by Avalos' (2011) review of research focused on professional development published in the journal of *Teaching and Teacher Education* during the 10-year period from 2000 through 2010. In providing a synthesis overview

of this literature, Avalos classified the 111 identified articles according to their thematic emphasis. This activity resulted in four categories—professional learning, mediations through facilitation and collaboration, conditions and factors influencing professional development, and effectiveness of professional development. Avalos noted that despite differences in foci and geographical locations of where the work was carried out, at the core of these studies was an understanding that "professional development is about teachers learning, learning how to learn, and transforming their knowledge into practice for the benefit of their students' growth" (p. 10).

Along related lines, Hochberg and Desimone (2010) examined the role of professional development within the context of academic standards and accountability reform to build teachers' capacity to implement those standards. According to the authors, professional development played two critical roles, "the improvement of teachers' knowledge and the fostering of beliefs that are consistent with reform initiatives" (p. 91). The emphasis these scholars give to the role of beliefs in teacher learning and subsequent adoption of reform-minded practices has direct relevance to the study I propose to carry out given that many mainstream teachers have been found to hold deficit views of ELLs (Escamilla, 2006; Hutchinson, 2013; Mellom, Straubhaar, Balderas, Ariail, & Portes, 2018; Pappamihiel, 2007; Walker-Dalhouse, Sanders, & Dalhouse, 2009) and often believe that English-as-a-second-language teachers are responsible for teaching them, not mainstream teachers (Song & Samimy, 2015; Wade, Fauske, & Thompson, 2008; Yoon, 2008). If not challenged, these two beliefs could fundamentally compromise what mainstream teachers learn from professional development opportunities focused on teaching ELLs. As Hochberg and Desimone (2010) argue, the success of professional development depends on the ability of the learning experiences provided to bridge the gap between the desired student outcomes and teachers' knowledge, beliefs and practices.

While researchers agree that specific features of professional development can influence teacher learning and change, several scholars have pointed out that these two processes learning and change—are highly complex and cannot be explained by a small set of professional development features (Avalos, 2011; Borko, 2004; Clarke & Hollingsworth, 2002; Desimone, 2009; Kazemi & Hubbard, 2008; Kwakman, 2003; Webster-Wright, 2009; Wilson & Berne, 1999). For example, both Desimone (2009) and Borko (2004) acknowledged that general agreement exists regarding the features of effective professional development. However, Borko noted that understanding how teachers learn from professional development, or the impact professional development opportunities have on changing teachers' classroom practices are topics ripe for further research. Along related lines, Desimone (2009) aptly pointed out that relatively little is known about "how" teachers learn and change classroom practices. A major part of the problem, she explained, is the challenge of measuring these processes given their complexity and the different ways in which teacher learning is conceptualized in the literature (e.g., 'situative,' cognitive, sociocultural). Interestingly, Putnam and Borko (2000) observed that a shift toward a situative perspective on teacher learning was taking place in the field, one they equated with the fundamental shift from behaviorist to cognitive views of learning that occurred in teacher education in the 1980s. In a subsequent publication, Borko (2004) revisited her earlier thinking on this topic, extending it to include a sociocultural influence that acknowledged the need for teacher learning opportunities to be embedded in multiple contexts of formal learning (e.g., teachers engaged with colleagues, sharing their knowledge and experiences, and collaboratively solving problems of practice experienced in their own classrooms, thus allowing for the co-construction of new knowledge and understandings) and informal encounters (e.g., classroom interactions, discussions with colleagues). As Borko (2004) put it, to understand

teacher learning is to "study it within these multiple contexts, taking into account both the individual teacher-learners and the social systems in which they are participants" (p. 4). This situative, sociocultural perspective resonates with Opfer and Pedder's (2011) complexity perspective on teacher learning that I adopted for the study I report here. While both of these views emphasize the contextualized nature of teacher learning, there are important differences between the two that merit attention. The situative, sociocultural perspective presents teacher learning as influenced by the different contexts—the teacher as well as the formal and informal learning situations she finds herself in—with each context considered separately as a different analytical lens. In contrast, the complexity perspective conceptualizes teacher learning holistically as emerging from the interactions of the different contexts or systems (teacher, school, professional learning activities) that are part of a larger system in which teachers learn. That is, how a teacher learns depends on the larger system of which she or he is a part. In a subsequent section of this chapter I discuss the Opfer and Pedder framework in detail.

Building the Capacity of Mainstream Teachers to Teach ELLs

In the previous section, I discussed research on teachers' professional learning intended to build the capacity of the teaching force to prepare K-12 students for a productive role in a knowledge economy. This section shifts the focus of attention to what the research tells us about how to build the capacity of mainstream teachers to teach the growing numbers of ELLs now placed in their classrooms, particularly given new high academic demands and school accountability. I begin with an overview of the history of language education policies in the U.S. to establish the context for the discussion (and for my study). I then examine what is known from the scholarly literature about the knowledge, skills, and dispositions mainstream teachers seem to need to teach in linguistically diverse classrooms. In the final section, I review the scant

but expanding research on professional learning experiences specifically focused on the preparation of mainstream teachers for ELLs.

A Historical Look at the Education of ELLs in the United States

Unlike many other nations, the U.S. has never declared an official, national language. When the Continental Congress adopted the Constitution in 1778, English was not made the official language of the U.S. As Marshall (1986) explained, "the Founding Fathers of this country did not choose to have an official language precisely because they felt language to be a matter of individual choice" (p. 11). In the absence of an official national language, educational language policies have varied in the U.S. over the years according to the politics of the times (Ovando, 2003) and prevailing attitudes toward immigration (Rumbaut & Massey, 2013). Although it is beyond the scope of this section to discuss the numerous educational policies, judiciary judgments, and legislative initiatives affecting the education of students who speak a language other than English at home since the British, French and Spanish colonization of the U.S., highlights of key policies and decisions will help place in context the current trend toward mainstreaming ELLs and the pressing need to develop the capacity of the teaching workforce to teach them.

Historically, U.S. educational language policies have spanned from silence on bilingualism and the use of a language other than English in schools, to support of bilingualism for both ELLs and their native English-speaking peers, to English-only instruction that has dramatically limited or virtually eliminated the use of ELLs' native language in the classroom (Ovando, 2003). Early in this country's history, liberal language attitudes allowed for languages other than English to be used in schools. For example, in the first half of the 19th century, German-English schools were legally authorized in many states, and other European languages

were also used to teach children in many immigrant communities (Kloss, 1977). In fact, German-English bilingual education thrived in the U.S. from the mid-19th century through the early part of the 20th century. However, liberal language education policies began to recede in the late 1870s with the rise of the Americanization movement. This movement focused on encouraging newly arrived immigrants to quickly learn the English language and assimilate U.S. culture and values. This shift was clearly evident in Federal Indian education policies adopted in the 1880s that called for the Anglicization of Indian children and the eradication of their native languages (Crawford, 2000). About the same time, anti-immigrant sentiments—largely in response to the growing numbers of newcomers from Eastern and Southern Europe—propelled the process of eliminating the use of languages other than English in schools (Crawford, 2000). The onset of World War I, which produced strong anti-German feelings in the U.S., brought an end to the tradition of German-English bilingual education in this country (Kloss, 1977). By 1918, 34 states had adopted laws making English the sole language of instruction in public schools (Crawford, 2000). Since then until the early 1960s, English immersion or what some educators refer to as the "sink-or-swim" approach was used as the dominant method of instruction for ELLs enrolled in U.S. public schools (Crawford, 2000; Ovando, 2003).

Interestingly, a series of legislative actions opened the way for the reintroduction of languages other than English in schools during the 1960s. First was the passage of the Civil Rights Act of 1964, which prohibited discrimination on the basis of race, color, or national origin, and also prohibited discrimination in the operation of all federally assisted programs (Ovando, 2003; Salomone, 2012). One year later, Congress passed the first Elementary and Secondary Education Act (ESEA), a central component of President Johnson's "War Against Poverty." This legislation, which has been reauthorized eight times since 1965, legally

authorizes the federal government to provide financial support to elementary and secondary schools throughout the US for purposes of ensuring equitable learning opportunities (Salomone, 2012). Then came the Bilingual Education Act of 1968, an expanded component of ESEA, which established a federal program of bilingual education for "economically disadvantaged" language minority students and provided competitive grants for schools to implement innovative bilingual programs (Crawford, 2000; Evans & Hornberger, 2005; Ovando, 2003; Salomone, 2012).

In 1974, a class action suit was filed on behalf of students of Chinese ancestry against the San Francisco Unified School District arguing that because the students were of limited English proficiency, they were entitled to special services that the children were not receiving (Ovando, 2003; Salomone, 2012; Wright, 2005). In what became known as the Lau v Nichols decision, the Supreme Court ruled in favor of the plaintiffs. According to Chief Justice Douglas:

There can be no equality of treatment merely by providing students with the same facilities, textbooks, teachers, and curriculum; for students who do not understand English are effectively foreclosed from any meaningful education...We know that those who do not understand English are certain to find their classroom experiences wholly incomprehensible and in no way meaningful. (as cited in Ovando, 2003, p. 9)

Subsequent to this ruling, the U.S. Office of Civil Rights issued guidelines to determine school districts' compliance with the Lau decision. Challenging the sink-or-swim instructional approach that prevailed at the times, the *Lau Remedies*, as the guidelines were referred to, called for school districts to provide students of limited English proficiency with special English-as-a-second-language (ESL) instruction as well as academic subject-matter instruction through the

students' strongest language until the student achieved sufficient proficiency in English to learn effectively in an English-only classroom (Wright, 2005).

Following the Lau decision, the general practice of public schools was to place ELLs in programs where they received bilingual instruction in core subject areas from bilingually certified teachers along with ESL instruction from teachers with ESL certification until they reached a threshold level of English language proficiency at which point they were "exited" from bilingual/ESL programs and placed in mainstream classes (Ovando, 2003; Salomone, 2012; Wright, 2005). However, in a political backlash against bilingual education, states began making proposition decisions through ballots in the late 1990s prohibiting the use of languages other than English for instruction in public schools (e.g., California Proposition 227, Arizona Proposition 203, Massachusetts Question 2) (see accounts in Lucas & Villegas, 2011; Ovando, 2003; Salomone 2012). By 2014, 31 states had approved some form of English-only policy (Shin, 2013). This movement contributed, in large measure, to the current trend to mainstream ELLs (Harper & de Jong, 2009). A related factor, although less frequently mentioned in the literature, was a clause in the NCLB Act of 2001, which held schools accountable for the academic performance of ELLs, as measured on standardized tests in English (Evans & Hornberger, 2005; Salomone, 2012). As explained in Chapter 1, mistakenly assuming that immersion in English would help ELLs attain higher test scores (see related discussion of second language development principles below), many school and district administrators have and continue to push for placing ELLs in mainstream classrooms (Echevarría et al., 2006; Harper & de Jong, 2009; Ovando, 2003). Making matters even more complex, the shortage of bilingually certified teachers that began in the 1990s, also reduced the capacity of bilingual education programs in many states to serve ELLs (Echevarría et al., 2006; Evans, Arnot-Hopffer, & Jurich, 2005; Evans

& Hornberger, 2005; Harper & de Jong, 2009). These three developments—political backlash against bilingualism, the federal government push to hold schools accountable for the academic performance of ELLs, and the shortage of bilingual teachers—help explain the increased placement of ELLs in mainstream classes.

The Knowledge Base for Teaching ELLs

Given more recent standards-based educational reforms, accountability pressures on schools and teachers, and the trend towards "mainstreaming" ELL students, mainstream classroom teachers are now faced with the daunting task of not only changing their teaching to include reform-oriented instructional practices for native English-speaking students but also for ensuring that ELLs in their classes meet the established academic content standards and also develop their English language proficiency. This work is especially challenging in light of the complex and cognitively demanding English literacy skills all students are expected to develop across school content areas, a challenge that is intensified for ELLs who must develop these skills while simultaneously learning English (Bunch, 2013; de Jong 2013; Hakuta, Santos, & Fang, 2013). Unfortunately, because teaching ELLs had been considered the responsibility of bilingual and ESL teachers since the Lau Decision of 1974, as discussed in Chapter 1, mainstream teachers often report they lack sufficient or specialized preparation for teaching ELLs (de Jong, 2013; Lucas & Grinberg, 2008) and describe feeling unprepared to do so (Ballantyne et al., 2008; Gándara et al., 2005; Lucas, 2011; Reeves, 2006; Samson & Collins, 2012).

According to de Jong and Harper (2005), the use of "just good teaching practices" (e.g., use of cooperative learning, graphic organizers, and hands-on activities) is ineffective with ELLs because this approach generally fails to address the needs of this student population to

simultaneously develop academic knowledge and skills while acquiring English language proficiency. To help guide much needed initiatives for preparing mainstream teachers for today's linguistically diverse classrooms in the U.S., a number of scholars have worked to identify the knowledge base mainstream teachers need to successfully teach ELLs in their classrooms (Bunch, 2013; de Jong & Harper, 2005; Wong-Fillmore & Snow, 2005; Lucas et al., 2008; Lucas & Villegas, 2011; Turkan, de Oliveira, Lee, & Phelps, 2014; Valdés, Bunch, Snow, & Lee, 2005). "Knowledge base," in this sense, refers to what teachers need to know and be able to do to teach ELLs academic content while also developing their English language skills. While a thorough discussion of this literature is beyond the scope of this chapter, highlights from this line of work usefully inform the present study.

Wong-Fillmore and Snow (2000; 2005) wrote a seminal paper for the Center for Applied Linguistics regarding the preparation of mainstream teachers. That paper, which in 2005 was published as a journal article, attended specifically to what mainstream teachers need to know about language so that they can effectively teach to and meet the learning needs of their ELL students. Since both Wong-Fillmore and Snow were linguists, it is not surprising that their conceptualization of the knowledge base for teaching ELLs reflects their linguistics academic roots. The authors argued for teachers to be provided with a thorough grounding in linguistics, or what they called knowledge of "educational linguistics," including teachers' understanding of language as used in classrooms, literacy development, second language learning principles, sociocultural aspects of language, and language assessment (Wong-Fillmore & Snow, 2000; 2005). To help teachers develop this type of knowledge involves helping them gain a thorough understanding of how language figures prominently in teaching and learning. According to Wong-Fillmore and Snow, teachers have five functional roles: communicators, educators,

evaluators, educated human beings, and agents of socialization. Each role requires teachers to know the different aspects and functions language plays to enact those roles. The authors proposed seven linguistics/sociolinguistics teacher preparation program courses for mainstream teachers aimed at developing both their knowledge of educational linguistics and the expertise needed for the range of functions teachers must enact in their practice. Each of these is described in turn below.

The first course, focused on language and linguistics, would introduce teachers to the language structures and history of Standard American English along with a basic introduction to comparative linguistic analysis. This information is taught within the context of how language is used in school settings. The second course, focused on language and cultural diversity, would provide teachers with insights about the differences in language across cultures, and how those differences might be reflected in classroom interactions. In the third course on sociolinguistics for educators in a linguistically diverse society, would give teachers an understanding of the history and use of languages other than English as well as dialects in the context of schools. This course would attend to language policies and politics on the schooling of ELLs and related attitudes about language. The fourth course, focused on language and literacy development, would have teachers understand how children develop language and how to cultivate their academic language in particular. The sixth course would attend to the language of academic discourse and help teachers understand how the different structures and expectations for language use in general educational settings, content-specific instruction, and in everyday informal communications influence teaching and learning. The final course, on text analysis and language understanding in educational settings, would help teachers examine and how to

explicitly teach the language structures and styles of different literary genres to improve students' comprehension and ability to write their own texts.

While the Wong-Fillmore and Snow proposal underscored the urgency of providing future and practicing mainstream teachers with knowledge and skills specific to teaching ELLs and pointed the field in the right direction, its ambitious scope made it impossible to incorporate into the already crowded curriculum of professional learning programs for both pre-service and in-service teachers (Lucas, 2011; Lucas et al., 2008; Walker, Ranney, & Fortune, 2005). Other scholars, seeking not to add additional coursework to teacher preparation programs, have provided additional frameworks to help develop the knowledge and skills mainstream teachers need to effectively support ELLs' language development and content-specific knowledge. In the following sections, I discuss some of these scholars' frameworks and their approach.

Taking a different approach, Lucas and colleagues (2008) built on what is known about preparing bilingual and ESL teachers to teach ELLs and judiciously adjusted this specialized knowledge base for non-specialists (e.g., mainstream teachers). Their conceptualization of the knowledge, skills, and ways of thinking mainstream teachers need to teach ELLs are encompassed in their vision of the "linguistically responsive" teacher, which is anchored by six principles of second language development culled from an extensive body of published research on the topic, and also includes three pedagogical practices that flow from those principles. The two parts of this framework are discussed below.

Essential understandings of second language learning. The initial principle in this framework draws on work conducted by Cummins (1979, 1981, 2000, 2008). Lucas and colleagues (2008) argued that to be linguistically responsive to ELLs, mainstream teachers must understand that conversational language proficiency is essentially different from academic

language proficiency, and that it takes second language learners approximately two years to develop conversational language skills, and five to seven years to develop academic language proficiency. According to this principle, ELLs may appear to be fluent speakers of English while interacting informally with peers and their teacher. This is because everyday language tends to be less cognitively demanding, more formulaic (e.g., how is the weather, what did you do this weekend), less linguistically complex, and speakers generally have access to a variety of contextual clues (e.g., gestures, facial expression) that facilitate the meaning-making process. In contrast, academic language is more cognitively dense, more linguistically complex, and more context-reduced as it relies more on language itself, particularly when written texts are involved. According to Lucas and colleagues, knowing the difference between conversational and academic English enables teachers to understand why ELLs require language support to participate competently in academic lessons, even when they appear to be fluent speakers in everyday social settings. That is, they have conversational English language skills, but are still developing their academic language proficiency.

The second principle in the framework is that in order to learn academic content, ELLs need access to comprehensible input. As Krashen (1981) posited, a large quantity of language input is of no use to ELLs if they do not understand that input. As this suggests, for language and content to be comprehensible to ELLs, teachers must scaffold their learning to make it comprehensible to them. Along related lines, the third principle posits that to learn English and academic content, second-language learners must participate in social interactions that require their use of English for academic purposes. Because learning originates through the negotiation of meaning in social interactions (Vygotsky, 1978), ELLs need interactions with others who are linguistically and academically more adept than they are to support their learning.

The fourth language principle in the Lucas et al. (2008) framework is that ELLs who have strong native language skills are ultimately more likely to achieve on par with their English-speaking peers than those with weak native language skills. As Cummins (2000) explained, native language skills transfer to the learner's second language. Similarly, academic concepts learned in the native language also transfer to the second language, thereby relieving the cognitive pressure on ELLs and giving them more space to focus on learning English. Building on this principle, Lucas and colleague pointed out that to appropriately scaffold learning for ELLs, mainstream teachers need to know about those students' native language skills and the extent of their academic preparation on the topic at hand in their native language. ELLs also need a safe classroom environment in which to learn both English and academic content in a language, the fifth essential second language principle articulated by Lucas and colleagues (2008). As these authors explained, classroom anxiety can take second language learners' attention away from learning and lead them to withdrawal from the academic experience. This principle suggests that in order to support ELLs' learning, teachers must be attentive to creating a comfortable classroom environment where the students feel safe to learn.

The sixth and final principle of second language development that form the foundation of linguistically responsive teaching, as envisioned by Lucas and collaborators (2008) calls for teachers to pay explicit attention to issues of language in their teaching. In the authors' view, while mainstream teachers should not be expected to become language specialists, to be linguistically responsive to ELLs they nonetheless need to understand how language is used in their content areas in order to make these expectations explicit to ELL students. More to the point, mainstream teachers also need to know the different ways in which students are expected to use language to develop arguments, to persuade an audience, and to draw inferences and

conclusions, among other things. That is, knowledge of language is a tool that mainstream teachers can use to help ELLs understand how to use language for academic purposes.

Linguistically responsive pedagogical strategies. As the above discussed language development principles suggest, until ELLs develop academic language proficiency comparable to that of their native English-speaking peers, mainstream teachers need to scaffold their learning. To do so, Lucas et al. (2008) argued that mainstream teachers need three types of pedagogical expertise. First, they must learn about the specific ELLs in their classrooms. Perhaps most relevant to this discussion is learning about ELLs' English language proficiency, linguistic and academic skills in their native language, and their prior knowledge of and experiences with the subject matter they are being taught. Second, mainstream teachers need skills for identifying the language demands inherent in different classroom tasks. That is, they need to be able to anticipate what aspects of the planned instructional tasks ELLs are likely to find problematic, including key vocabulary, subject-specific terminology, the linguistic complexity of written material, and the different ways in which students are expected to use language to successfully complete the task (e.g., preparing an outline, writing expository text, supporting claims with logical reasoning, synthesizing ideas).

The more specific teachers can be in their analysis of academic tasks and the more they know about their ELL students, Lucas et al. (2008) explained, the better position they are to scaffold instruction for ELLs. This is the third type of pedagogical expertise mainstream teachers need to be linguistically responsive to them according to the linguistically responsive framework. In their article, Lucas and colleagues (2008) discussed a variety of possible scaffolding strategies, including *extra-linguistic supports* (e.g., visual tools and graphic organizers); *supplementing and modifying written text to make it accessible to ELLs* (e.g.,

developing study guides, re-writing key portions of the text without watering down the academic rigor, adding notes at the margins of selected textbooks to support ELLs' understanding); *giving clear and explicit instruction for how to get work completed*; *facilitating the use of students' native language* (e.g., asking bilingual students to provide assistance to ELLs in their native language); *engaging ELLs in purposeful activities that give them opportunities to interact with others and negotiate meaning*; and *minimize the potential for anxiety*.

More recently, Lucas and Villegas (2011) added one more element to their conceptualization of the knowledge base needed for teaching ELLs. In keeping with their earlier work on preparing culturally responsive teachers (Villegas & Lucas, 2002), they theorized that to be linguistically responsive to ELLs mainstream teachers needed "socio-cultural consciousness" (Lucas & Villegas, 2011, p. 56). By this they meant an understanding that language, culture, and identity are intricately connected along with awareness that language is inherently political. In the US, for example, children who speak languages other than English at home or a variety of English other than the Standard variety are at a decided disadvantage in schools and other social institutions. As Lucas and Villegas put it: "socio-linguistically conscious teachers understand their students' experiences as speakers of subordinated languages and recognize that the challenges they face are partly political, extending beyond the cognitive difficulties of learning a second language" (p. 57).

While the conceptualizations of what mainstream teachers need to know and be able to do to teach ELLs discussed above are broadly defined and apply to teachers across different subject areas, those articulated by Bunch (2013) and by Turkan et al. (2014) took a subject-specific approach. Instead of focusing on language knowledge that is grounded mostly in principles of first and second language learning, Bunch argued that what mainstream teachers of

ELLs specifically need is *pedagogical language knowledge*. Building on work by Galguera (2011), Bunch (2013) defined pedagogical language knowledge as "knowledge of language directly related to disciplinary teaching and learning and situated in the particular (and multiple) contexts in which teaching takes place" (p. 307). To him, this entails a thorough understanding of the language that is specific to teaching a given subject area, including its specialized vocabulary and ways in which members of a parent discipline (e.g., scientists, mathematicians) use language (e.g., to develop an argument, to establish a proof, and to report the results of a laboratory experiment). Beyond this, Bunch hypothesized that teachers also need an understanding of, and skills for, making those ways of using language transparent to ELLs in their classes (e.g., an understand the grammatical and linguistic features of spoken and written texts, an ability integrate genre-based pedagogies into their teaching). Along related lines, Turkan et al. (2014) argued that to maximize access to academic content for ELLs—specialists (bilingual and ESL teachers) and non-specialists (mainstream teachers) alike—needed disciplinary linguistic knowledge. This refers to the knowledge required to unpack the language demands inherent in a particular discipline and the ability to use those insights to model for ELLs how language is used to communicate meaning in that discipline. Thus, the ultimate pedagogical goal is "to facilitate ELs' understanding of oral and written language within a discipline and their use of language in ways that allow them to actively participate in the discourse of the particular discipline" (Turkan & Schramm-Possinger, 2014, p. 5).

In brief, all five visions of the specialized knowledge, skills, and dispositions mainstream teachers need for teaching ELLs reviewed here emphasize the idea that language plays a central role in teaching and learning. Although Wong-Fillmore and Snow (2005) and Lucas et al., (2008) acknowledge the importance of attending to how language is used within the context of

particular disciplines, their views of the knowledge base for teaching ELLs take a more generic approach to teaching and span all subject areas. By contrast, work by Bunch (2013), Walker et al. (2005), and Turkan et al. (2014) take a subject-specific perspective and assume a tighter and more intricate relationship between language and content.

Research on Professional Learning Opportunities for Mainstream Teachers of ELLs

Because the overwhelming majority of practicing mainstream teachers have not been prepared to teach ELLs as part of their preservice programs, for reasons previously discussed (see Chapter One), school districts in the U.S. have become responsible for building their capacity to teach in linguistically diverse classrooms (Hopkins et al., 2015; Lucas & Villegas, 2013). Toward this end, many districts have created professional learning initiatives that aim to cultivate mainstream teachers' knowledge and skills for teaching the growing number of ELLs they are finding in their classes. Not surprisingly, over the past decade or so empirical studies documenting some of these initiatives have been published in the professional literature. This pool of studies was the focus of a review of empirical research recently published by Lucas et al. (2018). Specifically, the authors of this work set out to learn about the nature and outcomes of in-service learning opportunities for mainstream teachers of ELLs. The review included 28 studies published during the 15-year period between 2001 and 2016.

Using the central tasks of teacher learning proposed by Feiman-Nemser (2001) for practicing teachers as an analytic framework, Lucas et al. (2018) found that the initiatives in all but one of the 28 studies they reviewed focused on "developing, enacting, and refining knowledge and skills related to curriculum and instruction for ELLs" (p. 159). Within this wideranging pedagogical activity, the initiatives featured in several studies emphasized the need for teacher participants to develop their knowledge about language and the influential role of

language in learning. Among the topics addressed in the studies they reviewed were second language learning, language barriers for ELLs, the importance of teaching vocabulary, and the importance of using students' first language in instruction. For example, Hardin et al. (2010) examined a year-long professional development program of 48 pre-kindergarten teachers and teacher assistants that aimed at supporting their efforts in developing inclusive classroom environments and instructional practices that met the learning and language needs of ELLs. Participants were engaged in three interactive sessions (e.g., roundtable discussions, community and parent panels, small group activities, and question/answer sessions) and three classroom coaching visits. During the three-hour long interactive sessions, participants were introduced to culturally and linguistically relevant instructional practices, sheltered English instructional practices, and different ways of engaging and strengthening the home-school relationship. The coaching sessions provided teachers with individualized support in their implementation of strategies, assessing and identifying available and needed resources appropriate to support their implementation efforts, and facilitated teacher self-reflection of current teaching practices. Hardin and colleagues found by the end of the initiative teachers had developed more culturally relevant classroom environments, as reflected in their openness to implement instructional practices that valued the inclusion of ELLs' home language and culture as assets to the classroom environment.

Another set of studies focused on teachers' pedagogical knowledge and skills focused on developing mainstream teachers' knowledge and skills in scaffolding learning for ELLs. One example is the research conducted by Brancard and QuinnWilliams (2012), whose work engaged 22 urban middle and high school teachers in collaborative learning cycles with peers to examine their instructional practices with the goal of improving ELL students' learning and levels of

classroom engagement. Over a two-year period, participants engaged in learning "lab cycles," whereby a teacher hosts a group of teachers to observe her teaching and the observation is used as the basis for colleagues to discuss and learn instructional practices identified by that teacher. During the first year, teachers focused on strategies to effectively engage ELLs in collaborative groups. During the second year, teachers focused on higher-order thinking questions, increasing student responsibility for learning, and scaffolding techniques to engage and support ELLs with rigorous work and academic discussions. The researchers reported a shift in the teachers' beliefs regarding the capability of their ELL students and their own capability to effectively teach ELLs. The teachers viewed their roles and responsibilities differently as a result of the collaborative learning labs. Over the two-year period Brancard and QuinnWilliams observed and the teachers reported changes in their instructional practices specifically in the ways they scaffolded learning through a variety of modalities (e.g., visuals, sentence stems to encourage and support ELL oral participation, clear directions to be used as a reference by students, explicit vocabulary instruction, use of ELLs' native language) to engage ELLs in rigorous academic discussions and learning.

Beyond the language focus, the professional learning initiatives highlighted in 12 of the 28 studies in the Lucas et al. (2018) review were designed to help participating teachers gain knowledge about ELLs. The study conducted by Shea, Shanahan, Gomez-Zwiep, and Straits (2012) exemplifies this type of learning. These scholars reported outcomes from the first two years of a three-year professional development initiative that sought to increase the science content and pedagogical knowledge of 129 K-2 teachers as well as help the teachers use the context of science as the medium to support English language development. Shea and colleagues followed two similar professional development initiatives in two large urban school

districts in California. The facilitators of the initiative modified the 5E science instructional model by integrating English language instructional strategies teachers could utilized in teaching science to ELL students. Teachers were actively engaged in hands-on activities, collaboratively problem-solved with school peers in discussions regarding joint lesson planning, peerobservations, and ways to effectively engage ELLs in academic discussions. Teacher input was included in the development of learning activities as teachers were able to experience a variety of ELL-specific instructional strategies as learners, and then provided time to discuss how these strategies could be implemented in their classrooms, as such making it relevant to the teachers' context. The focus of one of the district's professional development was to increase ELL engagement in academic discussions through student-talk strategies so as to facilitate the development of ELLs' academic and oral language. The researchers reported increases in teachers' science content knowledge and self-efficacy to teach science and ELLs. Additionally, they documented a shift in the teachers' perception and expectations of ELLs. Specifically, the teachers learned that ELL students limited English language fluency did not diminish their ability or capacity to learn the content. Subsequently, teachers incorporated different pedagogical approaches (e.g., scaffolds, modifications, alternative assessments, student-talk strategies such as three-way interview, comprehensible input, explicit vocabulary instruction), providing ELLs greater access to the curriculum as well as multiple ways to assess conceptual understanding while supporting ELLs' English language development.

The professional learning efforts examined in a smaller number of the studies reviewed by Lucas and her collaborators engaged mainstream teachers in analyzing their beliefs and forming new visions for teaching ELLs. As an example, Chval, Pinnow, and Thomas (2015) presented a case study of a third-grade teacher who, along with three other teachers, was

supported in a three-year partnership with a mathematics teacher educator to help them integrate language into their math instruction and to provide equitable opportunities for ELLs to participate in classroom mathematical discussions. As part of this work, Courtney—the case study teacher—met regularly with a teacher educator (one of the authors) for lesson planning sessions during which she received a variety of ideas to consider when planning her teaching. These ideas included accounting for ELL students' life experiences and knowledge in her teaching, providing explicit attention to vocabulary specific to the math context but which may have multiple meanings, scaffolding instruction through a variety of modalities (e.g., realia, visuals, gestures, graphic organizers, illustrations of mathematical concepts), and identifying and writing essential ideas and terms for ELLs to make them visible throughout the lesson. Through these lesson-planning sessions, along with videos of Courtney's classroom instruction, lessondebriefing conversations, and teacher reflection, Courtney changed her misguided belief of not engaging ELLs in classroom discussions because they may feel uncomfortable. Instead, she learned how to plan for and provide supports to ELLs to increase their engagement in classroom talk.

Although different types of development opportunities can be used to promote teacher learning, Lucas et al. (2018) reported workshops, typically offered in a series, were the primary form employed in the studies they reviewed, used in 18 of the 28 studies. Next were summer institutes (n=12), teachers working collaboratively with peers (n=12), and coaching or mentoring (n=11). Coursework was also used, but to a much lesser extent, evident in three of the studies. Many of the studies also included more than one form of learning opportunity. The authors concluded that the teacher learning initiatives examined were fairly consistent with the features considered effective in the professional development literature, including variety in approach

(e.g., Antoniou & Kyriakides, 2013; Buysse, Castro, & Peisner-Feinberg, 2010), ongoing learning rather than discrete one-time events (e.g., Buysse et al., 2010; Polly et al., 2015; Supovitz & Turner, 2000; Wolbers et al., 2017), teacher reflection (e.g., Antoniou & Kyriakides, 2013; Greenleaf, Hanson, Rosen, Boscardin, Herman, Schneider, Madden, & Jones, 2011; Lara-Alecio, Tong, Irby, Guerrero, Huerta, & Fan, 2012; Lotter, Thompson, Dickenson, Smiley, Blue, & Rea, 2018; Polly et al., 2015), and a focus on teachers' classroom practices (e.g., Antoniou & Kyriakides, 2013; Heller, Daehler, Wong, Shinohara, & Miratrix, 2012; Kim, Olson, Scarcella, Kramer, Pearson, van Dyk, Collins, & Land, 2011; Lara-Alecio et al., 2012; Singer, Lotter, Feller, & Gates, 2011). Lucas and collaborators indicated that although they could not draw definitive conclusions about which type of learning form was more successful in producing desired learning outcomes, they nonetheless noticed that "longer-term, multifaceted initiatives that involved collaboration tended to have more success than shorter-term, one-dimensional initiatives" (2018, p. 167).

My own examination of the professional learning literature revealed that preparation of mainstream teachers to teach ELLs research reflects four general conceptual/theoretical approaches to professional learning and/or teaching ELLs—systemic functional linguistics (SFL), integrating the teaching of English and content in the context of science reform, Sheltered English instruction, and sociocultural perspectives. Since these approaches shape the content of professional learning experiences designed to prepare mainstream teachers to teach ELLs, a brief discussion of each follows.

A systemic functional linguistics (SFL) approach to teaching ELLs. Developed primarily by Halliday (1978), SFL is a perspective that emphasizes how language is used in social contexts to achieve specific goals. According to Eggins (2004), since SFL is concerned

with language use, it places emphasis on language functions (what it is used for), although it also attends to language structures (e.g., grammar, syntax). As used in education, SFL focuses on specific linguistic choices the user (e.g., students, teachers, authors of a text) makes, which "influence and are influenced by different purposes and audiences" (Bunch, 2013, p. 305). In general, professional development initiatives informed by SFL aim to equip teachers with tools to analyze and talk about the functional features of language in their specific content areas, particularly as reflected in written texts, for the purpose of helping them promote ELLs' academic language development in English (Achugar, Schleppegrell, & Oteiza, 2007; Schleppegrell et al., 2004; Turkan et al., 2014). This approach to teaching ELLs also aligns with the sixth principle of second language development in the Lucas et al. (2008) framework discussed above and is also consistent with Wong-Fillmore and Snow's (2005) recommendation to help mainstream teachers of ELLs learn about the language of academic discourse.

A handful of studies of professional learning opportunities made available to mainstream teachers to broaden their knowledge and skills for teaching ELLs have been conducted to date (e.g., Achugar et al., 2007; Aguirre-Muñoz et al., 2008; Brisk & Zisslberger, 2011; Schleppegrell et al., 2004). A study by Aguirre-Muñoz et al. (2008) exemplifies this line of research. In this study, the researchers aimed to familiarize practicing middle school teachers with "the genre of literary analysis" (p. 299) and an SFL informed method of evaluating student compositions. To this end, the teachers were engaged in a week-long professional development program comprised of four modules that addressed central SFL concepts, features of well-written academic language, strategies for incorporating SFL into instruction, and language problems ELLs' often experience when responding to literature and how a teacher might address these problems.

typically analyze and provide feedback to their students' writing; participating in lessons (playing the role of students) in which the professional development facilitator modeled how to teach about linguistic features and choices authors use; and developing lessons that would provide explicit instruction to students on the form and function of genre-based literary writing linguistic features (e.g., point of view, appropriate use of verb and noun phrases, the use of transitions, conjunctions, and sentence variety). Aguirre-Muñoz and colleagues (2008) found that the professional development initiative succeeded in getting teachers to shift from providing traditional feedback (e.g., focused on grammar and mechanical errors) to providing meaningful feedback, through student conferences where they were able to discuss specific strategies with their students and scaffold instruction for them, thereby making students aware of the linguistic choices they had made and how to improve their writing.

Integrating the teaching of English and content in the context of science reform.

Many of the published studies on the professional learning of mainstream teachers for ELLs are focused specifically on science teaching, probably because of the availability of research funding for work in this content area. Running through these studies is a focus on creative ways to integrate language and content within the context of large-scale science education reform. Work by Lee and colleagues on inquiry learning in science accounts for the majority of these studies (Adamson, Santau, & Lee, 2013; Hart & Lee, 2003; Lee, Adamson, Maerten-Rivera, Lewis, Thorton, & LeRoy, 2008; Lee & Maerten-Rivera, 2012; Lewis, Maerten-Rivera, Adamson, & Lee, 2011; Santau, Secada, Maerten-Rivera, & Lee, 2010). A few other studies complement this line of research. For example, concerned with the entrenched accountability discourse, Buxton, Kayumova, and Allexsaht-Snider (2013) provided science teachers with opportunities to rethink how to create classrooms that better serve the democratic purposes of schooling for all students,

but particularly for ELLs. Similarly, focusing on science teaching in urban schools, Johnson and colleagues (2016) explored the impact of Transformative Professional Development, a model of professional learning they developed, on the quality of science teaching and its effect on ELLs' science achievement.

One study by Hart and Lee (2003) exemplifies a program of professional learning that aims to prepare science teachers to integrate the teaching of English literacy skills through inquiry-based science instruction as a means to improving ELL students' development of English. Specifically, the researchers set out to determine the impact of professional learning opportunities on teacher participants' beliefs about and practices for teaching English language and literacy within science to ELLs. Over the course of a year, 53 third and fourth grade teachers from a large urban school district participated in four full-day workshops that addressed inquiry-based instruction and the integration of literacy and language support into science teaching. Participants also were provided with curriculum materials for use in their teaching, including instructional units that were developed by a team of scientists, science teachers and bilingual and ESL specialists. All units involved students in inquiry-based learning and were aligned with national science standards. The units also were attentive to students' linguistic and cultural backgrounds and included activities designed to support ELL students' literacy and engage them in authentic conversation to provide practice with English (see third principle of second language development in the Lucas et al. [2008] framework). Hart and Lee (2003) found that study participants developed a deeper understanding of inquiry-based instruction and content area literacy. While there were no statistically significant changes in the teachers' instruction in reading and writing, participants did increase the use of linguistic scaffolding supports in their teaching. In brief, the professional learning opportunities designed and examined by Lee and

colleagues demonstrate the importance of helping teachers learn how to integrate language into their content instruction. Furthermore, those learning experiences move beyond a focus on discrete strategies and focus on developing teachers' understanding and use of language supports.

Sheltered English instruction. Sheltered English instruction (SEI) is an approach to teaching ELLs that has been used in the U.S. since the 1980s for purposes of integrating content instruction with English language development (Crawford, 2004; Sobul 1995). According to Freeman and Freeman (1988), when the term was originally introduced, ELLs were considered to be "sheltered" because they were taught in classes apart from the mainstream. Today, however, ELLs are increasingly placed in mainstream classrooms for instruction, expected to meet established curriculum standards along with their native English-speaking peers, and required to participate in high-stakes tests that are part of states' accountability systems. Given this new reality, SEI has come to be seen as a set of instructional practices used by all teachers to make grade- and age-appropriate content accessible to ELLs by reducing the linguistic complexity demands embedded in a lesson.

Different sheltered instruction models or approaches exist. According to Markos and Himmel (2016), the four that predominate in U.S. schools are the Cognitive Academic Language Learning Approach (CALLA) (Chamot & O'Malley, 1987), the Guided Language Acquisition Design (GLAD) (Brechtel, 1992), the Specially Designed Academic Instruction in English (SDAIE) approach (Cline & Necochea, 2003; Sobul, 1995), and the Sheltered Instruction Observation Protocol (SIOP) (Short & Echevarría, 1999). Although the models vary somewhat, they all share a focus on simultaneously developing language and content, a commitment to making academic content comprehensible through the use of a variety of scaffolding strategies,

and the use of alternative assessments that give ELLs an opportunity to display their knowledge of content without regard for their proficiency with English (Markos & Himmel, 2016).

Teachers can use a wide range of SEI strategies. These include modifying the rate and tone of speech; simplifying vocabulary and grammar; repeating key words, phrases, or concepts; using context clues and models extensively; relating instruction to students' background knowledge and experience; using extra-linguistic supports in the form of visual cues, graphic organizers, and hands-on activities; providing students with study guides; building repetition and redundancy into lessons; modifying assessments and assignments; and creating flexible groups that include native English speakers and ELLs (Hansen-Thomas, 2008; Markos & Himmel, 2016; Moughamian, Rivera, & Francis, 2009).

Sheltered English Instruction has become well established as an effective teaching strategy in K-12 classrooms within the past decade or so (Coleman & Goldenberg, 2010; Hansen-Thomas, 2008; Markos & Himmel, 2016). One such example is the study by Crawford et al. (2008) who set out to examine the effects of a two-year professional development program on elementary teachers' use of sheltered instruction strategies. The initiative was carefully designed to incorporate use of the previously discussed core and structural features of effective professional development identified by Garet et al. (2001). Teachers were provided with the opportunity to take a 45-hour course that addressed principles of second language learning, instructional strategies for improving ELLs English language proficiency while increasing their content knowledge with appropriate supports based on their level of proficiency, approaches to developing literacy skills for ELLs, valuing and utilizing the linguistic and cultural resources of the students in the classroom, and identifying multiple assessments to measure English language proficiency and content knowledge. Following the course, on eight separate occasions the

participants received follow-up support in the form of classroom observations along with mentoring and coaching sessions at the school. Using two separate measures to assess the effectiveness of the initiative—the Levels of Use Interview (see Hall, Loucks, Rutherford, & Newlove, 1975) and an abbreviated version of the Sheltered Instruction Observation Protocol (see Echevarría, Vogt, & Short, 2004), Crawford and colleagues (2008) found that the teachers used many of the sheltered instructional strategies they learned from the course and improved their use of these strategies over time.

Sociocultural approach. Sociocultural perspectives on learning derive from Vygotsky's work in the early 1900s. The central theme in Vygotsky's (1978) theory is that social interaction plays a pivotal role in learning. According to Vygotsky, learners' appropriate new ideas and modes of thinking through practice and through social interactions with more competent individuals. From this perspective, learning is situated in a given sociocultural context and is inseparable from the social relationships embedded in that context. One of the roles of the socioculturally informed teachers (and also facilitators of professional learning for teachers), then, is to organize social interactions in the classroom/professional learning setting in ways that maximize learner's access to more knowledgeable others who can support or "scaffold" their learning (Brown & Campione, 1994; Goos, 2008).

Several of the studies I located focused on professional learning for mainstream teachers of ELLs reflected a sociocultural view of teacher learning and promoted a sociocultural perspective on teaching ELLs (e.g., Brooks & Adams, 2015; DaSilva Iddings & Rose, 2012; Deaton, Deaton, & Koballa, 2014; Hardin et al., 2010; Martin-Beltrán & Peercy, 2014; Molle, 2013; Peercy, Martin-Beltrán, Silverman, & Nunn, 2015; Russell, 2012; Takeuchi & Esmond, 2011). For the most part, these studies involved teachers in learning activities that engaged them

in collaborative dialogue with their colleagues and reflection on their beliefs about ELLs and how best to teach them. Additionally, as part of their learning opportunities, teachers were helped to understand the role of sociocultural factors in ELL students' learning.

A study by DaSilva Iddings and Rose (2012) is an example of a study that used a sociocultural approach to professional learning and as a basis for improving reading comprehension for ELLs. The study was conducted in a rural school district that received an increasing number of ELL students and involved two fourth grade teachers who requested help from their principal to learn how best to meet the needs of ELL students. Working as a study group, the researchers (who were also the facilitators of the professional development) and teachers engaged in collaborative and reflective discussions of relevant literature that addressed their identified challenges (e.g., promoting ELL classroom engagement, providing English language supports, teaching vocabulary), reviewed student work samples, and viewed and analyzed video-tapes of the teachers classroom instruction focusing specifically on how ELLs mediated their learning of the English language and reading comprehension. DaSilva Iddings and Rose (2012) documented a shift in the teachers' practices from the English-only instructional approach promoted by school policy to the use of ELL students' native language as a resource in mediating their ability to comprehend text. The researchers also found the teachers learned and increased their use of varied instructional strategies (e.g., contextualization of vocabulary, multimodal instructional deliveries, increased peer interaction and extended previewing practices) reported in the literature as effective in teaching ELLs. The researchers also provided evidence that ELLs showed considerable improvement on standardized test scores of reading comprehension.

It is important to note that the professional learning initiative I examined in this study, while focused on preparing mainstream teachers to use SEI strategies in their teaching, takes a sociocultural approach to teaching and learning. The intent of the Northeast State Department of Education in framing its training-of-trainers initiative from a sociocultural perspective is to help mainstream teachers reflect on and consider factors (e.g., cultural, economic, political, historical, social) that shape how ELLs are viewed and to promote an asset view of ELLs (Herbert & Jones, 2013). According to Molle (2013), professional learning initiatives that solely focus on instructional strategies are technical in nature and as such problematic. They aptly highlight that "the Achilles heel of such approaches is that they depoliticize language teaching by separating teacher-student relationships from the history of relations among dominant and marginalized groups" (p. 103). Rodriguez (2010) echoed this sentiment as he noted that the professional development/learning literature has been silent in "purposely naming and addressing issues related to teaching for diversity (i.e., culturally inclusive and socially relevant pedagogy and/or addressing the learning needs of culturally and linguistically diverse students)" (p. 924).

To summarize, the different approaches and models utilized to prepare mainstream teachers to teach ELLs vary, yet there are similarities in the type of knowledge they seek to develop in teachers. For example, they all seek to develop teachers' understanding of second language acquisition principles, familiarity with the linguistic features of their respective content areas, and skills with scaffolding instruction for ELLs. The professional learning initiative the teachers in this study were offered took the sheltered English instructional approach to prepare mainstream teachers for today's linguistically diverse classrooms. The initiative is discussed in detail in subsequent chapters.

Approaches to Examining Teacher Learning and Change in the Research

I was interested in learning about the conceptual approaches the researchers used to determine or identify the effectiveness of the professional development/learning initiatives. I found three broad approaches used. In the majority of studies, the researchers opted for what I consider a conventional approach, which assumes that if the initiative used features of effective professional development reported in the literature it will produce desired professional learning outcomes (e.g., Baecher, Rorimer, & Smith, 2012; Carrejo & Reinhartz, 2014; Choi & Morrison, 2014; Chval et al., 2015; Crawford et al., 2008; DaSilva Iddings & Rose, 2012; Green et al., 2013; Hardin et al., 2010; He, Prater, & Steed, 2011; Hutchinson & Hadjioannou, 2011; Shanahan & Shea, 2012; Short et al., 2012). In other studies, the researchers also took a conventional approach, but in discussing their findings they acknowledged the influence of contextual variables that might have mediated the impact of the professional development/learning initiative on the desired teacher learning outcomes (e.g., Aguirre-Muñoz et al., 2008; Bowers, Fitts, Quirk, & Jung, 2010; Brancard & QuinnWilliams, 2012; Burstein, Shore, Sabatini, Moulder, Lentini, Biggers, & Holtzman, 2014; Hart & Lee, 2003; Kibler & Roman, 2013; Lee & Maerten-Rivera, 2012; Lys et al., 2009; McIntyre et al., 2010; O'Hara, Pritchard, Huang, & Pella, 2013). Work by Johnson and colleagues (e.g., Johnson, 2011; Johnson & Fargo, 2010; Johnson & Marx, 2009; Johnson et al., 2016), all of which aimed to have teachers incorporate culturally relevant pedagogy and literacy strategies in inquiry-based science classrooms, took a strikingly different approach. In each, the researchers explicitly attended to elements and conditions in the teachers' everyday context that influenced how, if at all, the teachers used in their own teaching the practices promoted by the professional learning initiative in which they participated.

One example of this approach is a study conducted by Johnson and colleagues (2016) in which the researchers used the Transformative Professional Development model in their work with urban science teachers (grades 4-8). Briefly, the model is informed by Ladson-Billings' (1995) culturally relevant pedagogy, and specifically by her ideas of "teacher conceptions of self and others, teacher structured social relations, and teacher conceptions of knowledge" (Johnson, 2011, p. 174). It also draws from three bodies of research (instructional congruence framework, effective science pedagogical practices, and integration of language within science content instruction). The Transformative Professional Development model is a whole-school approach that provides intensive and sustained support for teachers focused on three components, culturally relevant and effective science instruction that incorporates language and literacy strategies to develop ELLs' conceptual understanding, the fostering of positive relationships (e.g., teacher-student, teacher-student, teacher-university faculty), and the development of positive school and classroom climates with high expectations for student success. Throughout this initiative, the facilitators were attentive to the important role culture and context played in the implementation of the learning activities and processes undertaken by the teachers. Teachers worked on improving inquiry-based instruction while integrating culturally relevant pedagogy, ELL instructional strategies, and literacy strategies within their science instruction. In two phases (phase 1 middle school and phase 2 elementary) over a five-year period, the professional learning opportunities made available by the researchers helped teachers to focus on building relationships amongst themselves and with their students, conduct home visits to learn more about the cultural aspects of their students' lives, collaboratively develop and implement units of study that incorporated the targeted strategies, development of alternative assessments and appropriate modifications to the curriculum to provide ELLs the opportunity to improve their

English language proficiency and science content knowledge. While the teachers encountered challenges that typically affect urban school environments (e.g., low teacher morale, teacher turnover, discipline issues), they nonetheless improved their instructional practices, formed collaborative relationships with other teachers, addressed the English language and literacy needs of students, deconstructed their own views about their students, and determined how to successfully meet students' educational needs as a result of the professional learning experiences. Johnson and colleagues (2016) found that through collective teacher leadership and empowerment, the professional learning initiative enabled changes within individual classrooms, school climate, and district policies and management. They posited that such a systems approach, one that attended to contextual factors (e.g., school climate, teacher professionalism, school policy, curriculum), helped develop both teacher and school capacity to improve student outcomes.

As the above discussion suggests, taking a systems approach to teacher learning, one that extends beyond the learning activities teachers are offered through professional development to include attention to teacher factors (e.g., beliefs, prior knowledge), district administrative support (e.g., instructional materials, time), and broader educational policies (e.g., district/school accountability, the role of professional learning and preparation educational reform) have been shown to mediate teacher learning (e.g., Aguirre-Muñoz et al., 2008; Gilrane et al., 2008; Johnson & Marx, 2009; Lee & Maerten-Rivera, 2012). Taking all of this into account, previous conceptualizations of teacher professional learning, which assumed a cause-and-effect perspective appear simplistic. The conceptualizations that consider and acknowledge the influence of contextual variables as mediating teacher learning provide insight into teacher learning, but offer a limited understanding of how and why teacher professional learning occurs

since they treat the different influences on teacher learning in isolation from one another. The perspective on teacher learning that frames the study addresses the above limitations, as I discuss next.

Conceptual Framework

Given the mounting pressure on programs of professional development to equip teachers with the knowledge and skills they need to enact educational reforms, it is essential to understand how and under what conditions professional development supports teacher learning and changes in their classroom practices in accord with the expected outcomes. Researchers such as Putnam and Borko (2000), Clarke and Hollingsworth (2002), and Opfer and Pedder (2011) have critiqued the research on professional development for its narrow focus on activities, the process of implementing professional development, and/or specific professional development programs. Most relevant to my work is the scholarship of Opfer and Pedder (2011), whose conceptualization of teacher professional learning frames the present investigation. These scholars specifically cautioned against the linear, process-product thinking embedded in conventional models of teacher learning and change that conceive of these processes as a direct outcome of professional development activities. Elaborating on this point, Opfer and Pedder noted that conventional models of professional development were flawed due to a failure to elucidate the "multicausal and multidimensional nature of teacher learning" (2011, p. 394).

From the conventional perspective that is dominant in education today, professional development is seen by researchers who take a linear perspective, such as Desimone (2009) and Guskey (2002), as a direct chain of events in which teachers participate in professional development activities, which directly causes a change in their instructional practice, which in turn improves student academic outcomes. Opfer and Pedder (2011) argued, however, that

models of professional development that assume teacher learning occurs as an effect or outcome of a chain of events lack adequate explanations of the learning and change processes, and also ignore important consideration of other factors at play that concurrently influence teacher professional learning (e.g., administrative support, teacher beliefs, school culture and climate). Drawing from complexity theory, Opfer and Pedder (2011) reconceptualized teacher professional learning as a complex, non-linear, recursive and emergent process involving reciprocal interaction between and among three nested systems, which from smallest to largest are: the individual teacher, the school, and the professional learning activity. According to these scholars, each of these systems is in turn comprised of elements. The teacher system includes the teacher herself and her prior experiences, beliefs (e.g., about student, teaching, learning), content and pedagogical knowledge, and how these are enacted in the classroom, all of which influence the teacher's individual orientation to professional learning. The school system refers to the types of support for teaching and learning that exist in the school, the collective perspectives and beliefs about teaching and learning, the shared school norms and practices, and the belief in the collective capability to accomplish a common goal. The professional learning activity refers to the nature of the learning activities, tasks, and practices in which teachers are engaged.

In the model of teacher learning and change developed by Opfer and Pedder (2011), these two processes emerge through simultaneous interactions occurring within and among the elements in the teacher, school, and professional learning activity embedded systems. Thus, merely knowing the elements of one system (e.g., that the professional development offered is sustained over time and intense) yields only a partial understanding of teacher learning because elements in the other systems in which teacher learning is nested (the teacher and the school)

also influence the results, sometimes acting as enabling factors and sometimes acting as constrains. For example, in a study by Barlow et al. (2014), nine secondary science teachers attended sustained professional learning sessions where they were actively engaged and collaborated with their peers. While the professional learning experience contained effective features and components, subsequent teacher implementation of inquiry-based instructional practices varied due to teachers' beliefs about students' preparedness, disposition towards teacher-centered instruction, and the misalignment and pacing of the curriculum with the pacing of the new instructional approach. Influenced by her students' favorable response to inquiry-based instruction (e.g., increased engagement and achievement), one teacher implemented the targeted strategy with fidelity despite its misalignment with the school curriculum. However, most of the teachers faithfully used the school curriculum as the district expected them to do, and set aside the inquiry-based practices the professional developers had aimed for them to adopt.

Since Opfer and Pedder's conceptualization of teacher professional learning draws from complexity theory, a brief discussion of how this theory influences the model is in order.

Complexity theory can be traced to the 1950's and 1960's. It is a transdisciplinary theory originating from diverse fields (e.g., physics, biology, mathematics, engineering, economics) and draws from other theories (e.g., chaos, systems, information) (Cochran-Smith, Ell, Ludlow, Grudnoff, & Aitken, 2014; Davis & Sumara, 2006). Cochran-Smith et al. (2014) noted that when analyzing complex systems, it is difficult to ascertain the unknown and known parts of a system by isolating the parts from the whole because the "wholes are much more than the sums of their parts" (p. 6), and the interactions of its parts follow multiple, unpredictable causal pathways that are not fixed or clearly defined. Using the Opfer and Pedder conceptual model of teacher learning and change as a framing lens in this study allows for a rich description and deep

understanding of the numerous interactions and interrelationships between and among the nested systems that comprise the overall professional learning system; while also offering insights into the patterned behaviors, processes, and structures of the various parts that make up the whole system.

Chapter Summary

In this chapter I reviewed what is known about features of effective professional development, different conceptions of the knowledge base for teaching ELLs in mainstream classes, and extant professional development/learning initiatives to support mainstream teachers to work in linguistically diverse classrooms. As discussed, the majority of the studies in a fairly slim body of research on preparing mainstream teachers to teach ELLs focuses on the design of learning opportunities made available to them, while ignoring contextual factors that support or hinder teacher learning and change. Breaking with this conventional tradition, the study reported herein sought to address the noted gap in the research literature by examining one school district's professional learning initiative that takes a sociocultural perspective to help mainstream teachers understand and implement SEI strategies. Using a complexity systems perspective, my study purposefully seeks to understand what three mainstream middle school teachers learn from a professional learning initiative focused on sheltered English instruction, and how those insights play out in their practice.

CHAPTER THREE: METHODOLOGY

As discussed in the two previous chapters, mainstream teachers in the U.S.—a group that until recently received little or no preparation to teach ELLs—are finding a growing number of ELL students in their classrooms. As a result, the vast majority of mainstream teachers report low self-efficacy for teaching academic content to students who are still developing their English (Ballantyne et al., 2008; Gándara et al., 2005; Lucas, 2011; Reeves, 2006; Samson & Collins, 2012). Given mainstream teachers' general lack of preparation to teach ELLs and ongoing accountability pressures on schools to get this student population to meet increasingly rigorous academic standards that reflect the realities of a knowledge economy, consequently an increasing number of districts now seek to develop the capacity of their teaching force to teach for linguistic diversity. Given this state of affairs, this qualitative study was designed to explore the complexities entailed in teacher learning and how that knowledge seems to play out in the classrooms of three middle school mainstream teachers who attended a sheltered English instruction (SEI) professional development initiative implemented by one school district. By using a complexity-informed perspective to frame my study, I aim to identify the elements that facilitated or constrained teacher learning.

This chapter is organized into five sections. In the first, I provide an overview of the research design and justify decisions made. Next, I explain the selection of both the study site and the teachers who served as the focus of this investigation. I then describe the data collection tools and procedures I used and explain how these were informed by the complexity perspective I adopted for this work. This is followed by a description of the procedures used to analyze the various data sources. In the final section, I discuss ethical concerns, explain how I ensured the trustworthiness of my data, and share reflections on my positionality.

Methodological Approach

Rationale for Use of Qualitative Research Design

In taking a systems approach in this study—one informed by Opfer and Pedder's (2011) complexity perspective on teacher learning—I sought to contribute to an understanding of what teachers seem to learn from professional learning opportunities made available to them and how ideas addressed in those professional learning settings appear to manifest themselves in their classroom practice. As discussed already, from this complexity perspective teacher learning and change is seen as embedded in nested systems (the individual teacher, the school where she teaches, and the professional learning activities in which she takes part) and elements that make up each of these systems. Furthermore, the systems and their elements are said to interact with one another, combining in complex and unpredictable ways, to enable or constrain teacher learning and changes in their teaching. Qualitative methodology lends itself well to this task because it is appropriate for examining "how" and "why" questions that aim for understanding and explanations (Merriam, 2009, Yin, 2015). Qualitative methodology is also well suited to studying complex, non-linear, contextually-situated phenomena, such as teacher learning and change, because it is concerned with meaning-making in a natural context rather than isolating phenomena for investigation (Merriam, 2009) or focusing on control and prediction (Lather, 2001) as other research approaches tend to do. As Opfer and Pedder (2011) explained, teacher learning is embedded in professional lives and working conditions, and cannot be studied as a product of activities "in isolation from the complex teaching environment in which teachers live" (p. 377). Therefore, a qualitative research approach that gives researchers a deeper and holistic understanding of complex phenomena that involve multiple interacting influences (Merriam,

2009) was the appropriate choice for investigating the research question posed in this study and the conceptual framework that guided my inquiry.

Overview of my Study

I sought to explore—as far as was physically possible—what did three focal teachers learn from their participation in their district's SEI professional learning initiative, and how the strategies to which they were exposed may have been applied in their practice. As discussed in Chapter 1 and detailed further in the chapter that follows, this SEI professional learning initiative emerged from the district's participation in the SEI training-of-trainers program implemented by the Northeast State Department of Education in the Summer of 2017. In agreeing to participate in that training program, school districts committed to designing and executing a professional development plan focused on the use of SEI strategies for 10 or more mainstream teachers and involving a minimum of 15 hours of professional learning.

I attended and observed all three days of the 2017 summer training-of-trainers program. However, my participation in this three-day program was deliberately secondary to my role as researcher in this investigation. For purposes of full disclosure, I identified myself to the participants as an employee of Northeast Department of Education, something I discuss in more detail later in the chapter. While present at those sessions, I took field notes focused on the substantive content addressed each day and the ensuing discussions among participants. I also collected documents shared with participants at the session (e.g., handouts) and other relevant background documents (e.g., Training-of-Trainer Handbook, PowerPoint presentations used). To gain a more thorough understanding of the training-of-trainers initiative and the expectations placed on participating districts, I conducted a semi-structured interview with Mr. Jones (pseudonym), the Northeast State Department of Education employee who facilitated the three-

day program. While the information I collected during the summer was not central to my study, knowing what transpired over the course of those three days gave me important insight into the training-of-trainers program and enabled me to more clearly understand the central concepts and key resources that district staff, including those in the district I hoped—at the time—to select as a site for my study, might draw on as they designed and implemented their respective SEI professional development plan. Another important reason for attending the training-of-trainers program was to familiarize myself with attendees from the participating districts given that I sought to select one of those districts as a site for my investigation. However, the collection of data central to this study began only after I had selected and negotiated access to the district that served as the site for my inquiry.

Site and Participant Selection

Site Selection

As outlined in the Training-of-Trainers Handbook, to be selected for participation in Northeast State Department of Education's SEI training-of-trainers program, interested school districts had to commit to developing and implementing a professional development plan for mainstream teachers at their respective sites. As in previous years, the districts involved in the three-day summer program in Summer 2017 were helped to develop a draft of their SEI professional development plan; however, they had until August 15, 2017 to finalize and formally submit it to Mr. Jones. The site for my study was selected from among the 18 districts that participated in Northeast State's SEI training-of trainers program that summer.

I selected the district for my study in two steps. First, I reduced the pool of 18 districts based on the following selection criteria: (a) attendance of a district administrator at the three-day program, which I took as an indicator of the district's support for and commitment to the SEI

professional development initiative; (b) the district either had a large ELL student enrollment or had recently experienced a notable increase in the number of ELLs served; (c) the district was not located in the county where I work as a Northeast State Department of Education employee given my professional responsibilities relative to schools there; (d) a substantial portion of the district's SEI professional development activities were scheduled for implementation between September and December of 2017, the time period during which I intended to collect data for my study; (e) the district staff member who would facilitate the local professional development initiative was knowledgeable about ELL instruction in general, and SEI strategies more specifically; and (f) the district was at a reasonable travel distance from my home.

To facilitate site selection, Mr. Jones gave me time during the first day of the training-of-trainers program to introduce myself to the participants and explain my interest in conducting a study about teacher professional development. After providing general information about the purpose of the study, I expressed my hope to carry out the investigation in one of their districts. Over the course of the three training days I circulated around the room while district representatives were in groups discussing their professional development needs relative to ELLs and how to address them. I listened to those conversations attentively and asked informal questions of the participants to learn as much as possible about them and their districts. By the end of the final day of the summer training program, I had identified three districts from the total pool of 18 that met the full set of criteria listed above.

As a second step in the site selection process, I compared those three districts on two factors—strong administrative support for the implementation of the SEI professional development initiative and the extent to which the formal professional development plan submitted to Mr. Jones (and to which he gave me access) exhibited features of effective

professional development, as reported in the scholarly literature discussed in Chapter 2. I considered the first of these factors important given the mounting evidence that school administrators can facilitate teacher learning by supporting and encouraging teachers' implementation of initiatives and instructional strategies (Hilton, Hilton, Dole, & Goos, 2015) and by helping to connect the instructional practices promoted by professional development efforts to the school curriculum (Darling-Hammond et al., 2009). Based on what I had learned about each district from my observations of the training-of-trainers sessions and interactions with participants present, along with my review of the formal professional development plans submitted by those three districts, I targeted Livemore School District (pseudonym) to serve as the site for my study. My decision was based on the following reasons: (1) the Bilingual/ESL supervisor for Livermore School District, Jada (pseudonym), had attended all three days of the program and I took her continuous presence as indicative of district interest in and support for the SEI professional learning initiative; (2) Jada impressed me as highly knowledgeable of SEI practices and she had previously facilitated district-wide ELL-related professional development for mainstream classroom teachers at the elementary school level for Livermore School District; and (3) the formal professional development plan she submitted to the state incorporated several features of effective professional development, including relevance to teachers' content areas and classes, active engagement, modeling of effective practices, and teacher collaboration. I was highly impressed that the plan went beyond 15 hours of collective professional learning activities to which the district had committed (organized into three full days of professional development) and included additional support for teacher participants in the form of ongoing professional learning community meetings to be held during after school hours following the completion of the three core days of professional learning. As discussed in Chapter 2, sustained and ongoing

teacher learning receives substantial support in the literature as a feature of effective professional development (Banilower et al., 2007; Garet et al., 2001; Penuel et al., 2011; Supovitz et al., 2000; Wolbers et al., 2017; Yoon et al., 2007). Based on these considerations, I reached out to Jada to discuss my interest in conducting my study at Livemore School District. Given her own interest in learning more about the SEI professional development initiative from someone outside the district, Jada graciously presented my proposal to the superintendent. With support from both the district superintendent and the bilingual/ESL supervisor, I received approval from the Livemore Board of Education to collect data for my study there.

Livemore School District serves K-12 students in 23 schools (17 elementary schools, three middle schools, and three high schools). According to the Northeast State Department of Education, in the 2017-2018 school year Livermore School District enrolled 11,406 students. Of these, 47% were White, 28% Hispanic, 18% Black or African-American, 3.8% Asian, 3.2% two or more races, and 0.13% Native Hawaiian or Pacific Islander. Thirty-nine percent of all students resided in economically disadvantaged homes, and 3.2% (a total of 365 students) were identified as ELLs.

Because the district had implemented a comprehensive professional development program to prepare elementary school mainstream teachers to teach ELLs in the 2016-17 school year, the bilingual/ESL supervisor decided to shift the focus of the SEI professional development initiative to mainstream teachers at the middle school level, a group that previously had not been offered support for teaching ELLs. Specifically, Jada targeted social studies and science middle school teachers because of the density of academic vocabulary embedded within these two content areas. According to data reported by the Northeast State Department of Education for the 2017-18 school year, Willard Middle School (pseudonym) was the largest of the three

Livermore School District that year, with a total enrollment of 958 students. Of these students, 61.1% were White, 18.7% Hispanic, 14.3% Black, and 3.5% Asian. ELLs accounted for 1% of total enrollment, or 10 students. The second largest middle school based on enrollment was Douglas Middle School (pseudonym), with 901 students. Of these, 42.4% were White, 32.7% Hispanic, 18% Black, and 4.9% Asian, and 45% of the students were economically disadvantaged. ELLs made up 3% of total enrollments, or 27 students. It should be pointed out that Douglas has experienced a steady growth of ELLs since the 2014-2015 school year. Of the three middle schools, Creekside Middle School (pseudonym) is both the smallest and the most diverse. In the 2016-17 school year, the latest data I was able to locate, Creekside enrolled 809 students, who were racially/ethnically distributed as follows: 37.1% White, 31.5% Hispanic, 25% Black, and 4.7% Asian. Three percent, or 24, of all students served were ELLs.

I had anticipated that Jada would facilitate the SEI professional development session for the middle school social studies and science teachers. However, because her responsibilities as supervisor were considerable, she asked two ESL teachers in the district—Gayle and Ann (both pseudonyms)—to complete the details of the SEI professional development plan—which encompassed three five-hour days—and facilitate the planned activities. (See Chapter 4 for a detailed description of the district's SEI teacher learning program.) Gayle had seven years of elementary teaching experience, and in the 2017-2018 school year she was entering her second year as an ESL teacher in Livemore School District. In her first year as an ESL teacher, Gayle taught at Creekside Middle School and one of the elementary schools. Ann has spent her entire teaching career at Livemore School District, and in the 2017-2018 school year was starting her 29th year of teaching. Ann was also an elementary teacher who has taught students from each K-5 grade level at three different schools. It should be noted that Ann is also a resident of

Livemore Township (pseudonym), and her two children attended elementary and secondary schools in Livemore School District. Ann was entering her fourth year as an ESL teacher. Jada selected Gayle and Ann to be the SEI facilitators because they had received extensive formal professional learning about SEI strategies, and both had previously worked together as facilitators of professional development for district teachers. This previous facilitating experience was primarily designed to assist mainstream elementary school teachers' incorporation of vocabulary instructional strategies for the purpose of fostering English language development and ELLs' academic language.

Participant Selection

During a meeting with district and school level administrators, Jada presented her SEI professional development plan and requested the three middle school principals to each invite five middle school social studies and/or science teachers who might be interested in attending the planned three-day sessions. An email, from the middle school principals, was sent to the district's 18 middle school social studies and science teachers informing them of the professional learning opportunity, and if interested in attending to speak directly with the principal for their respective schools. Eleven middle school teachers volunteered to participate; five were from Willard, three from Creekside, and three others were from Douglas. Jada also allowed three basic skills teachers from an elementary school to attend the SEI sessions, as requested by their principal. These teachers had missed the professional development program for teaching ELLs provided to all elementary teachers the previous year. This brought the total number of participants in the district's SEI professional development initiative to 14.

On the first day of the SEI professional learning program, Gayle and Ann gave me time to introduce myself to the participants and discuss with them the purpose of the study I intended

to carry out. I also explained that I hoped several of them would volunteer to participate. Such participation involved completing three structured interviews (45 minutes to an hour each), allowing me to conduct three observations of them teaching classes that included ELLs, and sharing with me handouts and lesson plans for the three lessons observed. My hope was to get as many of the middle school teachers involved in the SEI professional development initiative to volunteer for my study, and then to use purposeful sampling to select three participants for my study from this pool. According to Patton (1990), "the purpose of purposeful sampling is to select information-rich cases whose study will illuminate the questions under study" (p. 169). Since the aim of this study is to gain insight into how teachers learn from a professional learning initiative, focusing on three teachers would generate data that are sufficiently rich while keeping the study feasible. In selecting the three participants, my original plan was to strive for "maximum variation," which according to Merriam (2009) "involves identifying and seeking out those who represent the widest possible range of the characteristics of interest for the study" (p. 79). Specifically, I sought teachers with a range of teaching experience since the empirical literature shows that teaching experience mediates what teachers learn from professional development (see Battey, Llamas-Flores, Burke, Guerra, Kang, & Kim, 2013; Choi & Morrison, 2014; Dingle, Brownell, Leko, Boardman, & Haager, 2011; Donnelly & Argyle, 2011; Johnson, 2007; Johnson & Fargo, 2010; Lee, Lewis, Adamson, Maerten-Rivera, & Secada, 2008; Lee & Maerten-Rivera, 2012; Rushton, Lotter, & Singer, 2011; Wee, Shepardson, Fast, & Harbor, 2007). I also sought teachers of diverse cultural and linguistic backgrounds. Of the 11 middle school teachers in the district's SEI initiative, only four volunteered for my study—a social studies and science teacher from Willard Middle School, one science teacher from Creekside Middle School, and one social studies teacher from Douglas Middle School. Although I would

have liked to retain the social studies teacher from Douglas in my sample, given the trend of increasing enrollment of ELLs at this school, because he missed the second professional development session, I excluded him from the pool of potential participants. Not knowing the possible influence any of the three-day sessions may have on the teachers in terms of learning and understanding the use of SEI strategies, I thought it best to select only the three who attended all three days of SEI professional development. While less than ideal, the sample nevertheless reflected variation in the participants' backgrounds.

Table 1 summarizes pertinent background information for the three focal teachers. As shown, the sample included one male and two females. The youngest, Linda (pseudonym), was 27 years old and the other two—James and Kathy (pseudonyms)—were both 34. While Linda and Kathy self-identified as White, James specified that his was of Italian and Filipino heritage. English was the language all three spoke at home; they ranged from six to 10 years of teaching experience. Two of the participants (James and Linda) taught at Willard Middle School. James taught 7th and 8th grades social studies, and Linda taught 7th and 8th grade science. Kathy taught 8th grade Social Studies at Creekside Middle School. A fuller description of the three participants appears in Chapter 4.

 Table 1

 Pertinent Background Information for the Focal Teachers

	Gender/Age	Race or	Teaching	Subject/Grade	Teaching
		Ethnicity	Experience	Taught	Location
		/Language(s)			
		spoken			
James	Male/34	Italian/Filipino	9 years	Social Studies	Willard Middle
		English		7 th & 8 th grade	School
Linda	Female/27	White	6 years	Science	Willard Middle
		English		7 th & 8 th grade	School

	Gender/Age	Race or Ethnicity /Language(s) spoken	Teaching Experience	Subject/Grade Taught	Teaching Location
Kathy	Female/34	White English	10 years	Social Studies 8 th grade	Creekside Middle School

Data Sources and Collection Procedures

To add depth to my analysis and enhance the credibility of my findings, I used multiple sources of data in this study (Baxter & Jack, 2008; Merriam, 2009). However, the primary sources were individual interviews, observations, and review of documents. A description of each source and the strategies used to collect the data follows.

Interviews

Table 2 gives an overview of the interviews I conducted as part of this study. As shown, I interviewed the facilitator of Northeast State Department of Education's SEI training-of-trainers program, the two Livemore School District ESL teachers who facilitated the local SEI professional development activities (both before and after the implementation of this initiative), the district's bilingual/ESL supervisor, and the three focal teachers who participated in three rounds of interviews. All interviews were semi-structured and individually conducted. Semi-structured interviews include a balance of prepared questions that help structure or guide the conversation, with open-ended questions and probes that generate in-depth responses about interviewee's experiences, beliefs, and opinions on topics of interest (Lankshear & Knobel, 2004; Merriam, 2009; Patton, 2015).

Table 2Overview of Interviews

Participant	Focus (in relation to research question and framework)
Facilitator of Northeast State's SEI Training-of- Trainers Program (July	(Data collected were used only as background information.) - Background information about the state's SEI initiative
2017)	- Expectations and hopes for participating districts
	- Perspective on which districts were highly supportive of the state's SEI initiative and its goals
Facilitators of district's	- Role as facilitator of SEI professional learning experiences
three-day SEI professional development program	- Prior professional experience (with ELLs, SEI, and facilitating professional learning)
(First Interview—October 2017) (45-60 minutes)	- SEI professional development plan (format, features of effective professional development used, integration with other professional development initiatives in district)
	- Teacher participants (numbers, schools, grade levels, how selected)
	- Perception of factors that might support the teachers' use of SEI strategies in their teaching (individual teacher, school-related, district-related, broader policy)
	- Perception of factors that might constrain teacher use of SEI strategies in their teaching (individual teacher, school-related, district-related, broader policy)
Facilitators of district's three-day SEI	- Reflection on district's SEI initiative to date (successes, challenges)
professional development program	- Perception of factors that support teachers' use of SEI strategies in their teaching (individual teacher, school-related, district-
(Second Interview— December 2017) (30	related, broader policy)
minutes)	- Perception of factors that constrain teachers' use of SEI strategies in their teaching (individual teacher, school-related, district-related, broader policy)
Bilingual/ESL Supervisor (November 2017) (45	- Background experience (e.g., professional, work with ELLs, familiarity with SEI strategies)
minutes)	- District bilingual/ESL practices
	- Vision and expected outcomes for district's SEI professional development program

Participant	Focus (in relation to research question and framework)
	- Perception of factors that might enable teachers' use of SEI strategies in their teaching (individual teacher, school-related, district-related, broader policy)
	- Perception of factors that might constrain teachers' use of SEI strategies in their teaching (individual teacher, school-related, district-related, broader policy)
	- Plans to continue to prepare the district's mainstream teachers to support ELL learning
Teacher participant (First Interview— December 2017) (45	- Personal and professional background (self-reported race/ethnicity, pathway into teaching, years of teaching experience and where)
minutes)	- Perception of preparedness for teaching ELLs
	- Preparation and experience teaching ELLs
	- Preparation and experience with SEI
	- Reason for participating in district's SEI professional development program
	- Agreement on class to be observed and background information for that class (size, number of ELLs, background about ELLs)
Teacher participant (Second Interview—	- Experience with district's SEI professional development program (what was most helpful, most challenging)
January 2018) (45 minutes)	- Use of SEI strategies in their teaching (strategies that have worked well, strategies that have not worked well)
	- Perception of factors that enabled the incorporation of SEI strategies in their teaching (individual teacher related, school-related, district-related, broader policy)
	- Perception of factors that constrained the incorporation of SEI strategies in their teaching (individual teacher related, school-related, district-related, broader policy)
Teacher participant (Third Interview—	- Use of SEI strategies in their teaching (strategies that have worked, strategies that have not work)
February 2018) (45 minutes)	- Sense of preparedness for teaching ELLs

Participant	Focus (in relation to research question and framework)	
	- Perception of factors that enabled the incorporation of SEI strategies in their teaching (individual teacher related, school-related, district-related, broader policy) Perception of factors that constrained the incorporation of SEI.	
	- Perception of factors that constrained the incorporation of SEI strategies in their teaching (individual teacher related, school-related, district-related, broader policy)	

In this study, conducting an interview with the facilitator of the state's SEI training-of-trainers initiative was essential in order to get background information about the program.

Similarly, interviews were also essential with the district's bilingual/ESL supervisor, facilitators of the SEI professional learning program, and focal teachers to obtain relevant information about their past professional experiences and interpretations of aspects of the local setting that I could not access otherwise. The development of questions for the interviews (see Appendices A-F for interview protocol) was guided by the research question this study explored and the complexity-informed conceptualization of teacher learning used. Relative to the focal teachers, questions for the second and third interviews with them were finalized after reviewing their responses to previous interview(s) and/or notes from my observation(s) of their teaching. In developing the interview questions, I used the guidelines for interview development articulated by Jacob and Furgerson (2012), which involved creating an interview protocol with central questions and follow-up prompts or probes for clarification purposes and to elicit more details, where needed.

To give the interviews flow, I grouped the questions into general categories. For example, the questions in the first teacher protocol were organized into four categories—background experience, knowledge and skills for working with ELLs, interest in the district's SEI professional learning initiative and confidence in teaching ELLs, and relevant target classroom information. I shared drafts of the three different interview protocols I developed with members

of my critical friends group and doctoral advisor and revised them based on the feedback I received. This process helped clarify the phrasing of the questions and ensured that they were sufficiently open-ended to allow interviewees' responses to be varied and offer greater detail. At the beginning of each interview I reminded the interviewee about the purpose of my study and the particular focus of the interview. I reiterated that responses would be kept confidential, that they had the right to refuse to answer questions, and that their continuation with the study was voluntary. All interviews were audio-recorded and transcribed as soon as possible after the interview had been conducted. (Copies of all three interview protocols are included in the Appendix.) A detailed explanation of each interview follows.

Facilitator of Northeast State's SEI training-of-trainers program. I interviewed Mr. Jones at the end of July, following the three-day summer workshop. The purpose of the interview was to gather background information about the training provided to school district representatives in support of their development and implementation of a coordinated plan of professional learning experiences aimed at equipping mainstream teachers at the local settings to use SEI practices in their teaching. I was also interested in learning about his expectations and hopes for the districts involved in the summer 2017 SEI program, and impressions of district participants' engagement in the three-day professional development. Given Mr. Jones' experience and professional relationships with districts throughout the state, including those represented at the training-of-trainers program, and developed through his ongoing work with the Northeast State Department of Education, his unique insight was highly valuable in my site selection process. As such, as part of this interview, I also explored his views of the participating districts' level of support for the SEI initiative and likelihood that they would implement the expected minimum 15 hours of professional learning for mainstream teachers.

Facilitators of district's SEI professional learning program. I conducted two interviews with each facilitator (Gayle and Ann) of the district's SEI professional development program, separately. The initial interview took place in October 2017, prior to the implementation of the first local professional development session. That interview focused on the responsibilities of the facilitators and how this role fit within their overall responsibilities in the district; I also solicited information about their professional experience with ELLs, SEI, and facilitating professional development. I asked them to review with me details about their professional development plan, I tracked the effective professional development features reported in the literature (e.g., active engagement, collaboration, teacher reflection, relevance to teacher context and classrooms) and how the planned SEI activities fit with other professional development efforts in the district. I inquired about the initiative's focus on middle school social studies and science teachers and the process used to select teachers for participation. I also asked each facilitator to identify what they perceived as possible supports and/or constrains (if any) (e.g., administrative support, support for teacher learning in general, commitment to improving the education of ELLs) for teachers learning about SEI strategies and subsequent use of those strategies by the teacher participants, which was the district's goal for the initiative.

I conducted a second interview with each professional development facilitator in December 2017, following the conclusion of the three district-wide professional development sessions. In this second interview I asked each respondent to reflect on the successes and challenges of implementing the professional development, and again I asked them to identify factors they perceived might facilitate and/or constrain the teachers' learning and possible use of SEI strategies in their own teaching, in the event issues may have arisen since our first interview

considering that I may have not been privy to or aware of conversations, decisions or actions occurring in the district.

Bilingual/ESL supervisor. I conducted one interview with Jada, the district's Bilingual/ESL supervisor, just before the completion of the final day of the district's SEI professional learning series (November 2017). Jada was the driving force for this initiative in the district. She was the district's lone attendee at the state's Training-of-Trainers program. During that time, I had an opportunity to informally discuss her vision for this initiative, as it would be implemented locally. The focus of my formal interview with Jada was to revisit those preliminary discussions and to gather data about her background experiences working with ELLs and familiarity with SEI strategies. I also gathered data about the district's ESL program and its practices, expected outcomes for the SEI staff development program, perception of factors likely to enable or constrain the participating teachers' use of SEI strategies in their teaching (individual teacher, school-related, district-related, broader policy), and possible plans to continue to prepare the district's mainstream teachers to support ELL learning.

Focal teachers. I conducted three interviews of approximately 45 minutes in duration with each of the three focal teachers. The first round of interviews took place in December 2017, shortly before the completion of the three-day local SEI professional development sessions. The purpose of this interview was to gather data about the teachers' personal and professional backgrounds (pathway into teaching, years of teaching experience), estimation of their preparedness for teaching ELLs, prior preparation for and experience with teaching ELLs, prior preparation for and experience with SEI, reason for participating in district's SEI professional development program, and to agree on the class I would observe and get relevant information about it, including class size, and number of ELLs and their backgrounds.

The second set of interviews occurred in January 2018, after all three professional development sessions were completed. In this interview, I solicited the teachers' views regarding the SEI professional development in which they had participated, giving focused attention to aspects of the activities (e.g., format, pedagogy used by the facilitators, materials used) they had found most helpful in learning about ELLs and how to teach these students and which SEI practices they had found most challenging to integrate into their practice. I also inquired about their use of SEI strategies in their teaching (if at all), and factors that may have facilitated and/or constrained their use of those strategies.

The third set of interviews occurred in February 2018, after I had completed the three classroom observations of each teacher. In preparation for the third interview, I reviewed the transcripts of the two previous interviews and the field notes from the classroom observations, and developed a set of follow-up questions that were specific to each in order to fill gaps in my understanding of their experiences with the SEI professional development program and possible application of practices addressed. While some of the questions in the third interview were personalized to each teacher, I also used a set of common questions focused on the teachers' preparedness for teaching ELLs, their lesson preparation, their use of SEI strategies as reported by them and observed (or not) by me, and factors they perceived as facilitating or constraining the use of SEI strategies in their teaching.

Researcher's evaluation of teacher interviews. Unforeseen circumstances demanded changes in the data collection schedule I had initially envisioned. While I had proposed conducting the first teacher interviews prior to the initial district SEI professional learning session, I was not able to do so because the district delayed the local implementation schedule for two reasons—to give the facilitators of the SEI program more planning time and to allow

sufficient time to recruit middle school social studies and science teachers for participation in this SEI initiative. Originally, the district had planned to start the professional development sessions in September 2017, and to follow this up with a second session in October and a third in November. In the revised schedule, the professional development sessions occurred in quick succession—two in November (the 15th and 29th) and the third in December (the 13th).

Because I did not know who the participating teachers were until a couple of days prior to the first professional development session, I decided to wait until then to introduce myself and my study, and invite volunteers for it. Complicating matters further, because the first two professional development sessions occurred within a period of two weeks, with the Thanksgiving holiday falling between them, I was unable to conduct my first round of teacher interviews until after the second professional development session (December 7), followed by the second round at the conclusion of all three professional development sessions (January 12, 2018), and the final round (February 12-14, 2018) after I had completed all classroom observations.

I found semi-structured interviews an ideal data collection tool for my study. While I prepared set questions to ask interviewees, the semi-structured format gave me the flexibility to ask follow-up questions to delve deeper into the teachers' responses. Admittedly, I felt more comfortable doing this with each subsequent interview as I was concerned about the teachers' time and was also anxious that I might not have sufficient time to ask all of my prepared questions. As a researcher, I anticipated responses to the questions in the teacher protocol. However, because I could not anticipate all possible responses, I occasionally had to improvise follow-up questions. For the most part, I was able to ask pertinent questions in these situations. Nonetheless, after reading the transcripts I noticed several missed opportunities to ask clarifying or other follow-up questions. For this reason, I found the process of reviewing the transcripts of

each round of interviews and then adjusting the questions for subsequent interviews, as needed, gave me important insight about my role as a researcher. Overall, I was able to collect rich, descriptive data from each interview.

Observations

Observations give researchers firsthand knowledge of the phenomenon to be studied as it occurs in its natural setting (Merriam, 2009). They therefore represent a key source of primary data (Yin, 2015). Observational data also provides a context for other data sources collected, and relevant observed incidents and behaviors can be referenced in future interviews (Mack, Woodsong, MacQueen, Guest, & Namey, 2005; Merriam, 2009). Field notes, the written account of observations, are analogous to an interview transcript (Merriam, 2009). Initial field notes include sketches, brief descriptions of relevant words or phrases heard, observed behaviors and interactions; and the notes are formatted in a way that allow the researcher to offer greater details at the conclusion of the observation. Spradley (1980) categorized field observations into three types—descriptive, focused, and selective. I took a descriptive approach in preparing field notes for the three different settings I observed: (a) Northeast State's three-day SEI professional development for participating districts, (b) the district's SEI professional development activities, and (c) the classrooms of the three focal teachers in my study. Spradley (1980) explained descriptive observation as "approaching the activity in process without any particular orientation in mind, but only the general question, 'what is going on here?" (p. 73). I tried my best to capture as much as I could of what was going on during observations. My observations and note taking were guided by the six elements Merriam (2009) suggested. Specifically, she encouraged observers to consider the following during observations: the physical setting, the participants, the ongoing activities and interactions, the conversations that took place, subtle factors relative to the

objective of the study that become evident, and one's own behavior as an observer participant (p. 120-121). My primary role was that of observer participant (Merriam, 2009) in all three settings. As an observer participant, individuals involved in the settings were aware that I was observing them. My participant role was secondary to my role as an observer. However, in particular moments I engaged more as a participant. Below I discuss the procedures I used to collect observational data in the three types of settings observed, and explain how I worked to maintain a balance between my observer and participant roles.

Northeast State's SEI training-of-trainers program. I was primarily a passive observer participant during the three-day training-of-trainers program while taking field notes throughout. I participated in some of the large group activities as a way to socially engage with the participants and diminish my "stature" as a stranger. During small group work I walked around the room and sat with different groups to listen to their conversations. At times, I engaged in small talk with specific participants who represented districts I had begun to identify as possible sites for my study. In these situations, I would informally ask those individuals why they were attending the three-day professional development and what type of professional development plans they envisioned their districts implementing. As previously discussed, my purpose for attending these sessions was to gain an understanding of the type of preparation district representatives received for developing their own SEI professional development programs for mainstream teachers and to familiarize myself with districts that might serve as sites for my study. The notes I took focused on the substantive content addressed in the sessions and resources shared with participants for use in their local professional development activities, the types of support provided in developing district-specific professional development plans, and the expectations communicated to participants. However, these notes were peripheral to my

study and not used as data in my analysis. Because the participating districts were the pool from which I would select a site for my study, throughout the three-day session I was especially attentive to questions and comments made by district representatives that might suggest a strong commitment to improving the education of ELLs and strong support for the local SEI professional development effort. During this stage, I felt an underlying level of anxiety that after selecting a district for my study, that district would decide not to implement its SEI professional development plan in the coming school year. This possible scenario was one of my main motivations to attend the three-day state SEI program. Thus, one of my objectives for attending was to gauge and determine, as best I could, the commitment of each district to following through with their SEI professional development plans.

District SEI professional learning program. I observed the three full days of Livemore School District's SEI professional development. As previously discussed, these were carried out from mid-November through mid-December 2017. Here too I functioned primarily as a passive observer participant and my level of participation in activities and discussions with teacher participants varied by session. On the first day, I introduced myself to the group, and discussed the purpose of my study in an effort to generate interest in it and secure a large pool of volunteers from the 14 teacher participants. Because the study focused on the process by which mainstream teachers seem to learn about SEI strategies and the possible incorporation of these strategies to teach ELLs in their classrooms, the district's SEI professional development activities and how the focal teachers responded to the various learning opportunities they were provided was central to my purpose. As a passive observer participant, I took descriptive field notes at each professional development session, focusing on the learning opportunities the teachers were offered while also noting the (a) features of effective professional development

these opportunities reflected (e.g., active learning, opportunities for collaboration, integration of content into teachers' daily life, sustained focus from one session to the next, teacher reflection) and (b) the specific SEI strategies addressed. I took notes on the level of engagement of all the teachers present at each session (e.g., actively engaged, disengaged, off-task or holding peripheral conversations), and their response to the SEI strategies addressed (e.g., emotive reactions, favorable/unfavorable verbal responses, facial expressions, body language). I audiorecorded the professional development sessions, and subsequently transcribed the whole group conversations. During the session, I walked around the room and jotted down notes to myself summarizing side conversations between and among teachers as they worked in small groups. My goal was to include sufficient details in my notes "to make the story of the participant observation experience complete" (Mack et al., 2005, p. 21). Soon after each observation I expanded my notes (Mack et al., 2005; Merriam, 2009), while details of the sessions were still "fresh" in my mind. I also routinely reflected on the observational data collected using the two questions proposed by Skovdal and Cornish (2015): (a) what do my observations tell me in relation to the research question; and (b) what is the significance of what I observed? My reflective field notes built upon my descriptive notes. While observing and taking descriptive notes I would write notes for myself by placing my comments within parentheses. These are also called observer comments by Merriam (2009), and serve to record my thoughts, questions or concerns as I observe the event. I primarily keyed my field notes into a laptop during my observations. I italicized, and using a different font color to distinguish my comments from the field notes. Sometimes these notations were notes regarding my impression of the situation, reminder to seek clarity about something observed, or connections to the literature or other sources of data collected. The following excerpt, taken from day two of the SEI professional

development program, is an example of a reflective note I wrote to myself based on my observation of a discussion between one of the teacher participants in that session and the two facilitators. The focus of the interaction was on how the teacher might go about assessing ELLs who have minimal English language proficiency, and how the ELLs' native language might be used in assignments:

After the two professional development facilitators went back and forth with the teacher, with the teacher participant providing background information about her ELL student and an upcoming assignment, the facilitators asked the teacher questions about the possibility of alternative assignments that could also be used to assess if the ELL students learned the content. The teacher shared that all the students were already given different choices on how to complete the assignment (e.g., research paper, poster, PowerPoint presentation). The facilitators noted that she could ask the ELL student to complete the assignment in his native language, especially if she felt that the student had understood the material. After hearing what the professional development facilitators had said, the teacher seemed to reflect on whether it would be difficult for her ELL student to complete the assignment with the task choices she typically gave the class. She seemed to recognize that in the case being discussed, the ELL student would do poorly, not because he didn't know the concept involved in the assignment but because of his limited proficiency with English. This appeared to be an important "a-ha" moment for the teacher. What was not clear to me from this exchange was how many of the participating teachers actually understood that having ELLs complete an assignment in their native language is an acceptable and responsive teaching practice. Was there a district "mandate" forbidding the use of ELLs' native language in mainstream classrooms? That

is, was there an "English-only" policy in place, either explicitly or implicitly? Perhaps I can add a follow-up question about this to the next round of teacher interviews.

(reflective note, November 28, 2017)

Incorporating reflections in my fieldnotes during and/or after my observations, such as the above, was helpful to me both in thinking about my next steps in the data collection process and when analyzing the data later on.

Classroom observations. Classroom observations allowed me to view the focal teachers in a naturalistic setting, giving me a first-hand perspective on their teaching (Merriam, 2009). Specifically, my purpose was to explore how the SEI practices addressed in the professional development sessions played out, if at all, in the teachers' classrooms. As such, classroom observations were of utmost importance to my study. I conducted three classroom observations of each focal teacher, during which I adopted the role of passive observer participant. In each case, the teachers informed their students that I was a doctoral student interested in learning about teaching and would be observing the class. I did not participate in any of the classroom activities, nor did I engage with any of the students. I primarily remained seated in an area in the room that allowed minimal disruption of the ongoing flow of the class, while giving me an unobstructed view of the teacher and the unfolding classroom activities. At times, however, I walked around the room to listen to student conversations while in small groups that included ELL students. I observed each class for 40 minutes.

Given the district's change in its schedule of SEI professional development activities, I had to alter the originally proposed classroom observation schedule. My initial plan was to conduct the first round of observations of the focal teachers following their participation in the initial SEI session but prior to the second session. I would then follow this pattern with the other

two observations occurring after each of the planned professional development days. However, because the three SEI professional development days occurred within a relatively short period of time, my proposed schedule of observations would not work. Instead, I decided to conduct all classroom observations following the conclusion of the three SEI professional learning sessions and to observe each focal teacher in three "consecutive" classes. My purpose for doing this was to see the continuity of lessons rather than three unrelated lessons. As previously mentioned, during the first interview with each focal teacher we also agreed on which class I would observe based on the number of ELL students enrolled. My interest was in observing the class with the highest number of ELLs. I learned that the middle schools had an A/B block schedule, which meant that teachers saw each of their classes every other day. Based on this information, I prepared and followed the classroom observation data collection schedule summarized in Table 3, with some days including two observations of two different teachers. While the revised schedule worked smoothly with James and Linda, I was unable to observe Kathy for three consecutive lessons because on the day we scheduled for the third observation the students in her class took an end of unit assessment. In speaking with Kathy, we agreed that it would be best for me to return to observe her class the following time it met. Thus, the third scheduled observation for Kathy was the next consecutive "teaching" day, although the class had moved on to a different instructional unit.

Table 3

Classroom Observation Schedule

Teacher	Observation Dates
James	January 17, 2018 January 19, 2018 January 25, 2018

Teacher	Observation Dates
Linda	January 18, 2018 January 22, 2018 January 26, 2018
Kathy	January 17, 2018 January 25, 2018 January 29, 2018

During classroom observations, which were 40-minutes in duration, I was attentive to the ways in which the teachers interacted with ELLs in lessons, noting particularly if they used SEI strategies introduced at the district's professional development—connecting new content to ELL students' prior knowledge, involving ELLs in activities that required them to interact and collaborate with their native English-speaking peers, integration of English language development with subject matter learning, and providing language scaffolds for ELLs to ensure access to the academic content being taught. Prior to the start of the observations, I asked the teachers to share with me a copy of their lesson plan for the class I was going to observe along with copies of any relevant materials (e.g., handouts, PowerPoints) that would be given to the students, which they consistently did. At the end of each lesson, I recorded my own reactions to the lessons observed as well as insights gained regarding connections between the observational data, my conceptual framework, and other sources of data.

Researcher's evaluation of observations. During my observation of the district's professional development sessions, I strove to maintain a balance between my role as an observer and participant. When reviewing my observation notes for the first professional development session (day 1), I realized that I engaged as a participant more than I had planned for. My intent at the time was for the teachers to become somewhat familiar with me, something

I thought would be important. Thus, I joined their work groups for certain activities, and at times engaged in conversations with them. At the end of the first session, I noted in my reflective notes that I needed to monitor my own behavior in subsequent observations and not engage as much as I had done that day. I also noted that I had forgotten to take pictures of some of the work products the teachers had created on day one, as I had planned to do. Merriam (2009) addressed the difficulty and anxiety researchers can experience in maintaining a balance between their roles as participant and observer as follows:

Participant observation is a schizophrenic activity in that the researcher usually participates but not to the extent of becoming totally absorbed in the activity. While participating, the researcher tries to stay sufficiently detached to observe and analyze. It is a marginal position and personally difficult to sustain. (p. 126)

In my observations of the two subsequent SEI sessions, I adjusted that balance and consciously tried to remain more of an observer and became more selective of when to participate in activities.

Another issue I had to contend with while observing the SEI sessions related to how my presence in the setting might influence the behaviors of the teacher participants and facilitators. For example, on the first day of the district's professional development I overheard teachers asking each other the meaning of "ELP," a term that both facilitators had used during their presentation. The teachers by which I was sitting turned to me and asked if I knew what "ELP" meant. I explained to them that it stood for English language proficiency and added that the facilitators would explain the ideas in greater depth later in the day. This was something I knew because in preparation for this observation I had previewed the plan for the session and been given an advance copy of the PowerPoint presentation the facilitators would use. At the lunch

break, which followed shortly after this incident, I talked to the session facilitators about the teachers' confusion with the ELP term and reminded them that even if the terminology used was second nature to them as ESL teachers, it would likely be new to mainstream teachers. I then noticed that in the afternoon, both facilitators were explicit about the meaning of terms in their presentations. In reflection, I am not sure how much of an impact this interaction may have had on what transpired during the other two SEI sessions, but the incident made me more aware of the tension between engagement and detachment in my role as researcher.

Despite the challenges discussed above, participant observation was a useful strategy in this study. It facilitated my development of positive relationships with participants; gave me insight into district and school culture, available resources, the needs of the community, the students and teachers; and also served as a source of information I drew on to refine questions for subsequent interviews.

Document Review

Documents were an important and less intrusive source of data in my study (Bowen, 2009; Merriam, 2009; Yin, 2015). Documents is an umbrella term referencing a range of different materials (e.g., written, visual, digital, physical) that are easily available to researchers as long as they are carefully reviewed for relevance (Merriam, 2009). With this warning in mind, I purposefully selected documents that were relevant to my research question and overall study focus. The collection and subsequent analysis of documents is useful for several reasons, as noted by Bowen (2009):

Documents provide background and context, additional questions to be asked, supplementary data, a means of tracking change and development, and verification of findings from other data sources. Moreover, documents may be the most effective means

of gathering data when events can no longer be observed or when informants have forgotten the details (p. 30-31).

I collected all documents that were part of the state's training-of-trainers program, as identified in the table below. Table 4 provides an overview of the different documents I collected, purpose for using each, and source. Mr. Jones, the facilitator of this summer program, also created an online padlet that contained all the resources and materials from the three-day sessions, providing participating district representatives and their staff easy access. This was made available to all who attended the three-day training-of-trainers program. I also asked Mr. Jones for copies of the SEI professional development plans submitted by the three districts I had identified from the pool of 19 as potential sites for my study. Mr. Jones shared these plans with me between August 11, 2017 and September 6, 2017. In preparing their plans, the districts were given a template that solicited the following information: anticipated dates professional development is to take place, anticipated schools/grade levels targeted, anticipated numbers of mainstream teachers involved, description of the professional development format (e.g., length, frequency, timeline), topic focus, strategies and resources to be used from the training-of-trainers program, and integration of other district initiatives. As discussed above, none of these documents were central to my data analysis. Instead, they served only as background information for me and of assistance in district site selection.

From the district's professional development sessions, I collected all materials distributed such as handouts, resources, PowerPoint presentations, and I took pictures of activities completed by participants. Jada, the district's Bilingual/ESL supervisor, created a shared Google folder that contained all of the materials and resources the Northeast State Department of Education had made accessible to all participants at the training-of-trainers session with the

facilitators of the local SEI professional development sessions, along with all relevant PowerPoints and resources shared from the local SEI sessions. Towards the end of the third session, Ann showed all participants the Google folder that was created for their use by Jada, and took time to discuss what was included and available to them. The collection of materials and resources from the district's SEI professional learning initiative was useful as it helped me connect what I learned through the teacher interviews to my classroom observations. For example, a vocabulary resource packet discussed during the professional learning session was identified by all three teachers as being very helpful to them, and I observed one of the three teachers using vocabulary graphic organizers from the vocabulary resource packet given to all teacher participants.

Table 4

Document Collection

Document	Purpose	Source
PowerPoint presentations, activity materials, and handouts used as well as educational resources distributed during the Northeast State Department of Education's training-of-trainers program. Handbook for the Northeast State Department of Education's Training of Trainers Program.	Gave me insight about the Northeast State's training-of-trainers summer program and the educational resources from which districts were able to draw on in designing and implementing their local SEI professional development program for mainstream teachers.	The representative of Northeast State Department of Education who led the summer training-of- trainers three-day program
Proposed professional development plans submitted by districts that participated in the state's training-of-trainers program.	Districts' proposed SEI professional development plans were helpful to me in selecting a site for my study.	

Document	Purpose	Source
PowerPoint presentations, activity materials, and handouts used during the district SEI professional development series, as well as the educational resources shared with participating teachers. Pictures of work products completed by the teachers during activities included in the local SEI professional development program.	The various documents used and shared with teachers during the three SEI sessions were helpful in my documentation of the local professional development initiative. They also enabled me to engage the focal teachers in a detailed discussion regarding the features of the SEI professional learning program they had found helpful in learning about ELLs and how to teach them, as well as which specific SEI strategies and resources they had found useful to their work with ELLs, if any.	District facilitators of the SEI professional development initiative Teachers who participated in the local SEI professional learning sessions
Document	Purpose	Source
Instructional plans, and PowerPoint presentations and student handouts used during observed classroom lessons.	These documents helped me understand the teachers' intended lesson objective(s), and gave me insight into the teachers' planning and instruction, including their use (or not) of SEI strategies targeted and/or resources shared through the local professional learning initiative.	Three focal teachers
Livemore School District bilingual waiver Livemore School District bilingual/ESL three-year program plan 2017-2020 District and school performance reports for school years 2014- 2015, 2015-2016, 2016-2017 Northeast State Department of Education enrollment data Northeast State Department of Education ESEA Accountability Profiles	Demographic information, student performance, policies, and other pertinent information specific to the district and each of its three middle schools.	District bilingual/ESL supervisor Publicly accessible documents from Northeast State Department of Education website

Document	Purpose	Source
Northeast State Department of Education Administrative Code specific to Bilingual Education Northeast State Department of Education list of districts with approved bilingual waivers Northeast State Department of Education ESSA Plan		

When I conducted the classroom observations, the teachers shared with me their lesson plans, PowerPoint presentations (if applicable), and handouts with me. These documents helped me understand which SEI strategies and/or resources the focal teachers used to teach ELLs in their classrooms (if any). I also collected publicly accessible documents, including school and district performance reports, Northeast State Department of Education enrollment data, Northeast State Department of Education administrative code regarding bilingual education, Northeast State Department of Education ESEA Accountability Profiles, Northeast State Department of Education ESSA plan, and a list of Northeast State schools and districts with approved bilingual waivers. The collection of all of the documents discussed above, along with my field notes from the observed sessions, assisted me in making sense of what the focal teachers may have learned about SEI strategies and used in their own classrooms.

Although a previous section in this chapter specified the data collection schedule by data source, Table 5 gives a holistic view of all data collection activities.

Table 5Schedule of All Data Collection Activities

Interviews	Observations	Document Data	
	N.D. C. I. I.D. I. I. I.		
SEI Professional Development Initiative			
Individual semi-structured interview (45-60 minutes) for each of the two facilitators prior to the implementation of the three-day sessions: October 25, 2017 (Gayle) October 25, 2017 (Ann)	Implementation of each of the three full day SEI professional development sessions: Nov. 15, 2017 Nov. 29, 2017 Dec. 13, 2017	Presentation PowerPoint Activity handouts Teacher instructional resources (e.g., vocabulary resource packet, SEI strategies and activities based on ELP levels, Can Do descriptors)	
Individual semi-structured interview (45-60 minutes) for each of the two facilitators subsequent to the implementation of the three-day sessions: December 6 (Gayle by phone) December 13 (Ann)			
	 Focal Teachers and their Teaching	<u> </u>	
Individual semi-structured interview (45 to 60 minutes) with each focal teacher James: Dec. 7, 2017 January 12, 2018 February 12, 2018	Classroom observations of each focal teacher while teaching a lesson (40 minutes each): James: January 17, 2018 January 19, 2018 February 25, 2018	Lesson plans and classroom activity handout for each observed lesson	
Linda: Dec. 7, 2017 January 12, 2018 February 12, 2018 Kathy:	Linda: January 18, 2018 January 12, 2018 January 25, 2018 Kathy:		
Dec. 7, 2017 January 12, 2018	January 17, 2018 January 25, 2018		

Interviews	Observations	Document Data	
February 12, 2018; competed February 14, 2018 by phone	January 29, 2018		
State and District			
Two semi-structured individual interviews with each facilitator of the district's SEI professional development (Gayle and Ann) Semi-structured individual interview with Jada		Livemore School District bilingual waiver Livemore School District bilingual/ESL three-year program plan 2017-2020 District and school performance reports for 2014-2015, 2015-2016, 2016-2017 school years Northeast State Department of Education enrollment data, ESEA accountability profiles, administrative code specific to bilingual education, Northeast State Department of Education ESSA Plan Northeast State Department of Education list of districts with approved bilingual waivers	

Data Analysis

Overview

The analysis of data is an iterative, cyclical, and dynamic process that occurs simultaneously as one collects data (Merriam, 2009; Yin, 2015). According to Merriam (2009), "qualitative data analysis is primarily inductive and comparative" (p. 175). To ensure the successful completion of this study and wise use of my time, required careful organization and data management. To this end, I transcribed all interviews and expanded observation field notes in a timely manner, organized documents and artifacts collected systematically, and created an

inventory of data while simultaneously becoming acquainted with those data sources. As data were collected, rudimentary analysis began by reviewing the collected information, re-reading transcripts and re-listening to interviews, taking notes and making comments on the margins of interview transcripts and field notes, and reflecting on how the data related to my research question. I utilized open coding, as described by Saldaña (2009), to analyze my data.

Lankshear and Knobel (2004) noted that "analysis is a process of breaking things down into smaller parts in order to understand these parts in their own right and their relationship to other parts" (p. 315). They view coding as a way to do this by categorizing data so that the researcher can describe and explain the phenomenon being studied. Coding is a cyclical process that begins with "breaking down" data into parts or units in which a code is applied (Lankshear & Knobel, 2004; Saldaña, 2009). Saldaña (2009) defined a code as "a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data" (p. 3). Next, the researcher compares codes for similarities and differences, and then begins to group codes into categories. This is followed by the researcher linking codes and categories in a recursive, cyclical process distinguishing categories and subcategories looking for patterns and meaning-making of the data. I followed this process to examine my research question, while using my conceptual framework as a lens. However, my initial open coding was irrespective of my conceptual framework as I wanted to be open to unforeseen possibilities. I used the same coding process for all of the data collected. During the coding process, I also engaged in analytic memo writing (Saldaña, 2009). Analytic memos allow the researcher to be reflexive about the data. That is, I thought about what I was learning from the data and making comments or reflections about my thoughts as I engaged in data analysis. The memo also helped me to make methodological decisions by "journaling"

through specific activities or "memos," critically examining the researchers coding process, choices and emerging categories or themes (Saldaña, 2009).

Coding Process

First cycle coding began with the teacher interviews. I first read through transcripts resulting from the initial round of interviews with the three focal teachers. As I read through the transcripts, I simply noted any similarities or patterns in the teachers' responses across the interviews, without doing any highlighting. I re-read across all three teachers' first interview transcripts again, but this time I began to highlight sentences, phrases, or words. Initially, I highlighted only what I found interesting or that which caught my attention. I jotted down notes of why I highlighted a particular section of the transcript. I then returned to the highlighted text to try to "distill" the essence of the sentence, phrases, or words, a process that helped me begin to develop initial codes. I organized the codes into a table with an initial definition for each and an example of raw data that exemplified that code. Table 6 shows examples of this type of data coding.

I repeated this process for the second and third interviews, testing out draft codes, and refining the ones that seemed to work and eliminating those that did not, while keeping my research question in mind. From the 23 first cycle coding methods identified by Saldaña (2009), I used those that aligned best with the nature of my study, research question posed, and conceptual framework used. The specific methods I used were referred by Saldaña (2009) as "structural coding" (p. 66-70), "descriptive coding" (p. 70-73), "in vivo coding" (p. 74-77), "open coding" (p. 81-85), and "value coding" (p. 89-93). Each time I reviewed the interview transcripts, I applied these first cycle coding methods. I repeated the first cycle coding process several times, each time checking the fidelity of the codes. I used analytic memos throughout the

coding process to help me document and reflect as I was coding. For example, in some analytic memos I reflected on my research question, and in others I focused on the code choices I was making while ensuring that the operational definitions assigned to the codes were truly reflective of those codes. I continually evaluated and modified the interpretation of the data.

Table 6

Coding Data Record Examples

Initial Code	Definition	Raw Data
teacher self-critique	teachers reflect on their ability, knowledge, skills, or strategies to teach ELL students	As far as helping them be proficient in anything, I always felt like I was kind of lacking.
student effort	ELL students "try" or work hard to do school work	She is so determined. She will study for the test and she tries harder than most of my students.
internal struggle	teachers reflect on decisions they feel unsure about making	I am also like confused. Is it okay to give a Spanish-speaking student a Spanish worksheet or should they have the English worksheet?

Once I was comfortable with the codes generated from the teacher interviews, I repeated this process with the interview transcripts of the two district professional development facilitators and the bilingual/ESL supervisor. As I reviewed their transcripts, I used the codes generated from the teacher interviews to find any data that connected with those codes. During the process, I identified additional codes. When coding the interview transcripts of these three district representatives, I developed a catalog system of the sources from where the codes were generated. I then moved on to coding the field notes from the observations of the district professional learning sessions as well as the classroom observations. Once I was sufficiently

comfortable that I had reached a point where I could identify no additional codes and the refined codes were appropriate, I began to cluster codes into categories. This too was an iterative process as I rearranged codes into different categories when patterns among the codes became apparent to me. As I grouped the codes together, I tried to name the category to be reflective of the group of codes I had arranged together and which I believed shared similar properties or meanings. I then organized the categories into themes. In my initial attempt at developing themes I mistakenly tried to "tie" the themes to my research question and conceptual framework. With guidance and support from my dissertation committee and critical friends group I was able to create themes that were more reflective of my analytic findings. I methodically reviewed how the themes were connected to the data from across all the interviews conducted, and from the field notes from the professional development sessions and classroom observations. Three themes emerged from my analysis: (1) walking in their students' shoes and attending to the "deeper things" rather than focusing solely on "English language learning; " (2) being content area and language teachers simultaneously: (not) knowing what to do with language learners' English proficiencies; and (3) from the known to the new: refining the already-in-place and trialing the not-yet-in place for the benefit of ELLs and other students. These themes are developed and discussed in Chapter 5.

Ethical Considerations

Since my research involved human subjects, I made all efforts possible to ensure that my actions were in accordance with ethical guidelines set forth by the Montclair State University Institutional Review Board. Every caution was taken while conducting the research to ensure the three Belmont principles (respect for persons, beneficence, and justice) were adhered to. I explained to participants the purpose of the study and provided specific information enabling

them to make an informed decision about whether to consent to participating in it. As part of this explanation, I disclosed that I was an employee of the Northeast State Department of Education, but that I was conducting the study in my role as a doctoral student. Those who consented to participate were informed that they were free to withdraw from the study without concern for consequences. All efforts were made to minimize the risks to participants. In keeping with this principle, data were kept confidential, participant privacy was ensured through the use of pseudonyms, no identifiable information (direct or indirect) or markers were included in the collection and analysis of data, and the storing of data was secured.

Enhancing Data Validity and Reliability

To ensure the trustworthiness of my data collection and analysis I considered some of the validity tests identified by Maxwell (2010). More specifically, I incorporated triangulation of data sources, intensive exposure to the phenomenon under study within its context so that rapport with participants was established and multiple perspectives were collected and understood. I ensured the collection of rich-data and added follow-up questions to subsequent interviews in an effort to clarify previous responses. The use of a research journal allowed me to describe my own feelings and assumptions, reflect on my decisions throughout the data collection and analysis process, and aided in monitoring my positionality and biases. In addition to these actions, I spoke and met on a consistent basis with members of my dissertation committee, and critical friends who were also doctoral students conducting their own dissertation studies. The validity and reliability of my interpretation of the data were also enhanced through my ongoing engagement with these individuals as I shared with them my dissertation struggles and solicited their feedback on how best to address them.

Researcher Positionality

Throughout the study, I was aware that as a Northeast State Department of Education employee, I might influence participants' behaviors given that one of my responsibilities is to monitor districts and charter schools in my county to ensure they comply with the educational administrative code. Therefore, I was concerned that participants could be hesitant to share with me information relevant to my study if they felt it would not be in accordance with Northeast State guidelines and code. My positionality as a Northeast State employee was evident the first day of the district's professional learning when on a few occasions the teacher participants asked me to explain particular aspects of Northeast State's education regulations and statutes. As I discussed earlier in this chapter, I "recalibrated" my engagement the next day to minimize my participant role. Overall, I found the people I interviewed to be open when responding to my questions. To encourage their openness, I reassured all interviewees that our conversations were confidential and reiterated that my role was as a researcher and not as a Northeast State employee, barring instances that involved information I was legally required to report to the authorities (e.g., child abuse).

A characteristic of qualitative research is that the researcher is the primary agent involved in the generation and analysis of data. As someone who identifies as a bilingual Latina, and has experienced racism, I am sensitive to individuals who mistreat or think less of culturally and linguistically diverse students. As an educator, I have advocated for those who have been underserved and marginalized in schools, and I have questioned policies and practices that limit student access to an equitable education. As such, I tried to guard against having this perspective skew my collection and analysis of data through reflection and self-monitoring. Using my researcher journal and engaging in critical self-reflection was useful in this endeavor. I was genuinely surprised, for example that none of the teacher participants who attended the district

professional development expressed deficit views of ELLs. Perhaps because the teachers who participated in the district's SEI professional development program had volunteered to do so, all seemed genuinely concerned with how to improve their teaching of ELL students. While they expressed feeling overwhelmed by having ELL students in their classrooms given their lack of preparation to do so, they actively sought support and resources to help these students. I found them eager to improve their practice, and any difficulties they encountered were not rooted in a belief that ELL students were not capable of doing academic work. While my early journal entries suggested that I expected "push-back" comments from the teachers, I was relieved this was not the case. In fact, several times during the professional development sessions, the two facilitators reminded the teachers to be advocates for ELLs in their schools especially when confronted by other colleagues who may not be as aware and mindful to ELLs and their experiences. During some of these discussions, the teachers recounted situations where they had already confronted colleagues regarding how they talked about or treated ELLs. In brief, I found the journaling process helpful in checking for my own bias and assumptions.

CHAPTER FOUR: CONTEXT FOR THE STUDY

The focus of this investigation was on what three mainstream teachers seemed to learn about teaching ELLs from their participation in a district-sponsored sheltered English instruction (SEI) professional learning initiative and how those ideas appeared to change their classroom practices. Because the processes of learning and change do not occur in a vacuum, it is important to take a close look at the context within which these three teacher participants seemingly learned about and changed their practices for teaching ELLs. Building on complexity thinking, in this chapter I detail the "nested systems" (Martin & Dismuke, 2017; McQuitty, 2012; Opfer & Pedder, 2011) that helped shape the learning and change processes, which I discuss in depth in Chapter 5. The systems discussed here are—from broadest to most specific—the state and broader policy levels, the district, the SEI professional learning initiative itself, and the teachers and their immediate school and classroom settings.

Northeast State

Demographic trends observed over the past three decades in Northeast State, along with statewide educational policies and related supports for school districts have shaped the education of ELLs in this state, as discussed below.

Demographics

Historically, the population of Northeast State has been characterized by racial/ethnic diversity. However, in the past 30 years or so the state has become increasingly diverse. In 1990, for example, people of color (those other than the non-Hispanic White population) accounted for 20.7% of all state residents (Northeast State, 1993); by 2018, however, the share of this group in the overall population has climbed to an estimated 44.9% (Census Bureau, 2018), a

substantial gain of 24.2 percentage points over less than three decades. Nowhere is this diversity more evident than in the state's public schools.

In the 2017-18 school year, over 1.3 million students were enrolled in pre-k through high school in Northeast State, with students of color comprising 56% of total enrollments (Northeast State Department of Education, 2018b); twenty-eight years earlier, however, (in 1990) students of color made up a much lower 34.8% of the state's total student population (National Center for Education Statistics, 1992). Along with racial/ethnic diversity, schools in the state have also become more linguistically diverse over time. According to the Northeast State Department of Education, during the 2017-18 school year ELLs made up 5.9% of total Pre-K-12 enrollments, up from 4% in 2010. This change represented a gain of about 26,000 ELL students, a nearly 32% growth over a brief seven-year period. In 2018, ELLs in Northeast State collectively spoke 315 languages, with Spanish, Arabic, and Chinese being the three most frequently represented. Interestingly, ELLs were widely distributed throughout the state that year, present in five of every six school districts (Northeast State Department of Education, 2018c). Consistent with national patterns, urban school districts report large numbers of ELLs; and while students from this group are present in growing numbers in suburban schools, their numbers tend to be much lower in those settings, at times creating educational programming complications, as I will soon discuss.

Policies Regarding the Education of ELLs

Although somewhat distant from teachers and their classrooms, state policies regarding the education of ELLs exert a powerful influence in classroom life. Most relevant to this study are the two specific policies discussed below.

Bilingual education policy. Back in 1974, the Northeast State Board of Education approved regulations on bilingual education. As conceptualized then, the overall intent of bilingual education was to serve the needs of *children of limited English-speaking ability*, a group that was relabeled *English language learners*, or ELLs, when the bilingual codes were revised in 2017 to ensure that the state's terminology was consistent with the terminology used by the federal government since 2015. According to the bilingual education rules originally adopted by the state:

When at the beginning of any school year there are within the schools of the district 20 or more pupils of limited English-speaking ability in any one language classification, the board of education shall establish for each such classification a program in bilingual education for all the pupils therein, provided, however, that a board of education may establish a program in bilingual education for any language classification with less than 20 children therein. (Northeast State Register, 1975, p. 8)

As in nearly all states in this country with an approved bilingual education policy, the goal of bilingual education in Northeast State is to assist ELLs in acquiring English language skills while learning the content of the established school curricula in their home language. Once a student is considered to have developed sufficient English language proficiency to be able to benefit from content area instruction in English, he or she must exit the bilingual program and transition to a mainstream class (at the elementary level) or classes (in middle school and high school). Northeast State uses a set of approved standardized tests that are administered annually to monitor the progress of ELLs and determine the extent to which they are advancing throughout the bilingual program.

School districts' compliance with this bilingual education policy has been monitored by the Northeast State Department of Education since 1976, when the mandate first went into effect in the schools. However, the bilingual education rules were revised over the years, with the last round of revisions occurring in 2016. Key changes included consistency of terminology and definitions throughout code, the term "Limited English Proficient" and "LEP" was replaced with "English Language Learner" and "ELL," greater specifications were provided regarding parent notification timelines, passive voice language was replaced with active voice to clarify responsibilities, and professional development requirements were expanded to include supervisors and administrators. Despite the revisions, the bilingual administrative code maintained the bilingual waiver process. School districts with 20 or more ELLs in any single language classification can request a waiver for the bilingual education program requirement and propose offering instead one or more of several instructional alternatives (e.g., sheltered instruction, high-intensity ESL, bilingual tutorial, bilingual resource, or part-time bilingual). To receive state approval for alternative programming, a district must demonstrate that it is impractical to provide a full-time bilingual program based on the students' age range, grade span, and/or geographic location spread. This revision is particularly relevant to suburban districts, which often enroll relatively low numbers of ELLs from across different language groups.

School districts seeking a bilingual waiver must include with their requests not only an explanation of why it is impractical for them to offer bilingual education to ELLs, but they must also provide detailed information about these students, including enrollment by grade level for each school and achievement data (e.g., English language proficiency level growth and attainment, ELL subgroup performance on state standardized assessments). Most relevant to my study, however, school districts are also expected to develop and submit a professional learning

plan for teachers who work with ELLs—including mainstream teachers who teach them in their classrooms. Based on the information given, Northeast State Department of Education officials either approve the waiver or ask the district to reorganize its program by supplying additional supports for ELLs and/or offering them different instructional programming. Districts with approved waivers must submit an annual report that updates the information required by the state, as outlined above. During the 2017-18 school year, a total of 178 districts, or approximately 31% of all districts in Northeast State, were approved for bilingual waivers (Northeast State Department of Education, 2018a).

According to the information maintained by the Northeast State Department of Education, the most prevalent alternative programs in the 2017-18 school year—used by over 90% of all districts with approved waivers—were high-intensity ESL (accounting for 65% of all waiver approvals) and sheltered English instruction (accounting for another 27%) (personal communication, December 4, 2018). High-intensity ESL requires that ELLs be provided a minimum of two periods of instruction daily by a certified ESL teacher, with one of those periods being a standard ESL class and the other a tutorial or ESL reading class. Students in these programs are placed in mainstream classes for instruction in the content areas for the rest of the day. Districts providing sheltered instruction as an alternative to a bilingual program must offer ELLs at least one class period daily of ESL instruction by a certified ESL teacher, and the teachers of sheltered classes must be content-certified. While subject area (mainstream) teachers in programs of both sheltered instruction and high-intensity ESL are expected to participate in professional learning experiences designed to prepare them to teach ELLs, those in programs of sheltered instruction are required to receive training on SEI strategies to make subject-area content rigorous, culturally relevant, and comprehensible for ELLs. As this suggests, ELLs

receiving either high-intensity ESL or sheltered English instruction, the two most frequently used alternatives to bilingual education in the state, spend the majority of their school day in mainstream classes with teachers who may not be familiar with appropriate practices for teaching ELLs and feel inadequately prepared to do so.

Northeast State's ESSA plan. Beyond the ELL student regulations discussed above, the plan Northeast State developed in accordance with the Every Student Succeeds Act (ESSA) of 2015 specifies additional requirements that schools and districts must meet regarding the education of ELLs. As discussed in Chapter 1, ESSA is the reauthorization of the Elementary and Secondary Education Act (ESEA) originally approved by the federal government in 1965. As amended recently, this legislation authorizes the federal government to award funding to states and school districts for purposes of providing "all children significant opportunity to receive a fair, equitable, and high-quality education and to close educational achievement gaps" (Every Student Succeeds Act, 2015). Upon its approval in 2015, ESSA replaced the No Child Left Behind (NCLB) Act that had been in place since 2001. States that meet the requirements of ESSA are provided funding for their educational programs.

As was the case with NCLB, ESSA continues to require states to implement accountability systems that hold school districts, schools, teachers, and students accountable for academic results. However, ESSA provides states greater flexibility than was previously available under NCLB to determine indicators and targets for measuring the performance of schools as part of their accountability systems. In exchange for this flexibility, states must develop a rigorous plan designed to close achievement gaps and prepare all students—including ELLs—to succeed in college and careers. Broadly, ESSA requires states to use ELLs' acquisition of English language proficiency as one measure of school quality in their

accountability systems, and to establish statewide criteria for identifying and exiting ELLs from English language services and/or programs. Using this new flexibility, Northeast State developed a plan that reduced the minimum number of ELL students required to create a subgroup of ELLs for accountability purposes to 20, down from 30 under NCLB. This reduction is in keeping with the approved bilingual education code in Northeast State. The plan gives schools/districts in the state a maximum of five years from the date an ELL student is first enrolled to achieve the state established English language proficiency score (a composite score of 4.5 on ACCESS 2.0). Schools or districts that struggle to meet academic proficiency or growth targets, including ELLs' English language proficiency targets, are identified as lowperforming. According to Northeast State's ESSA plan, schools identified low performing need comprehensive or targeted support. A comprehensive support school is one that performed at or below the lowest 5% of Northeast State schools receiving Title I federal funds or any high school with a graduation rate less than 67%. A school identified in need of targeted support and improvement had one or more student subgroups performing at or below the lowest 5% compared to other Title I funded Northeast State schools. Student subgroups, as defined in ESSA, include the different racial and ethnic groups (e.g., White, Black, Hispanic, Asian), ELLs, economically disadvantaged students, and students with disabilities.

As the above suggests, the ESSA plan recently developed by the Northeast State

Department of Education placed increased pressure on schools in the state to provide appropriate services to help develop ELLs' English language skills and meet established accountability measures. A feature of ESSA, of special relevance to my study, is that to apply for professional development grants from the federal government, states must now show how teachers and other

school personnel who work directly with ELLs can provide appropriate instruction for these students.

Northeast State's SEI Training-of-Trainers Program

Northeast State Department of Education officials recognized the need to support and provide multiple opportunities for school districts to improve the capacity of teachers beyond specialists in bilingual education and ESL instruction to educate ELLs. In addition to the variety of professional development offerings available to the over 116,000 teachers in Northeast State's schools, the Department of Education sought specifically to increase the number of mainstream teachers knowledgeable about SEI instructional strategies. With the help of a federal grant, the Northeast State Department of Education partnered with a Regional Equity Assistance Center in 2013 for this purpose. Regional centers are federally funded and provide technical assistance to improve and support public schools' capacity to offer equitable learning opportunities to all students regardless of race, gender, religion, and national origin (Mid-Atlantic Equity Consortium, n.d.). This partnership led to the development of a three-day training-of-trainers initiative focused on sheltered English instruction, a teaching approach that builds on a sociocultural view of teaching and learning. As I discussed in the previous chapter but worth reiterating at this point, to be accepted for participation in this three-day training-of-trainers program a school district must commit to designing and implementing a professional learning initiative of a minimum of 15 hours for mainstream teachers from their local settings.

As designed, the state's training-of-trainers program offers participants a comprehensive review of sheltered English instruction, a variety of activities intended to deepen participants' understanding of sheltered instructional strategies, time to discuss the needs of mainstream teachers at their local settings, and support to develop district-specific SEI professional learning

plans to address identified needs. Participants also receive a set of resources for use in the implementation of those plans. In the first day, participants review SEI principles and instructional strategies, and examine examples of activities designed to demonstrate central SEI concepts. On day two, participants draft their respective professional learning plans, giving care to align them with both national and state professional learning standards. They spend time in groups discussing current language development research and exploring the implications of those ideas for Northeast State's academic learning standards. They then receive a guiding template to assist in outlining their respective professional learning plans. If more than one person represents a district, they work as a team to produce their plan. On the third and final day, participants continued to work on their plans and also received constructive feedback from peers. They collectively problem-solved potential challenges (e.g., teacher/administrator buy-in, initiative fatigue) and discussed possible ways to address these.

Over the past five years, more than 90 districts have participated in the program. During the summer of 2017, representatives from 23 districts attended Northeast State's three-day training-of-trainers SEI program, one of which was Livermore School District.

To summarize, the trend toward increasing racial/ethnic and linguistic diversity evident in the student population in Northeast State mirrors demographic patterns noted in many other states across the U.S.; and while in the past linguistic diversity was mostly seen in urban schools, it is not unusual today to have noticeable numbers of ELLs enrolled in suburban schools as well. Perhaps driven by federal policies (e.g., NCLB, ESSA) and their underlying interest in preparing the future workforce for a knowledge-based economy, Northeast State illustrates key aspects of the educational reform currently evident in all states. One of these is the push to hold schools, teachers, and students accountable for meeting rigorous academic standards, as demonstrated in

test scores (Coburn et al., 2016). Another is the focus on getting all students, not just some, to meet high standards, something that calls for the elimination of achievement gaps, which as related to this study involve ELLs and their English proficient peers (Bunch, 2013; de Jong & Harper, 2005). Still another educational reform features a strong belief in using teacher professional development as a central vehicle for advancing desired school change (Darling-Hammond et al., 2009; Garet et al., 2001; Gulamhussein, 2013).

Northeast State gives a window into why ELLs have been appearing in increasing numbers in mainstream classes. As discussed, the growing numbers and dispersion of this student population has made it "impractical" for some districts, but especially suburban districts who enroll these students in lower numbers than urban schools, to offer ELLs a full-bilingual education program. This state has solved the problem by offering districts the option of applying for a waiver to the bilingual education requirement. However, the alternative programs most widely used offer ELLs one or two periods of ESL instruction daily, while placing them in mainstream classes for content area instruction. As such, mainstream teachers who were not previously prepared to teach students in linguistically diverse classrooms and often report feeling unprepared for the task (Ballantyne et al., 2008; Reeves, 2006; Samson & Collins, 2012) must rely on professional learning experiences to equip them with the skills needed to teach ELLs.

Livemore School District

Demographics

Livemore School District is located in Livemore Township (pseudonym). Both the district and township are in Northeast State's top 10 largest school districts and most populous municipality, respectively. Livemore Township is a suburban community that borders a metropolitan city. The K-12 district consists of 23 schools (17 elementary schools, three middle

schools, and three high schools). The district also offers an alternative education program for middle and high school students and a night school. A review of the district's website shows highlights of numerous student achievements in academics, athletics, performing arts, and character education.

As per the school performance report for 2016-2017, Livemore School District enrolled 11,486 students. Of that number, 48% were White, 27% Hispanic, 17.9% Black or African-American, 3.9% Asian, 2.9% two or more races, 0.2% Native Hawaiian or Pacific Islander, and 0.1% American Indian or Alaska Native. Thirty-eight percent of all enrolled students were classified as economically disadvantaged, 17% as students with disabilities, and 3% as ELLs (or 345 students). Although the Livemore student population is diverse, as the figures above show, this diversity is not evenly distributed across the district, as evidenced by the demographics of the neighborhood elementary schools. As noted above, White students account for less than half of the student population (48%) in school year 2016-17; however, they were the majority in 11 of the 17 elementary schools. Specifically, White students accounted for 50% of total enrollments in four schools, for 60% in five other schools, and for more than 70% in two others. The three middle schools, which are most directly relevant to this study, draw students from their respective neighborhood elementary schools. The demographic breakdown of the middle schools is discussed later in this chapter as part of the overview of each focal teacher.

While the district's overall student population has declined over the past ten years, the number of ELLs enrolled has risen during this time. According to enrollment data reported by Northeast State Department of Education for school year 2007-2008, Livemore School district served 12,899 students, with 183 of those students identified as ELLs (or 1.4% of total enrollments). Ten years later, the overall student population had decreased to 11,405, and the

number of ELLs had doubled to 365 students (or 3.2% of total enrollments). During my interview with Jada, the district's bilingual supervisor, she indicated that the district's ELL enrollment had reached 395 students (Jada, Bilingual/ESL Supervisor Interview, November 29, 2017). Because Northeast State has a sizeable Puerto Rican community, the Department of Education informed schools and districts to prepare for the possible arrival of students from Puerto Rico whose families had been displaced by Hurricane Maria, with the overwhelming majority of them likely to be ELLs. As such, Jada anticipated a further influx of ELLs given that the township had many residents of Puerto Rican descent, something my review of the 2010 U.S. Census data confirmed. Specifically, Hispanics or Latinos accounted for 10.9% of the township's population, with Puerto Rican's being the largest Hispanic group in the township at 4.4% (U.S. Census Bureau, 2010).

Bilingual Waiver

Livemore School District has filed for bilingual program waivers for the last five years (Jada, personal communication, February 4, 2019). In its most recent bilingual waiver request, based on numbers for June 2017, the district reported serving 304 ELLs who collectively spoke 25 languages. In accordance with Northeast State bilingual policy, Livemore School District was mandated to provide bilingual education to students in two language groups—Spanish speakers (with 206 students) and French-based creole and pidgin speakers (with 26 students). However, the district submitted a bilingual waiver for these groups on the grounds that it was impractical to provide bilingual programs to students who were enrolled across the K-12 grade spans. The district further argued that the geographic location of the schools made offering bilingual programs impractical given that ELLs were located in all 23 schools and transporting them between buildings, especially at the elementary level, would place the children on a bus for

45 minutes daily. For example, in the middle schools, which are of particular relevance to this study, there was a total of 55 ELLs. Willard Middle School enrolled 11 of them, but this included only 5 Spanish speakers and two French-based creole/pidgin speakers. Creekside Middle School had another 22 ELLs, and of these, 13 spoke Spanish and four spoke French-based creole/pidgin. Douglas Middle School, not involved in my study, served 22 ELLs, including 17 Spanish speakers and one French-based creole/pidgin speaker. While there were more than 20 Spanish-speaking ELLs at the middle school level, the district would have had to bus students from two of the schools to create one.

In place of a bilingual education, Livemore School District proposed and was approved by Northeast State Department of Education to offer high-intensity ESL instruction to all identified ELLs at their respective schools. As previously mentioned, these programs provide students with a minimum of two periods of instruction daily by a certified ESL teacher. The students are assigned to mainstream classes for the remainder of the school day. To implement the approved plan, the district hired additional ESL teachers, with their numbers increasing over the past two years (Jada, Bilingual/ESL Supervisor Interview, November 29, 2017). At the beginning of my study the district employed 10 ESL teachers; during the course of my study the district hired additional ESL teachers. Nearly all of the teachers were assigned to teach ELLs in multiple schools. For example, Gayle and Ann, the district's SEI professional learning initiative's facilitators, are also ESL teachers in the district. Gayle taught K-5 students and traveled between three different schools. Ann taught in two different K-5 schools and traveled between her assigned schools as well.

Administrative Background and Support

Jada, the bilingual supervisor, explained during my interview with her that both the superintendent and the director of curriculum and instruction were new to the district. The superintendent began working in the district in May 2017, and the director started in August of that year. Jada, who was just beginning her second year as a supervisor, was fairly new to her position as well. She shared that her two immediate supervisors were supportive of the ESL department and her efforts to ensure that ELLs receive appropriate supports. At the time of our interview (November 2017), Jada informed me that four additional ESL teachers had been hired (to begin in January 2018), bringing the total number of ESL teachers to 14. She also indicated being in the process of interviewing additional candidates and would likely add two more ESL teachers to that number.

During her relatively brief time at Livemore School District, Jada has worked to strengthen the ESL department, advocated for a variety of resources (e.g., funds, staffing, materials for teachers and students, curriculum writing, professional development), implemented processes and standard operating procedures, and promoted awareness among school personnel about the ESL department's existence and the type of support it could provide. Prior to Jada's hiring, the ESL department did not have its own supervisor and the district administrators who were overseeing the work of ESL teachers lacked experience with and expertise in ESL. As such, school principals and teachers lacked a clear understanding of the ESL department.

Both Gayle and Ann commented on the positive effects that Jada's hiring had on the department. As Gayle noted:

I think in the past there was a different administrator assigned to oversee the department,

in some cases, there might have been multiple changes of supervisors in one school year. So, the department had no stability and no one that really delved into curriculum content and instructional strategies like the way this supervisor is doing. She is really getting into how to support these teachers. (Gayle, Professional Learning Facilitator Interview 1, October 25, 2017)

With a new administrative team (superintendent and director of curriculum and instruction) in place and a renewed sense of purpose and vision Jada has given the ESL department, the district is now responding in a coordinated way to the increased enrollment of ELLs and the new state accountability measures for this student population.

District Response to Increased ELL Enrollment

One of the responses already discussed has been the hiring of ESL teachers. As previously mentioned, Livemore School District started the 2017-18 school year with 10 ESL teachers and by January 2018 that number increased to 14, with the possibility of two additional hires before the end of the school year. Although Jada would like each of the schools with the highest numbers of ELL students to have a dedicated ESL teacher who is not shared with other schools, she knows this will take time given budgetary constraints. Nonetheless, she anticipated that with the hiring of the four additional ESL teachers she would be able to make the workload of all ESL teachers more manageable by either reducing the number of assigned schools and/or decreasing the number of students they are responsible to teach.

Beyond hiring a permanent supervisor focused solely for the ESL department and hiring ESL teachers, the district has secured and provided various resources for staff and students.

With additional funds given to the ESL department, Jada reported increasing the number of professional learning opportunities for ESL and mainstream teachers in the district by hiring

consultants for professional learning sessions and supporting staff to attend outside conferences and workshops. Jada also purchased new intervention instructional materials and programs (e.g., iReady and Lexia Core) for use in both ESL and mainstream classrooms. Furthermore, the district now provides all ELL students with tablets that have built-in features and apps to support students with their academic work. For example, I observed Andriy (pseudonym), an ELL student in James' 8th grade social studies class, using his tablet frequently to translate assigned readings and/or worksheets written in English into his native language, thereby facilitating his participation in lessons, including doing work with peers. These tablets also have spoken text and dictation features, allowing ELLs to practice speaking in English and listening to the standard pronunciation of English words. Additionally, the three teachers who participated in my study mentioned that the district had given them supplemental instructional resources in their content areas (e.g., textbook ancillary materials in Spanish, content-specific lesson modifications for ELLs). They noted, however, that while these resources were helpful, nearly all were for use with Spanish-speaking ELLs.

Jada is well aware that mainstream teachers in the district, most of whom have at least one ELL student in their classes, lack the knowledge and skills to adequately support ELLs' learning. As she explained, the need for professional development is clearly evident based upon the many requests the ESL department receives for assistance and guidance for teaching ELLs from mainstream teachers. As such, she is purposefully working to increase the number of professional learning opportunities for mainstream teachers. To address the needs of the district, Jada set out to expand the expertise of ESL teachers in the district with sheltered instruction with the idea of having them share those ideas with mainstream teachers, either informally or through organized professional learning sessions. With this in mind, Jada invited the ESL teachers in the

district to attend a weeklong professional development seminar focused on SEI strategies in the summer of 2016. The seminar was held at Grover State University (pseudonym) and was led by two well-known veteran educators, and highly respected SEI facilitators who have done considerable work in Northeast State. Although, only two of the ESL teachers (Gayle and Ann) attended the seminar with Jada, both of them subsequently played a central role in the Livemore School District's SEI teacher learning initiative featured in this study, as discussed later in this chapter. Also, of importance, it was while attending that summer SEI seminar that Jada learned about Northeast State's training-of-trainers program.

As a follow-up to the summer SEI session, Jada convinced the district to use a significant portion of its 2016-17 federal (ESSA) grant funds to provide SEI professional development to over 90 elementary mainstream teachers from 14 of the 17 elementary schools. Those teachers attended a three-day session led by outside consultants, and the sessions were designed to familiarize them with the Sheltered Instruction Observation Protocol (SIOP), which is a specific instructional model that incorporates SEI strategies. All district ESL teachers attended the threeday SIOP session as well. Jada was pleased to have organized this district-wide professional learning opportunity, which she considered successful. However, she acknowledged that the high cost of this initiative would limit similar offerings in the future. Pursuing a more costeffective path to develop the capacity of mainstream teachers in the district to teach ELLs, Jada decided to attend Northeast State's three-day SEI training-of-trainers program in the summer of 2017. As she put it, this would allow the district to offer "in-house" professional development. With this idea in mind, Jada invited Gayle and Ann to attend Northeast State's SEI program with her. Because both were unavailable during the time the training-of-trainers sessions were offered, she was the sole representative of Livemore School District at the three-day program.

Like many other school districts in Northeast State and across the nation, Livemore School District has seen a growth in its ELL student population in recent years and is responding to the increasing presence of these students in schools. Arguing that ELL students in the district speak too many different home languages and are too widely dispersed across its 23 schools to make it feasible to offer a program of bilingual education, the district requested and received approval from Northeast State Department of Education to implement a high-intensity ESL program instead. Consistent with the approved instructional plan, the district hired a supervisor for its ESL department and an expanding number of ESL teachers, purchased a variety of instructional materials, and invested substantial financial resources to develop mainstream teachers' capacity to teach ELLs given that these students are placed in their classes when the students are not in their two daily periods of ESL. As this suggests, professional development for mainstream teachers is a central component of Livemore School District's ongoing efforts to reform its educational practices to address the needs of the changing student population. A description of the SEI professional learning initiative that resulted from Livemore School District's participation in the Northeast State's SEI training-of-trainers program in the summer of 2017 follows.

Livemore School District's SEI Professional Learning Initiative Professional Learning Facilitators

Jada spoke highly of Gayle and Ann as educators, and during my interview with her she shared why she had selected these two ESL teachers to be the facilitators of Livemore School District's SEI professional learning initiative. As Jada explained, both teachers were intrinsically motivated to improve their practice and often expressed interest in their ongoing professional learning, as evidenced by their attendance at the weeklong SEI summer session at Grover State

University the prior year. She noted that although she had invited all the ESL teachers in the district to attend the summer professional development seminar at Grover State University, Gayle and Ann were the only two who acted on the invitation. According to Jada, Gayle and Ann were innovative, flexible, open-minded, current with research, and had previous experience leading professional development for their colleagues. Jada added that as she learned more about Gayle's and Ann's knowledge of teaching and professionalism over time, her decision to involve them as facilitators of the local SEI professional development initiative was validated.

Jada was impressed that while Gayle and Ann were paid a stipend for a specified number of hours to develop the professional learning program, they went above and beyond those hours to ensure a productive learning experience for participating mainstream teachers. Additionally, given the pressure of time, they had to plan the details of the professional learning program while teaching on a full-time basis, with no "release" time, and somehow found ways to make it work.

Gayle. Gayle, who self-identified as a White female, was starting her 7th year of teaching. Prior to being hired by Livemore School District, Gayle was a third-grade mainstream teacher in another public-school district in Northeast State. Because the district where she taught at the time served a large ELL student population, she was encouraged to take university courses leading toward ESL certification at the district's expense. She reported that even before receiving her ESL certificate, she volunteered to participate in ESL family night and other ESL-focused events. After moving to another community, Ann applied to teach in Livemore School District to work closer to home. In 2013, she was hired by Livemore School District as a third-grade teacher. While employed by the Livemore School District, Gayle completed her ESL certificate and a Master's degree in teaching to become even better prepared to teach ELLs. In 2016, she applied for and was offered a position as ESL teacher in the district.

In school year 2016-2017, Gayle's first year as an ESL teacher, she was assigned to work with ELLs in Creekside Middle School and an elementary school. During my initial interview with Gayle, she shared that teaching middle school was different from her previous experience but enjoyed the assignment nonetheless. She believed that her previous experience as a mainstream classroom teacher in Livemore School District helped her connect with colleagues in her role as ESL teacher since she understood their challenges working with ELL students.

Gayle admitted that she was somewhat nervous when asked to facilitate the district's SEI professional learning initiative given her limited experience facilitating professional development. However, she added when she learned that her co-facilitator would be Ann, who in the previous school year had co-facilitated a district-wide professional development for mainstream teachers on vocabulary instructional strategies for ELLs, she immediately felt more comfortable. I should note that Gayle and Ann worked well together as co-facilitators of the local SEI professional learning initiative, and Gayle never appeared nervous throughout the three full-day sessions, had good rapport with all teacher participants, and was an engaging presenter and facilitator.

Ann. Ann, who self-identified as a White female, had spent her entire teaching career at Livemore School District. As the 2017-18 school year began, she was entering her 29th year of teaching and fifth year as an ESL teacher. In my initial interview with Ann, she reported having taught every grade within the K-5 grade span, and having worked in three of the 17 elementary schools in the district. She joked being a "forever" and "die-hard" Livemore Township resident. By this she meant that she had actually attended district schools as an elementary and secondary student, is still a township resident, and her three children had also attended school in the district.

Ann added that it was nice (and also crazy) to teach the children of her former students, and thoroughly enjoyed having those long-term connections.

During Ann's first 11 years of teaching, she taught in elementary schools that were linguistically homogeneous and enrolled only a handful of ELL students, if any. In 1999, she was assigned to teach at a more diverse elementary school and had to substantially modify her teaching for Burmese refugee students and students from Haiti, many of whom had experienced extremely impoverished conditions in their native country. These students were not only learning English as a second language and adjusting to new cultural expectations in their new country, but they also had limited prior schooling experiences. Ann admitted feeling overwhelmed and unprepared to teach ELL students then. As she began taking ESL courses her teaching confidence increased. When I interviewed her for my study, Ann expressed being eager to put her experience to work to support colleagues in mainstream classrooms, who she knew were struggling to teach ELL students, just as she once did. After completing her ESL teaching certificate, a little over four years ago, Ann secured a position as an ESL teacher in the district. She expressed that she was thoroughly enjoying this new chapter in her teaching career.

Ann recounted numerous examples of her experiences facilitating professional development for colleagues. Based on her longevity as a teacher, she mentioned being tapped often by the administration to turnkey information when the district adopted a new reading program and other new district initiatives. In Ann's view, the SEI professional development initiative she co-facilitated with Gayle had been very helpful to the participating teachers because they were all eager to learn about ways to improve their teaching for the growing number of ELL students they were finding in their classrooms. As Ann talked about her professional experiences and ongoing efforts to support teachers in her assigned schools, along

with my observations of her interactions with teachers in Livemore School District's SEI professional learning initiatives, it became evident to me that she is a veteran teacher who is respected and is sought out by both teachers and administrators.

Planning the SEI Professional Learning Sessions

As previously mentioned, Jada was the only person from Livemore School District to attend Northeast State's three-day training-of-trainers program in the summer of 2017. She reported receiving permission from Mr. Jones, the Northeast State Department of Education official who ran the three-day training-of-trainers program, for Gayle and Ann to facilitate the local SEI professional development even though they had not attended the summer sessions. He agreed since they had both received prior formal professional preparation in the uses of SEI. To get Gayle and Ann started with the planning of the three-day teacher learning initiative, Jada shared with them the online padlet that included all the resources Northeast State Department of Education had compiled for the use by district personnel in their local professional development program. In addition to using the state's resources, the two facilitators decided to draw on the materials they had gathered from the SEI seminar both had attended at Grover State University the previous summer, and the SIOP professional development offered to all elementary teachers and district ESL teachers. Although it was a lot of materials to sort through, Ann observed, "we looked at all presentations. What is the common thread? Whatever is common then that is what must be the most important thing" (Gayle, Professional Learning Facilitator Interview 1, October 25, 2017). Using an approach to review the available material from previous professional development experiences, they were able to identify key ideas to address as part of the district's three days of SEI professional learning. In making those decisions, the two facilitators agreed to include ideas that were not overly theoretical, preferring to focus on what was relevant to the

teacher participants and their specific school and classroom contexts, and maintaining a balance between presenting content and hands-on activities. Ann discussed how the two continuously placed themselves in the "shoes" of the teacher participants as they planned the sessions. In my first interview with her she noted:

So, we are trying to picture ourselves as if we know nothing. Consider how the information would be beneficial after being there all day. No one likes to be at professional development and feel like it was a waste of their time, and it wasn't relevant to them. (Ann, Professional Learning Facilitator Interview 1, October 25, 2017)

Ultimately, Gayle and Ann decided to more closely model the sessions after the professional development they attended at Grover State University, which followed the FABRIC approach, a learning paradigm developed by the Office of Bilingual/ESL Education of Northeast State Department of Education. The FABRIC learning paradigm is a framework that districts and schools in Northeast State can use to prepare teachers and administrators to address the needs of ELLs. According to both Gayle and Ann, they used the six threads that run through the FABRIC framework. Specifically, this paradigm consists of six threads to guide the substantive organization of the three days of professional learning. The term FABRIC is an acronym which refers to the six threads—Foundational skills, Academic discussions, Background knowledge, Resources, Individualized assessment, and Culture. As organized, the professional learning experiences focused on two FABRIC threads each day. A description of the substantive topics and activities for each of the three full-day sessions in Livemore School District's SEI initiative follows.

Overview of the Sessions

Since the previous year the district had offered elementary mainstream teachers profession learning on using sheltered instruction for ELLs in their classrooms, the focus of the new initiative shifted to middle school teachers. As was explained in Chapter 3, all of the district's middle school social studies and science teachers were invited to attend the SEI professional development. Jada explained in her interview that she decided to focus on the middle school social studies and science teachers because those two content areas have much academic-related language; and she also thought it was time to focus and support the middle school teachers since the previous year only mainstream teachers in elementary schools had been offered professional development to help them teach ELLs. Eleven middle school teachers volunteered to participate and attend the district's SEI initiative. Additionally, three elementary school teachers who had missed the district-wide SEI professional learning the previous year were also included to bring the total number of participants to 14.

The SEI initiative included more than 15 hours of professional learning spread over three days, with each session beginning at 8:30 am and ending at 3 pm. Table 7 gives an overview of activities used and the SEI strategies addressed, by session.

Table 7
Summary of SEI Professional Development Sessions

Sessions	Session Activities	SEI Strategies Addressed
Day 1	 Overview of ESL department purpose and function, and the identification and exiting of ELL students from ESL program Overview of sheltered English instruction and the FABRIC paradigm Graffiti Activity-What is culture? Moises video-Effects of immersion and English-only 	 Value ELLs' home language, knowledge, and culture. It is a resource; bring it into the classroom. ELLs need to be taught literacy skills explicitly
	policies and practices on ELLs • Factors that affect second language acquisition	through language objectives

Sessions	Session Activities	SEI Strategies Addressed
	 Affective filter video, and discussion of ways to lower this filter What does it mean to be culturally responsive, and implement culturally responsive classroom practices Distinction between empathy and sympathy Supporting foundational skills through the four language domains (listening, speaking, reading, writing) Explanation of English language proficiency levels (ELP) and Can Do descriptors Content and language objectives 	
Day 2	 Three Key Features for Building Background Knowledge Ways to activate background knowledge (e.g., standup sit-down, KWL chart, brainstorming, quick writes, student journals) Leveraging native language Explicit vocabulary instruction, and three tiers of vocabulary instruction (e.g., academic content words, high utility words, basic words) Multiple opportunities for ELLs to engage in academic discussions Distinction between BICS and CALP Language-concept connection, leveraging ELLs' native language to teach unknown concepts, and leveraging ELLs' background knowledge of concepts to teach academic language Develop ELLs' academic language 	 Explicitly link concepts to students' background experience Bridge ELLs' past learning with new concepts Explicitly teach and emphasize vocabulary every day (e.g., word walls, personal dictionaries, graphic organizers) Leverage ELLs' first language (e.g., cognates) Pair or group students with English native speakers (listening, speaking). Use flexible grouping strategies Increase wait time Allow ELLs to create, clarify, fortify, and negotiate ideas
Day 3	 Provide students with scaffolds (sensory supports, graphic supports, interactive supports) Teach ELLs strategies (meta-cognitive, cognitive, and social/affective) to help them become independent learns, enhance comprehension and retention of information Provide comprehensible input (Mandarin video and El Perrito Bombero activities) Reduce language load of lesson but not rigor of content Multiple ways of assessing ELLs, individualizing assessments according to ELLs' ELP levels 	 Use scaffolding and other strategies to engage students and make content accessible to them Adapt materials to student's language level Use comprehensible input strategies (e.g., modeling, visuals, realia, facial expressions, gestures, graphic organizers) Provide ELLs different pathways to demonstrate mastery of knowledge and skills

Day 1. The first session focused on *culture* and *foundational skills*, two of the FABRIC threads. Jada began the session by welcoming everyone. She then discussed the trend toward increasing ELL enrollments in the district, and the new Northeast State accountability mandates. She explained that the SEI professional learning initiative would be of support to them with the rigorous academic and linguistic demands of their content areas. After participants introduced themselves, Gayle and Ann provided information about the district's ESL department and the process used for identifying and exiting ELLs from it. They then presented a broad overview of how ELLs' English language proficiency (ELP) levels determined whether a student is eligible for ESL services or not. The participants' responses (e.g., questions asked, side chatter and comments made among the teachers) to the information provided suggested that they either did not know, or were unclear about, the process and criteria the district used to identify ELLs. Along these lines, participants were told that the ESL teacher assigned to their respective schools could provide them with the ELP levels of ELL students in their classes, something that would be helpful in planning their lessons. This was followed by a discussion of the FABRIC model, and why it was important to start with an exploration of "culture."

For the first activity, teachers were asked to work in groups and brainstorm what came to their minds when they heard the word 'culture,' and write those ideas on chart paper. Once completed, the chart papers were hung on the walls and teacher participants circulated around the room to read what their peers had written. This was followed by a whole group discussion, guided by the facilitators and centered on the idea that a person's culture informs the way he/she sees the world, including his or her perception of education.

For the second activity, teachers viewed a video about Moises, a fictional 11-year old recent immigrant struggling to acclimate to a school that implemented an "English-only" policy,

which gave the student limited support in his math class, even though he was quite knowledgeable about math but spoke very little English. The teachers were asked to work in small groups to answer a set of questions related to the video. The Moises video produced an animated exchange about having ELLs who have not yet developed English fluency take standardized tests. Teachers expressed frustration about this practice, seeing no benefit whatsoever in having students take tests in a language they had yet to master. Since the teachers were aware that I was a Northeast State employee, they asked me if the Northeast State Department of Education would reconsider this practice. Although I had not intended to participate in session discussions, I felt my response was required in this situation. I explained that it was the federal government, not the state, which required ELLs to take the same standardized assessments the state administered to English proficient students. I added that the state exempted ELLs in grades 3 to 8 from taking the English Language Arts (ELA) test if they had been in the country for less than a year, and when placed in a testing situation allowed them to utilize word-to-word dictionaries as an accommodation along with other accommodations (e.g., extended time, mathematics response speech-to-text, directions read aloud and repeated in student's native language, text-to-speech for the mathematics assessments in Spanish). Lastly, I also informed them that the state was in the process of requesting an extension of the ELA exam exemption for high school ELLs. The facilitators shifted the teachers' attention to how ELLs might feel when placed in learning situations where they were not given instructional supports.

For the final morning activity, Gayle and Ann introduced factors that affect second language acquisition, focusing specifically on the theoretical construct of "affective filter."

Teacher participants then watched a video that distinguished between feelings of empathy and sympathy. The morning session concluded with a discussion, first in small groups and then as a

whole group, in which teachers explored the cultural understandings and skills ELLs would need to appropriately participate in schools and the broader community. The intended take-away from this discussion was that while ELLs needed to learn the values and culture of the school, teachers also needed to understand, value, and integrate ELLs' cultures into their classes.

The afternoon portion of the day addressed foundational skills. The teachers were introduced to the practice of writing language objectives, in addition to the content objectives they were familiar with, in their lessons. Gayle and Ann explained that the use of language objectives was intended to help teachers attend to building ELLs' understanding of foundational content, phonics, vocabulary, language structures, and comprehension skills to access grade level material. Teachers were told this could be done by focusing on ELLs' skills in four language domains—listening, speaking, reading, writing. Working in groups, the participants were tasked to develop a content and a language objective for a lesson they had recently taught. To support their work, the teachers were given "Can Do descriptors," a tool that details what students should be able to do for each language domain, based on their ELP level. They were then given the ELP levels for a fictitious student to use as an example as they developed a language objective for their lesson. As I walked around the room, I noted that the teachers were asking each other if they understood what the task expected and calling the facilitators to explain the task again. Some seemed concerned that language objectives would soon become a district requirement. To ease the teachers' concerns, the facilitators clarified that the district required language objectives only of ESL teachers. Noting the confusion participants seemed to be having with the task, the facilitators stopped by each work group to clarify expectations. After teacher groups shared their objectives with the whole group, the facilitators stressed that when planning a lesson, they needed to consider the language demands it made on the students. More specifically, they

needed to consider whether the lesson asked ELLs to receive information (e.g., listening or reading) or to reproduce the information learned (e.g., speaking or writing). This was what should guide the type of language objective they were to use in the lesson.

At the end of the day, the facilitators asked the teachers to write on an index card two things they took away or learned from the session and one thing they would like to learn more about. Gayle and Ann used this strategy to gather teacher feedback about the session and would help adjust their professional learning plan for the second day.

Day 2. The second session focused on *students' background knowledge* and *academic* discussions, two other FABRIC threads. Teacher participants were engaged in four different activities that addressed the importance of activating students' prior knowledge and linking it to their teaching to facilitate ELLs' content learning. Teacher participants were helped to understand that since ELLs' language and culture differ substantially from that of the mainstream, it could be difficult for them to see how to make those connections. The facilitators modeled for the teachers, strategies and activities they could use in their own classrooms to activate and link ELLs' prior knowledge. At different points in the discussion, Gayle and Ann drew the teachers' attention to how the activities or strategies they were experiencing as students would be helpful in teaching ELL students in their classrooms. For example, after being asked to talk over the content of the modeled lesson with their partners, the facilitators stressed the importance for ELLs to have multiple opportunities in class to practice listening and speaking with English-native speakers. The last component of background knowledge addressed was that of developing ELLs' academic vocabulary, specifically helping them connect new terms to vocabulary the students were already familiar with. In fact, vocabulary instruction was emphasized throughout day two.

Ann emphasized the need to teach ELLs content area vocabulary explicitly to support their development of academic language. The participants were provided numerous resources (e.g., strategies, graphic organizers) to use with their ELL students for this purpose. As teachers reviewed the materials, many commented that the vocabulary instructional strategies and resources studied were actually beneficial for all students. Ann acknowledged this was true, but stressed that they were especially helpful to ELLs who needed to learn both the English language and academic content concurrently. In this discussion, the teachers were encouraged to leverage ELLs' native language as a resource. Using cognates in their teaching was one way to build on ELLs' native language knowledge. That is, this strategy positioned ELLs to transfer their native language skills to their learning of English.

The afternoon session focused on *academic discussions*, the second FABRIC thread for the day. Gayle shared with the teachers a variety of strategies they could use to engage ELLs in academic dialogue, which is critically important for the students to do as they learn English. She explained Cummins' (1981) concepts of Basic Interpersonal Communication Skills (BICS) and Cognitive Academic Language Proficiency (CALP). Ann emphasized that because it takes longer for ELLs to develop CALP, teachers should use a variety of strategies that involve them in creating, clarifying, fortifying and negotiating the meaning of ideas, thereby bridging the gap between everyday language usage and conceptual knowledge development.

Building on ideas summarized in a graphic titled "The Language-concept Connection Instructional Model," Ann explained that teachers should use students' known language to teach an unknown concept. Conversely, they should use a known concept to teach unknown language, in this case, English. It was during this discussion that one of the teacher participants (not a focal teacher), asked how she might assess ELLs. (In chapter 3, I discussed and characterized this

exchange as an "a-ha" moment for this teacher.) The teacher made the connection that an ELL student in one of her classes knew the concept she was teaching the class, but lacked the English fluency to demonstrate his understanding of that concept in the way she expected the entire class to do. That is, the teacher realized that it would be best to use a different assessment option with this particular ELL student to allow him to display what he actually knew about the topic. Both facilitators reinforced that modifying assignments and assessments based on ELL students' ELP levels, including allowing students to complete required work in their native language, was a perfectly good practice. After the exchange, Gayle modeled activities and strategies that teachers could use to engage ELLs in academic discussions. As in day one, the second day concluded with the teachers being asked to list on an index card two things they had learned from the session and one thing they would like to explore further. As reported above, the facilitators used this information to reshape their plans for the next session.

Day 3. The final session focused on *resources* and *individualized assessment*, the final two threads in FABRIC. Ann began the session asking the teachers to complete a handout that involved a review of the concepts presented in the two previous full-day sessions. She modeled for the teachers how she adapted the activity and noted that adaptations were an example of scaffolding used to give ELLs access to the academic content of learning tasks. She then engaged the teachers in a variety of activities and provided numerous examples of how scaffolds (e.g., instructional modifications, supplemental materials, graphic organizers) and strategies (e.g., metacognitive, cognitive, affective, repeated readings, mental imagery) could be integrated in their teaching.

Ann stressed the importance of attending to comprehensible input to ensure that ELLs can access and understand ideas being taught. The teachers participated in two different

activities to help them better grasp the notion of comprehensible input along with strategies they could use to make this happen. In the first activity, teachers were asked to watch a video of an instructor teaching a lesson in Mandarin. After watching the video, Ann asked the teachers to explain what had been taught. The participants laughed because they could not understand what the instructor in the video was saying. Ann replayed the video, however this time the instructor taught the lesson using expressive facial expressions, gestures, props, and previewed key vocabulary terms with accompanying visuals depicting those terms. Again, after watching the video Ann asked the teachers to explain what had been taught. This time the participants were able to explain that the Mandarin-speaking teacher in the video was giving a health lesson on the difference between eating healthy and unhealthy foods. Ann then presented a variety of scaffolds (e.g., modeling, visuals, realia, hands-on activity, demonstrations, gestures, body and facial language, repetition, pictures, graphic organizers) teachers could use to ensure comprehensible input for ELLs.

The teachers were then asked to complete the Spanish reading comprehension activity called, El Perrito Bombero (the Little Fire Fighting Dog). Ann previewed key terms in Spanish with the group. For example, the teachers were given a picture of a little dog alongside the word "perrito." Ann cued the teachers to look for cognates in words they read in Spanish that might help them make connections to English words they were familiar with. The teachers were directed to work with a partner to answer the questions related to the assigned reading passage. As I walked around the room, I heard laughter as participants attempted to complete the assigned task. After the task was completed, Ann had the teachers discuss their answers as an entire group. She also asked them to report on how they felt completing the assignment and to indicate how well they did with it. The teachers expressed different emotions (e.g., uncertainty,

nervousness, frustration). They pointed out that it was easier to complete the assignment based on the information Ann had previewed with the group. The facilitator then shared that the passage the teachers had read was at a Kindergarten reading level and then gave them a middle school level science reading passage to examine. The teachers, who were surprised by what to them seemed challenging text, discussed the difficulty they would experience if expected to complete a similar task with the middle school passage. This paved the way for another discussion about scaffolding instruction and teaching ELLs strategies to help them become independent learners while providing them with comprehensible input, and decreasing their affective filter to facilitate their learning of new academic content. Ann concluded the morning session by providing participants with additional resources to support explicit vocabulary instruction in the form of a resource packet titled, *Inventory of the GO TO Strategies for English Language Learners K-12*. This packet offered the teachers a variety of strategies and activities they could use based on their students' ELP levels.

The focus of the afternoon session turned to *individualizing assessments* according to students' ELP levels. It is important to point out that assessing and grading ELLs was a topic of discussion in each of the three sessions. There appeared to be confusion about how to assess and grade ELLs, especially when many of the teachers expressed frustration at the lack of any specific district policy on the topic, leaving teachers in the three middle schools with little guidance for assessing and grading ELLs in their classes. The afternoon began with an activity that the session facilitators called "human affinity." In this activity, participants were first asked to write on a post-it note their biggest question, concern, or interest related to the assessment of ELLs. Once done, they walked around the room and found others who had expressed concerns similar to their own, thus forming group(s) of people with an affinity. Ann called on each of the

three groups that were formed to share their affinity with others. A teacher from one of the groups asked:

Should I change the formatting of my tests? Are they going to be able to read my test? I was just thinking of the most frustrating exercise we had so far where we had to read and answer those questions in Spanish. How are my kids going to read my tests? When am I going to be able to assess them correctly when they can't even read in English? (Ann, Professional Learning Facilitator Interview 2, December 13, 2018)

The second group reported their concern about the limited time they had to learn about the backgrounds of ELL students in their classes. Those teachers also shared that they often did not know much about their ELL students, and had to figure it out on their own. In light of this, how could they possibly know how to assess or grade their ELL students? The third group expressed frustration with the practice of having ELLs take standardized assessments without the supports and strategies they have learned over the three days in the district's SEI professional learning initiative. One teacher mentioned her concern about working to scaffold their classroom assessments, but having the state administer standardized assessments to them with no supports other than a dictionary. This state practice took away her motivation to scaffold instruction for ELLs. Ann facilitated the conversation, answering the teachers' questions and addressed their concerns as best as she could.

Ann presented information about different types of classroom assessments (formative, summative, and individualized). When speaking to the idea of individualizing assessment, Ann noted that teachers should consider students' ELP levels and followed the point with a discussion of different ways teachers could individualize assessments. She stressed, however, that it was important to assess the students for the content that was taught in class, without "watering" down

the content assessed. As general guidance, Ann suggested that the teachers consider the following: develop authentic assessments that are related to ELLs' background knowledge; provide a different question format (e.g. change open-ended questions to multiple choice); reduce the language complexity of the questions; provide scaffolds such as word banks, pictures, graphs, checklists, and glossaries; offer alternative ways to demonstrate understanding (e.g. graphic organizers, sentence frames, and drawings); and allow students to take the assessment and/or provide their responses in their native language.

To conclude the session, Ann reviewed with the teachers the Google SEI folder that Jada had developed for their use. The folder contained the PowerPoints for all three SEI sessions, resource handouts, and information about the modeling activities the teachers engaged in during the three-day sessions for possible use in their classes. The facilitator informed the participants about the upcoming professional learning community (PLC) meetings that Jada had organized as follow-up support to the SEI professional learning sessions. As was the practice by now, Ann asked the teachers to write on their post-it notes two things they had learned from day three and one thing they would like to explore further. She also offered to stay after the session to give each teacher the ELP levels for ELL students in their classes. Of the 11 teachers present for the third session, five (none of the three focal teachers) met with Ann to obtain their students ELP levels.

PLC sessions. In addition to the three full days of professional learning, the SEI professional development plan Livemore School District submitted to Mr. Jones, the district had proposed holding a series of one-hour PLC meetings, to be held after-school hours, once the three full-day sessions were implemented. The PLCs were to take place on a monthly basis beginning in January and extended through May. Because the SEI sessions began later in the

year than originally planned and to avoid state standardized testing, Jada modified the implementation timeline, and scheduled three meetings to take place in May and one more in June. All meetings were scheduled during after-school hours, from 4 to 5 pm. The PLC sessions were open to all of the teachers who had participated in the three-day SEI professional learning sessions in Fall 2018, and also to all the elementary school teachers who had attended the SEI professional learning offered the previous school year. Teachers who attended the after-school PLC meetings would receive a stipend of \$33 per hour. The specific PLC meeting schedule and topics were as follows: May 7 (building background knowledge), May 21 (fostering and supporting academic conversations), May 30 (instructional best-practices), June 4 (assessment strategies).

Following the scheduling of the PLC meetings, I communicated with the three focal teachers who participated in my study, inquiring about their intended participation in those meetings. Linda informed me that the meetings were scheduled on days Willard Middle School held faculty meetings, which she did not want to miss, so she would not be attending the PLC meetings. Kathy responded that she was juggling many different responsibilities, including a grant program that met on some of the same days as the PLC meetings. As such, she decided against attending the PLC meetings. James did not respond to my inquiry. Because none of the three focal teachers were planning to attend the follow-up PLC meetings, I opted not to attend them. I subsequently learned that due to low teacher turnout only two of the PLC meetings were held. Jada shared that five teachers signed up for the first PLC meeting, and four of them actually attended. For the second PLC meeting, four teachers signed up and three attended.

In sum, Livemore School District's SEI professional learning initiative reflected many features of effective professional development identified and empirically tested by Garret and

colleagues (2001). As shown, the learning activities described above were *intensive and* sustained over time, with the 15 hours of professional learning sessions extending from mid-November through mid-December and involving three full days of activities. While the plan to hold four PLC meetings following the sessions would have extended the learning opportunities even further, difficulties in getting these meetings on the schedule and poor attendance at the two meetings held, made this part of the SEI initiative much less productive than originally envisioned. Additionally, the activities in the three-day sessions were purposefully designed to *involve the participants actively in learning* about ELLs and how to teach them, and also reflected modeling of effective practices and *collaboration among participants*. Furthermore, the substance addressed in the sessions was highly relevant to the participants' daily teaching.

As discussed in Chapter 2, in a major study that used regression analysis, Garret and his collaborators (2001) found that these professional development features tended to result in the improvement in teacher knowledge and skills, and were also conducive to change in their instructional practices.

Interestingly, while teacher attendance at the three professional learning sessions was consistent overall (although a few absences were noted at each of the sessions), the scheduled PLC meetings drew very limited response on the part of teachers. As discussed previously, to make it possible for the teachers to attend the three full day sessions, they were released from their daily teaching responsibilities and given professional development days. Although teachers were offered an honorarium to attend the PLC sessions during after school hours, the incentive did not prove attractive to most participants, including the three focal teachers. It is possible that given the many pulls on teachers' time—both by other school-related responsibilities or their

personal lives—scheduling professional learning experiences during after-school hours is not likely to be as productive as building those activities within teachers' work days.

Focal Teachers and Their Immediate Settings

The description of each focal teacher presented in this section gives attention to their personal and professional backgrounds, the middle school in which they taught, and the class selected for observation.

James

Personal and professional background. James is a social studies teacher who has taught for nine-and-a-half years, the last seven of which were at Willard Middle School. During the 2017-2018 school year, he taught 8th grade U.S. History. James is certified by Northeast State to teach social studies in secondary schools. He reported attending a pre-service teacher preparation program with a focus on urban education. The program's curriculum gave emphasis to issues of student poverty, race, and social class as related to city schools. James could not recall taking any specific courses or receiving any prior preparation whatsoever for working with ELLs.

James is a native English speaker and self-identified as biracial (Italian and Filipino descent), but shared that he was raised around Spanish-speaking individuals. In his earlier work experience he interacted regularly with Spanish-speaking co-workers who would teach him words in Spanish, and in exchange he would teach them words in English. He shared that between his life experiences and what he had learned in high school Spanish classes, he was able to communicate to some extent with Spanish-speaking students. James enjoys traveling and has traveled to different countries, experiences that have given him insights into what it feels like to not be able to communicate due to a language barrier. However, in a Spanish-speaking country

he felt able to communicate somewhat with others, but at times had difficulty understanding the language used by local people.

Prior to working in Livemore School District, James spent two years teaching urban middle school and high school students in a nearby state. He was initially hired by Livemore School District as a long-term substitute teacher and assigned to teach a self-contained special education classroom. He expressed confidence and comfort in his ability to work with special education students and discussed different types of preparation (pre-service and in-service) he had received to work with this student population. He reported seeing some similarities between teaching ELLs and special education students, especially regarding scaffolding, accommodations, and instructional differentiation that needed to be provided to support these two groups of learners.

James stated that ELL students had been placed in his classes only in the past two years. He indicated, however, that this school year (2017-2018) was his first experience teaching an ELL student with very limited English language proficiency. Reflecting on his professional experience, he shared feeling he lacked the ability to properly teach ELLs, specifically to help them learn the content and become proficient in English. He added, however, that he typically had good rapport with all of his students, and always tried his best to do well by them. James volunteered to attend the SEI professional learning sessions because he was motivated to improve as an educator. His experience with the district's professional learning sessions was his first exposure to SEI strategies.

Middle school environment. James taught at Willard Middle School, which has the largest student population of the three middle schools in the Livemore School District. Although the school is demographically diverse, Willard serves proportionally more White students than

the other two district middle schools (61%), has proportionally the fewest students who come from low socioeconomic backgrounds (27%), and ELLs make-up only about 1% of total enrollments. According to the school performance report for 2016-2017, 87.6% of the student population spoke English at home, 6.3% spoke Spanish, and 5.9% spoke a variety of other languages (e.g., Gujarati, Mandingo, Igbo, French-based creoles and pidgins, and Chinese), which added considerably to the linguistic diversity of ELL students in the school.

Overall, the academic achievement of students at Willard Middle School compared favorably to that of their peers at the two other middle schools in the district. As per the 2017-2018 ESSA school accountability profile, 53.7% of Willard's students were proficient or advanced proficient in ELA and all eight of the school's reportable subgroups met their performance targets; however, compared to White, English-speaking students, students with disabilities, Black students, and ELLs showed achievement gaps, with ELLs being the lowest performing subgroup. On the up side, the evidence showed that ELLs had made the largest growth in academic progress, exceeding their ELA growth target. In math, 43% of the school's student population had reached proficient or advanced proficient levels. Black students and students with disabilities were the only two subgroups that had not met their performance targets. Although ELLs were substantially behind their White, English-speaking peers, they performed better than the other student subgroups, with 33.3% reaching proficiency in math. Unfortunately, the accountability profile did not show ELLs' English language proficiency progress because the number of students did not meet the minimum subgroup n-size of 20 which is required by Northeast State for results to be reported publicly, out of concerns that individual students could be identified if there are less than 20 students in a subgroup.

The structure of the school schedule and classes were as follows: ELA and math classes were taught daily in 80-minute blocks, and students were grouped homogeneously into three academic levels in math and two in ELA. In the content areas of social studies and science, the two represented in this study, classes were heterogeneously grouped and reflected a wide range of academic levels. The social studies and science classes met for 80 minutes every other day.

In total, Willard Middle School enrolled 11 ELL students, each of whom received two periods of daily ESL instruction with the ESL teacher as required of schools implementing high-intensity ESL programs. The ESL teacher taught these classes during the first half of the day because in the afternoon she was scheduled to provide ESL instruction at an elementary school.

The students I encountered in the school were friendly and respectful. Staff was helpful and always greeted me with a smile. As students changed classes between class periods, they chatted with their friends or teachers, and moved briskly to their next class. While classes were in session, I very rarely saw a student in the hallway. To me it seemed that Willard Middle School had a safe and orderly school environment.

Focal class observed. James taught a total of four ELL students between two of the classes he taught, two in one and two in the other. I selected one of those classes primarily to make it feasible for me to conduct each round of classroom observations over two days.

Specifically, I selected James' 8th grade U.S. History class, which he taught at a time that did not conflict with classes taught by Kathy or Linda.

The selected 8th grade U.S. History class I observed enrolled 14 students, two of whom were ELL students—Andriy (pseudonym) who came from the Ukraine and Lindaly (pseudonym) who was from the Dominican Republic. James characterized this class as "a bunch of good kids." In my interview with him, he reported that the students had a wide range of academic

ability. According to James, Lindaly was more fluent in English than Andriy. He further noted that Lindaly appeared to understand what went on in class but was "reserved," requiring him to check-in with her often to ensure she was on-task and participating in class activities. James thought that Andriy was more "motivated" than Lindaly and appeared more "engaged" with class activities and discussions. He was also willing to ask for clarification regarding the substance of class-assigned activities with the student who sat next to him. When I observed the class, I understood James' characterization of the two students. For the most part, Lindaly kept to herself during the lessons I observed. For example, when grouped with two other female students in one lesson, she remained on the periphery, although she appeared to be listening to the discussion between the two other students. Andriy, in turn, listened intently to class discussions and made use of his tablet during the lesson. For example, when paired with another classmate to complete a class assignment that involved reading documents and answering questions related to those documents, Andriy used his tablet to translate the text into Ukrainian, read it, wrote his responses to the questions, and shared them with his partner. I want to note that his partner, who had completed the worksheet quickly, waited patiently for Andriy to do his work. I also observed Andriy voluntarily raising his hand to participate in class discussions.

Linda

Personal and professional background. Linda is an 8th-grade science teacher with six years of teaching experience. For the last three years, she has taught at Willard Middle School. Linda self-identified as White and a native speaker of English. Although she speaks no other language fluently, Linda mentioned learning some basic Spanish words and taking Italian classes in high school. She shared that her husband is bilingual in English and Spanish, and occasionally has enlisted his help to support her Spanish-speaking ELL students. Linda has traveled to other

countries and reported having experienced feelings of anxiety when trying to communicate with others she encountered in her travels because she did not speak their language.

Linda has multiple teaching certificates from different states. In Northeast State, she holds both K-8 and K-5 certificates with a middle school extension in Science. She has a birth through 6th grade certificate for all subjects from the state where she attended college and completed a university-based pre-service teacher preparation program. She was also awarded a certificate for teaching birth through 9th grade with a middle school extension in Science in her home state. At the time I interviewed her, Linda was working towards National Board Certification, widely considered among educators as the highest teaching credential a teacher can obtain. She acknowledged that part of her interest in obtaining National Board Certification was the prestige that comes with it, but she stated that the process is helping her become a better teacher since it requires much self-reflection and the collection of artifacts to include in a portfolio that reflects best instructional practices. Additionally, she noted that her husband's job may require them to move to another state in the future, and being Board Certified enables her to teach elsewhere without having to undergo that state's certification process.

Prior to being employed as a Livemore School District teacher three years ago, Linda taught in urban schools, the initial two years in a charter school and the third in a Catholic school. While Linda completed a traditional university teacher preparation program, she opted to join Teach for America upon graduating from college. Although having completed her student teaching in a high-risk, urban school she felt unprepared for urban school teaching. Based on that experience, she decided that Teach for America would best support her during her initial years of teaching, as she told me in our initial interview:

Knowing how the administration works in urban education, I knew that if I did it through

Teach for America I would have some sort of backing. I decided to go through them instead. I was fortunate and got into a school that had a fantastic administration and Teach for America actually backed off. But I had the option of those supports, which is why I went through Teach for America. I felt they provided supports that I would otherwise not have had upon leaving a traditional teacher preparation program where there isn't support from the university once you start teaching. (Linda, Teacher Interview 3, February 12, 2018)

Linda shared that she has always had ELL students in her classes, but admitted not feeling well-prepared to work with this student group because the type of preparation needed had not been part of either the university pre-service program she attended, or the Teach for America services she received. Linda added that as a graduate student she took a culturally responsive teaching course, but the focus of that course was on issues of culture, not language. As such, her experience with the district's professional development sessions was her first exposure to SEI strategies.

Middle school environment. Like her colleague James, Linda taught at Willard Middle School, a description of which appears above.

Focal class observed. I observed one of Linda's 8th grade science classes. Of the 19 students in this class, one of them was an ELL. Since Linda taught only one ELL student, my options of classes to observe was automatically narrowed to this one. Linda described the students in this class as "goofy middle schoolers" who were "kind, welcoming, and helpful" to one another. She reported that her students represented a wide range of academic abilities, including gifted and talented, special education students, students with 504 plans (a plan that details academic supports and accommodations for students with an impairment such as a mental

or physical disability, long-term illness, or some other disorder that substantially limits one or more major life activities), and an ELL student. Linda joked that she had a little bit of everything in her class; nonetheless, they were a cohesive group of students who worked well together and supported each other. Linda indicated that a paraprofessional was assigned to this class primarily to support the students with 504 plans, but was also helpful to other students.

Dwede (pseudonym), the ELL female student in the class, was from Liberia. She also had James as her social studies teacher, but in a class I did not observe. Linda indicated that she had a "positive relationship" with Dwede, who greeted her whenever they met in the school. According to Linda, Dwede was placed in the sixth grade when she arrived in Livemore School District, and first attended another middle school. Linda learned that because Dwede had been the target of bullying in her previous school, she was transferred to Willard Middle School during the first marking period of her 8th grade. Linda felt that Dwede's transition to her new school was going well because the students at Willard Middle School were "welcoming and inclusive." Linda described Dwede as a "shy student" who was likely to become "more outgoing" once she felt a level of comfort and familiarity in her new environment. Although during our first interview, Linda described Dwede as someone who didn't speak much English, upon learning about her ELP level from the ESL teacher assigned to Willard Middle School, she realized that the student was actually more fluent in English than she originally thought. During my observations of Linda's class, I saw Dwede engaged and following along with the lessons. Just as Linda described her class, when it was time for group work, one of the English-speaking students would invite Dwede to partner with her for different class activities. I observed both students working well together, talking, laughing, and taking turns discussing how to complete assignments.

Kathy

Personal and professional background. A social studies teacher, Kathy taught 8th grade U.S. History and another 7th-grade social studies class at the time I met her. She has taught for 10 years, all of which have been in the Livemore School District, with nine of those years at Creekside Middle School. She self-identified as being White and of Eastern European descent. Kathy reported that while knowing some Spanish, she did not consider herself fluent in that language. In Kathy's view, her ability to communicate with her students in Spanish, to some extent, has placed them at ease and they see her as a person they could open up to. Kathy has traveled outside the U.S., but because she always found English speakers in those countries, she has experienced no difficulty communicating during her travels.

Kathy did not follow the traditional path to teaching. She received a bachelor's degree in criminology and justice and was originally interested in applying to law school. For financial reasons, she became a certified paralegal instead. Because she felt unfulfilled with her career as a paralegal, she soon considered a career change. In reflecting on her professional journey, Kathy stated that her parents, who were both teachers, advised her against becoming one.

Nevertheless, Kathy decided to obtain her teaching certification through an alternate route program and was subsequently hired as a long-term substitute teacher for self-contained 7th-grade social studies and science classes at Douglas Middle School. After a couple of months, she was offered a permanent teaching position as a social studies teacher at Douglas Middle School, but within a year transferred to Creekside Middle School, where she has taught ever since.

Kathy admitted not being prepared to teach ELL students placed in her classes in recent years. To try to reach them, she would often translate for them assignments and provide them

with content-specific resources in their native language. As she explained, her alternate route preparation never addressed how to teach ELLs. She volunteered to attend the district's SEI professional development to improve her practice in order to help ELLs be successful in her class. In my interviews with Kathy, she often mentioned wanting to do more for her ELL students. As she put it, "I need to do more. I want to help them better. I can be better at what I do for them" (Kathy, Interview 2, December 13, 2017). The district's professional learning sessions were her first exposure to instructional strategies for ELL students.

Middle school environment. As previously mentioned, Kathy taught in Creekside Middle School. The student population is fairly evenly distributed across White, Hispanic, and Black racial/ethnic groups. Over the last three school years, the ELL student population has remained steady at about 3% of total enrollment. According to the 2016-17 school report card, the majority of students speak English at home (76.8%), although 13.6% speak Spanish, and another 9.3% speak a variety of other languages (e.g., English-based creoles and pidgins, French-based creoles and pidgins, Arabic, Gujarati, Haitian Creole, Slovak, and Chinese). A little less than half the student population (48%) was identified as economically disadvantaged.

Creekside Middle School students perform slightly better on Northeast State's standardized assessment than their peers at Douglas Middle School, but compare less favorably to those at Willard Middle School. According to the 2017-2018 ESSA school accountability profile, 46.5% of all Creekside students were proficient or advanced proficient in ELA. Although ELLs had met their proficiency target, they were the second lowest performing subgroup of students, with only 21.9% reaching proficiency level in ELA. In math, 38.2% of Creekside Middle School students were proficient or advanced proficient. Math is a content area in which all subgroups struggled to meet proficiency targets. While 51% of White students and

74.2% of Asian students met math proficiency targets, only 18% of ELLs did. In fact, ELLs underperformed all student groups in the school, with the exception of special education students who were still less proficient than ELLs in math, with only 6.2% meeting expectations.

Since all three middle schools have the same instructional schedule and structure,

Creekside Middle School functions similarly to Willard Middle School, which was described above. In general, ELA and math classes meet daily for 80 minutes and are organized according to students' ability levels. Social studies and science classes are heterogeneously mixed and meet every other day for 80 minutes.

Creekside Middle School served a total of 22 ELL students, each of whom received two periods of daily ESL instruction with the ESL teacher as required of schools implementing high-intensity ESL programs. Given the relatively large numbers of ELLs in the school, the ESL teacher was assigned to work there for the entire school day. Kathy reported that while she was free at the same time as the ESL teacher, both she and the ESL teacher were used to cover classes since typically there were not enough substitute teachers to fill in for those who were absent. This made it difficult for her to connect with the ESL teacher.

The times I visited the school, I found the staff friendly and helpful. Students transitioned from one class to another without incidents, and there were no noticeable disruptions while classes were in session. Overall, Creekside Middle School appeared to be a safe and orderly school.

Focal class observed. Kathy reported that she taught two ELL students, a male student of Latino descent, and a female of Haitian descent, each in different classes. Because the male student was frequently absent, she thought it best that I observe the class with the female ELL student. The selected 8th grade U.S. History class had 23 students, one of whom was Rose-

Merline (pseudonym), a student of Haitian background. Of the three classes I observed, this one was the most ethnically diverse, reflecting the student diversity evident in the school. Kathy noted that the class I would observe had students with a broad range of academic abilities.

Overall, however, she thought it was one of her higher performing classes. Kathy joked that this was her "liveliest" class and noted she had "some talkers in the class, and they could be chatty." Kathy had a paraprofessional who was assigned to work directly with a student who had a 504 plan. The paraprofessional was only present during the second of three observations I conducted in this class. While the paraprofessional stayed near her assigned student, she also provided assistance to others who would call her for help.

According to Kathy, Rose-Merline had a low English language proficiency level. I should note, however, that Kathy had not obtain Rose-Merline's ELP levels from the ESL teacher, so this assessment was based solely on her experience with the student. Like Andriy, Rose-Merline used a tablet to help her translate classwork, but Kathy noted that the student did not always bring the tablet to class. Kathy seemed to have little information about Rose-Merline's background. For example, she did not know how long the student had been in the U.S., although she knew this was her first year at Creekside Middle School. Kathy characterized Rose-Merline as "a hard-working student" who was determined to learn and was not shy to ask for help from her. Despite Kathy's view of Rose-Merline as having a low level of English language proficiency, the teacher indicated that the student would often try to complete classwork and assessments in English. At times, however, Rose-Merline would ask for the work to be translated into French so that she could cross-reference her work. On such occasions, Kathy typically provided Rose-Merline with the French translation of the material. Kathy explained that she would use Google translate to provide Rose-Merline classroom worksheets or

tests in her native language. Although, Rose-Merline had access to the tablet, ELL students have to go to the library in the morning before classes start to retrieve it, but Rose-Merline did not always do so. Kathy speculated that Rose-Merline might be embarrassed to use the tablet in class, something that highlighted her ELL status.

Chapter Summary

As this chapter shows, the changing student demographics and pressure from the federal government to have all K-12 students receive an academically rigorous education that prepares them for college and careers in a knowledge-based society are two recent developments exerting considerable pressure on Northeast State (and other states as well) to reform its schools in significant ways. As I discussed, over the last two decades the state's ELL student population has grown substantially and the number of language groups has expanded considerably, with ELLs currently accounting for nearly 6% of the total number of students served and representing more than 150 language groups While in the past ELL students enrolled mostly in urban schools, they are now more dispersed throughout the state and enroll in suburban schools as well, although in lower numbers. This dispersion has prompted many school districts to request bilingual education waivers because they find it impractical to implement bilingual programs based on the large number of language groups ELLs represent, and their age range, grade span, and/or geographic spread. The alternative programs typically adopted—high-intensity ESL and sheltered English instruction—place ELLs for large portions of the school day in mainstream classes. Because mainstream teachers were not expected to teach this student population in the past, neither university-based nor alternative routes teacher preparation programs have equipped them to teach ELL students. As a result, the Northeast State Department of Education and most

of its school districts have needed to design and implement professional learning opportunities for practicing teachers to enable them to teach ELLs.

At the same time, the federal government has leveraged its resources, largely through the financial support made available to states and their schools through the No Child Left Behind Act of 2001 and the Every Student Succeeds Act of 2015—the two latest re-authorizations of the Elementary and Secondary Education Act of 1965—to hold states, districts, and schools accountable for student performance. In both of these legislations, the federal government has required states to include ELLs in their standardized testing programs and report their performance separately as part of existing accountability systems. The Every Student Succeeds Act of 2015 also requires that applications for professional development grants under ESEA must show how teachers and other school personnel can identify and provide appropriate instruction for ELLs. States who do not comply with these requirements run the risk of losing ESEA funding, which represents a substantial stream of financial support for states, districts, and schools.

In addressing the changing demographics of the student population and responding to federal requirements, Northeast State has modified its accountability system in accordance to federal expectations, approved numerous waivers to the bilingual education requirement, and strongly encouraged or required school districts to create and implement professional development programs aimed at preparing mainstream teachers to teach ELLs. To support districts in developing the needed professional development programs, the Northeast State Department of Education regularly offers multiple professional learning opportunities, such as the training-of-trainers three-day program focused specifically on sheltered English instruction.

The above dynamics are clearly reflected in Livemore School District. As discussed, the district has experienced a rise in its ELL student population over the past five years or so. Because ELL students enrolled in the district are dispersed throughout its 23 schools and speak 25 different languages, Livemore School District has received a bilingual education waiver during the last four years. Throughout this time, the district has offered a high-intensity ESL program, which places ELLs in ESL instruction for two periods daily and in mainstream classes for the rest of the day. To run the ESL component, the district has an ESL department and hired a supervisor to oversee it, and increased the number of ESL teachers. By December 2017, the district employed 10 ESL teachers and was slated to add to that number in January 2018. Over the years, the district also acquired a number of resources to support the work of both ESL teachers and mainstream teachers with ELLs in their classes. In the 2016-17 school year, the district used ESSA Title I funds to hire consultants with expertise in SEI to provide professional development for 90 mainstream teachers at the elementary school level. As this study details, the following year the district expanded its professional development efforts and implemented an "in-house" SEI professional learning initiative for social studies and science middle school teachers, an effort that resulted from its participation in the Northeast State Department of Education's SEI training-of-trainers program of summer 2017. As described, the local SEI professional learning initiative reflected many of the features of effective professional development reported in the literature. This was not by accident since the state's training-oftrainers program included a discussion of effective features of professional development, and the materials made available to school districts for use in their local initiatives (which Gayle and Ann used in planning and implementing Livemore School District's SEI professional

development) reflected some of these features (e.g., active learning activities, collaboration, teacher reflection, relevant to teachers' contexts).

As the above suggests, the changing demographics of the student population and state policies and procedures for how to teach them filtered down into the classrooms of mainstream teachers in Livemore School District. For one thing, they began finding ELLs in their classes. They were also aware of the pressure on schools to get all students, including ELLs, to meet high academic standards. The three middle school teachers who participated in my study volunteered for the Livemore School District's SEI professional development program because they were interested in learning how to teach the ELL students they were encountering with increasing frequency in their classes. None of them had previously received pre-service or in-service preparation for linguistic diversity. As experienced teachers who seemed committed to their students, they knew they lacked the expertise needed to properly teach ELLs and saw the SEI professional development sessions as an opportunity to develop some of that expertise.

I detailed the nested systems from broadest to most specific—the state and broader policy levels, the district, the SEI professional learning initiative itself, and the teachers and their immediate school and classroom settings. This is the broad context in which the processes of teacher learning and change that I examined in this study occurred. In the next chapter, I present and discuss what the three focal teachers in my study seemed to learn from their participation in Livemore School District's SEI professional development initiative and how those insights manifested in their practice. I present my findings and discuss how teacher learning was mediated by the interacting elements of the nested systems detailed in this chapter.

CHAPTER FIVE: FINDINGS AND DISCUSSION

In the previous chapter I detailed the broader context for this study, giving focused attention to the state policy context, the district's response to the growing number of ELL students in schools, the SEI professional learning initiative that district personnel designed and implemented for the purpose of preparing middle school mainstream teachers to teach English language learners, and the background and experiences of the three study participants along with an overview of their school and classroom settings. This chapter shifts the focus to what I learned from my systematic analysis of the data relative to the question guiding my investigation. Specifically, I asked the question at the start of my study: "What do three middle school mainstream teachers seem to gain from professional learning opportunities focused on sheltered English instruction, and how do those insights appear to play out in their practice?" I begin this chapter by re-introducing the teachers, this time highlighting similarities and differences in their background and experiences upon entry to the district's SEI professional learning initiative. In the remainder of the chapter I present and discuss the three salient themes that emerged from my analysis: (1) walking in their students' shoes and attending to the "deeper things" rather than focusing solely on "English language learning;" (2) being content area and language teachers simultaneously: (not) knowing what to do with language learners' English proficiencies; and (3) from the known to the new: refining the already-in-place and trialing the not-yet-in place for the benefit of ELLs and other students.

Commonalities and Differences in the Teachers' Backgrounds and Experiences

As previously discussed, the focal teachers entered the local SEI professional learning program with already-in-place personal and professional experiences, pre-professional and professional preparation for teaching, and beliefs (e.g., about students, teaching, learning, feeling

of preparedness for teaching ELLs) that helped shape how they interpreted the learning opportunities they were offered by the program for teaching ELLs.

Looking across the three focal teachers' backgrounds, I noted mostly commonalities although a few differences also stood out. For one thing, all three teachers had some knowledge of Spanish, acquired mostly from courses taken in high school and/or college, but also through interactions with Spanish-speaking individuals in work settings (James) and with a spouse (Linda). All of them reported using their limited Spanish language proficiency to communicate with Spanish-speaking ELLs as best they could. Two of the teachers (James and Linda) mentioned having traveled to countries where a language other than English was the norm and experiencing difficulties understanding local people and making themselves understood. In discussing his travels to Mexico and the Dominican Republic, James commented, "I can slightly get by on what I have learned in high school, but it was a bit of a challenge at times trying to grasp what people (in those countries) were saying to me" (James, Interview 2, December 7, 2017). Similarly, Linda expressed, "I have traveled to other countries that don't speak the (English) language. It made me anxious initially when I was trying to get around" (Linda, Interview 1, December 7, 2017).

In terms of differences, the three teachers entered teaching through different pathways.

James followed the traditional path, completing the course of study leading to teaching certification as an undergraduate. Linda also completed a teacher preparation program as an undergraduate, but chose to join Teach for America as a way into teaching. She explained her decision as follows:

I did my observation hours in a high-risk school and fell in love with it. I knew that I wanted to do urban education, but I knew that I couldn't do it on my own. Knowing how

the administration works in urban education I knew that if I did it through Teach for America, I would have some sort of backing. I decided to go through them. (Linda, Interview 3, February 12, 2018)

Kathy, who as an undergraduate had received a degree in criminology, entered teaching through an alternate route program.

All three teachers reported not having previous formal preparation for teaching ELLs. James, who attended a teacher preparation program focused on urban education, explained that his preservice courses had not equipped him for teaching ELLs. As he put it, "zero, absolutely none. A lot of it was urban education because they wanted educators to teach in (urban schools). Not so much about ELL students but maybe to some extent to students with disabilities" (James, Interview 1, December 7, 2017). Similar experiences were reported by Linda and Kathy. For example, Linda noted, "I felt like I was prepared for the special education side but not prepared for the ELL side (of teaching)" (Linda, Interview 2, December 7, 2017); and Kathy reported, "I don't think alternate route even touched it (referring to preparation to teach ELLs)" (Kathy, Interview 1, December 13, 2017).

Given their in-common lack of preparation for teaching ELLs, it is not surprising that all three teachers reported lacking confidence in their ability to teach ELL students. For example, Linda, who reported having had at least one ELL student each year she has taught, dispiritedly described how, "they [ELL students] have walked into my room and I haven't known what to do, I mean no inkling at all on what to do" (Linda, Interview 1, December 13, 2017). When I asked Kathy how confident she felt about teaching ELLs, she responded, "I don't" (Kathy, Interview 1, December 12, 2017). Along related lines, after attending two of the district's SEI sessions James

stated, "I didn't realize how novice I was until we went to that workshop. Just kind of seeing where I am in terms of helping them (ELLs)" (James, Interview 1, December 7, 2017).

Indeed, the teachers' lack of preparation and feelings of ineffectiveness seemed to be a major catalyst for volunteering to participate in the district's SEI professional learning sessions. James reported responding quickly to an email from the administration looking for interested middle school social studies and science teachers to participate in the three-day SEI training. As he put it, "I just jumped on it because I always like to better my practice. It was just my internal motivation to improve as an educator" (James, Interview 1, December 7, 2017). For both Linda and Kathy, the recognition that they were going to continually have ELL students in their classes led them to volunteer. For example, Kathy stated, "I volunteered. The population (of ELLs) is only growing. I felt like I needed more information...I don't know how to help these students, except [for] translating things" (Kathy, Interview 1, December 13, 2017).

James and Linda gave similar responses when I asked them what they hoped to gain or take-away from the SEI professional learning sessions. Both indicated looking for practical ideas and strategies to use in their classes. James shared that he hoped to learn "mostly ideas that I can bring back into the classroom" (James, Interview 1, December 13, 2017). Linda's response was similar, although more detailed:

Ultimately, I want to get some practices that I can use, some things that I can easily modify. Like even things that I might do already. So, like vocab lessons and what can I give them that is an easy modification to do this because I also have 120 students. Some easy tips and tricks on things that I can do to help them, and what to do when I initially have an ELL walk into my room. What should my initial reaction be? How should I

communicate with them? What is my best method? Where do I find resources? That sort of thing. (Linda, Interview 1, December 7, 2017)

Similarly, Kathy reported she wanted to gain skills that would enable her "to at least have the ESL students get some content and be more comfortable in the classroom" (Kathy, Interview 1, December 13, 2017).

Despite their self-described lack of preparation for teaching ELLs, all three teachers nonetheless identified a variety of basic strategies they were already using prior to joining the SEI professional learning initiative to engage ELLs assigned to their classes in learning activities. For example, James reported letting ELLs work with a partner, or occasionally using his limited knowledge of Spanish to communicate with Spanish-speaking students. He also shared, "I would group them all together and their progress was not even tracked (but I would try) to acclimate them into the English language and help them along the way" (James, Interview 2, January 12, 2018). Linda's approach was to search for appropriate worksheets in Spanish for Spanish-speaking ELLs and then relying on her husband, who is of Latinx descent and a fluent Spanish-speaker, to tell her if the students had responded correctly. Sometimes she would pair ELLs with other students. However, she uneasily reported that for ELLs from other language groups, "I kind of just immersed them...trying to communicate as much as I can, and other than that," she just shook her head and shrugged her shoulders (Linda, Interview 1, December 7, 2017). Kathy, who did not agree with the "immersion mentality" she reported existed in the district in the past, tried various ways to make ELLs feel comfortable in her class. She used Spanish to "translate something, or provide better directions for them on what to do" (Kathy, Interview 1, December 13, 2017). Kathy also kept a sample of a bilingual Spanish-English textbook she once received as a resource for her Spanish-speaking ELL students because it

provided them with academic content in both languages. While Kathy used some Spanish in her teaching of Spanish-speaking ELLs, she questioned this practice, "I don't know how much it was helpful learning-wise, but it makes (ELLs) open up to me a little bit if I can talk a little Spanish with them. I think it puts them at ease" (Kathy, Interview 1, December 13, 2017). Although, not a strategy specific for ELLs, Kathy additionally mentioned using "motivational and kinesthetic activities" to engage her ELL students and to help them "get a little more confident in the classroom as well" (Kathy, Interview 1, December 13, 2017). Yet, Kathy felt that her primary instructional approach to working with ELLs was to let her students know she was "willing to translate things or work with them" (Kathy, Interview 1, December 13, 2017).

In this section I compared and contrasted the personal characteristics of the three focal teachers because the commonalities and differences represent elements in the individual teacher system (e.g., teacher preparation, beliefs, prior experience with and exposure to culturally and linguistically diverse people, experience teaching ELLs), which may interact with elements from the other nested systems in the larger teacher learning system to mediate what they each learn.

Themes

In this section I present and discuss the three central themes that I developed out of my analysis of data collected through individual interviews (teacher, facilitators, and bilingual/ESL supervisor), observations of the district's SEI professional learning sessions, observations of the three teacher participants while teaching, and review of documents gathered during my observations of the district's SEI professional learning initiative (e.g., PowerPoint presentations, handouts used, resource materials distributed) and classroom observations (e.g., lesson plan, handouts and other materials distributed to students). Each reported theme is similarly structured text-wise, beginning with an overview of the learning opportunities the teachers were offered in

relation to the theme, followed by a presentation of the data connected to the theme, and concluding with a discussion of findings in relation to existing research.

Theme One: Walking in Their Students' Shoes and Attending to the "Deeper Things"
Rather than Focusing Solely on "English Language Learning"

This theme captures a new awareness the three study participants seemed to develop regarding what being an ELL student in a mainstream classroom is like. The learning opportunities that addressed this theme in the district's SEI initiative they completed were few but seemingly powerful, as discussed below.

Learning opportunities related to better understanding teachers' gained awareness of and empathy for ELLs. The first session of the Livemore School District's SEI professional learning initiative set the stage for teacher participants to increase their awareness of and empathy for what ELLs encounter in English-only classrooms. That day, the teachers were engaged in several activities that the two professional learning facilitators, Gayle and Ann, had purposefully designed to help participants gain insight into the lives of ELLs. Gayle underscored the need to give the teachers a window into the experiences of ELLs in my first interview with her. As she explained, "I think most teachers honestly do not know (about ELLs). They only know what they experience and there is so much more that they could be told (about ELLs' experiences) to help them understand their situation a little more" (Gayle, Interview 2, December 6, 2017).

Several day 1 activities addressed the experiences of ELLs. These included viewing and discussing a video depicting the experiences of a recently arrived ELL student in school and at home, a short video distinguishing the emotions of empathy and sympathy, and follow-up discussion of Krashen's (2003) idea that the anxiety ELL students experience when learning a

second language in a classroom setting activates an "affective filter" that keeps them from making optimal use of linguistic input, even when language supports are given to them during instruction; an exercise focused on distinguishing the sentiments of sympathy and empathy that teachers may have for ELLs; and a mini-presentation with related activities about students' culture and the role it plays in education. Of these, the video was singled out by all three focal teachers as giving them much to think about.

The Moises video, which I briefly described in Chapter 4, explores the effects of immersing ELLs in English for content area instruction. It documents the experience of Moises, a fictional student who recently immigrated to California from Mexico. While Moises doesn't speak English, he is very knowledgeable in mathematics. However, when given math word problems in English, Moises struggled with the language of the problems, which prevented him from displaying his knowledge of math. The video provides viewers with insight into Moises' background, family situation, interactions with other students, experience in the classroom, and preparation for an upcoming standardized math assessment that includes word problems. It highlights Moises' struggles to communicate with his teacher, and also shows the teacher's struggles to help him do well in class and on the upcoming standardized test. Yet, while the teacher is well-intentioned, her lack of knowledge about Moises' background experiences and lack of preparation for teaching students who are not already proficient in English seriously limits the instructional support she can offer the student. After watching the video, the teachers were asked to discuss in groups the following questions: Does Moises look like a student in your class? What are Moises' strengths and challenges? How is Moises' family supportive? What does the teacher need to know about Moises to teach him well? All three focal teachers

described the video featuring Moises' experiences in school and at home as having a powerful impact on their understanding of the ELL experience, as I subsequently discuss.

The ELL experience was again picked up for scrutiny in the third professional learning session, during which teacher participants were engaged in two language immersion experiences. The first involved being immersed in a Manadarin lesson. This entailed watching a video of a health lesson taught entirely in Mandarin with no language supports. The lesson was then taught a second time in Mandarin, but this time the teacher used several sheltered English instructional strategies (e.g., visual images, realia, hand gestures, facial expressions, explicit vocabulary instruction) to support speakers of languages other than Mandarin. This was followed by a debriefing session with the teachers. In the second language immersion activity, the teachers were placed in the role of students and asked to read a short story that was written entirely in Spanish (El Perrito Bombero) and then answer comprehension questions about the reading. Ann began the lesson by telling all participants to assume that she had already done the following to prepare them for the lesson: given them a preview of key vocabulary words used in the text (e.g., bombero, perro, manguera, escalera); discussed the word order for adjectives in sentences written in Spanish (e.g., the noun is typically placed before the adjective, while adjectives typically appear before the nouns they modify in English); and taught them to look for cognates to help them decipher the meaning of some words in the Spanish language text. She then distributed a handout that graphically depicted key words. For example, the handout included a picture of a fireman next to the word bombero. Teacher participants were then directed to read the short story and answer a set of comprehension questions related to it. While the teachers struggled with the activity, they all managed to complete it. However, they were shocked to learn from Ann that the passage was intended for kindergarten students. Ann proceeded to give

the teachers a fifth-grade reading passage on science content. At this point there was a collective moan from the teachers as they contemplated what was expected of them next. During the debriefing, one teacher participant (not a participant in the present study) quickly shared that the experience had given her a different perspective on ELLs. Another (not a teacher participant in my study) said, "I found it difficult to complete this activity, and I felt anxious when you presented the second passage as I couldn't imagine having to complete this activity again. Honestly, I didn't feel so good about myself" (SEI Session, Observation 3, December 13, 2017).

What teachers seemed to learn. In my interviews with the three focal teachers, all identified the activities highlighted above—the Moises video, the video of the Mandarin lesson—but especially the El Perrito Bombero language immersion activity—as helping them gain awareness of and empathy for ELLs' experience in mainstream classrooms. For example, James described the experience as "eye opening." Even though he had some understanding of Spanish, James found the activity to be challenging. Reflecting on it, he commented, "oh, this is hard. This is difficult for me. I can't imagine what it is like to be a 12-year-old, a 13-year-old coming from another country having to learn English and having to read the constitution (in English)" (James, Interview 2, January 12, 2018). Linda's view was similar to that of James:

Giving us an article in Spanish, even knowing some Spanish because I have been exposed to it and because my husband speaks Spanish...like giving me the kindergarten reading I was able to translate the whole thing. Then they came out and said that was a kindergarten reading passage. This put the experience into perspective. Then handing us a fifth-grade reading. That was huge. I feel that when I can relate to students, I am much better at teaching them. So, giving me that passage, wow, I can relate to them. Even

having some (Spanish) background I still struggled. If I get a student...who has no English...they must feel like I felt. (Linda, Interview 2, January 12, 2018)

In the same interview she later added, "I got a taste of the anxiety that ELLs feel. I got an awareness."

Kathy expressed similar sentiments as well. In speaking about ELLs in my second interview with her, she commented:

You always know that they are scared, but...to learn more about what they're experiencing, why they are quiet, why they are shy. I cannot imagine not understanding a lick of what is going on around me. How horrifying that must be. Those activities brought awareness about how they feel. I really just learned more about the emotional aspect to it...they can easily shut down because they get frustrated or they're scared. (Kathy, Interview 2, January 12, 2018)

The Moises video also made an impact on the three study participants. For example, James reported finding the video "really powerful. (It) shed light on what is going on in these students' (referring to ELL students) minds. That gave me a little more empathy towards ELL students" (James, Interview 2, January 12, 2018). Reflecting on Moises' experience, James added:

He actually knew the math material but when he read 'four blocks' (referring to text in one of the word problems), you can see that in his head he was thinking—what are blocks? What does this mean? That makes you ponder what is going on in the minds of my ELL students... (James, Interview 2, January 12, 2018)

Later in this same interview, James reflected on one of the contributions of the SEI professional learning initiative and commented that it had "exposed new light on what it is like to be an English language learner."

Interestingly, the discussion about ELL students' culture, which took place during the initial SEI session, led Linda to reconsider her assumption about possible reasons why ELL students struggle in class. Reflecting on that experience, she candidly commented:

It changed how...I think about the students and not to automatically (think) that they are not trying...that there is some deeper thing causing them to not understand and not do their work. (Linda, Interview 2, January 12, 2018)

Ann, one of the SEI professional learning facilitators, was convinced that experiential immersion learning experiences, like the Mandarin video and the El Perrito Bombero lesson, profoundly influenced teachers' motivation to act. In my second interview with her, she stated:

I think experiencing the life of their ESL students, I think was most impactful. While teachers may learn these strategies, it is really important that they do it and experience it themselves. Because I think teachers can sit there and you can teach them all these things, and teachers can say, yeah, I don't have any time or when am I supposed to do this. Now I think having experienced it for themselves, they understood the need to intervene. (Ann, Interview 2, December 12, 2017)

The evidence presented above suggests that participation in the local SEI professional learning initiative, particularly in the learning activities identified immediately above, promoted an awareness of and empathy for the experiences of ELLs in English-only classes on the part of the three teachers who participated in this study. While all of them began the SEI professional learning project seemingly sensitive to their ELL students and concerned about how best to teach

them, their awareness of the students' lived experiences appeared to have grown or deepened as a result of the learning opportunities in which they engaged. However, the data I collected as part of this study do not yield evidence of a direct link between the teachers reported changes in perspectives regarding ELL students' experience and their classroom practices, other than to note that all three of them expressed concern about helping ELLs feel "comfortable" in their classes. It might be more appropriate to consider their newly gained awareness about ELLs as perhaps a pre-requisite for engaging in the instructional change process that other SEI activities called for (see my third theme later in this chapter). As Ann aptly noted, after gaining insight into the challenges ELLs face in mainstream classes, especially through experiences that placed them in the students' shoes, the teachers were able to better understand the need to intervene on ELLs behalf.

Discussion. As previously written, for a variety of reasons (e.g., shortage of Bilingual/ESL teachers, adoption of English-only education policies, increased pressure to have ELL students meet accountability measures) ELLs are placed with growing frequency in mainstream classrooms before they have developed sufficient proficiency with English to benefit from instruction solely in that language. Although instructional practices that support ELL students to learn academic content while also developing their English language proficiency have been the topic of a growing number of studies lately (e.g., Adamson et al., 2013; DaSilva Iddings & Rose, 2012; Estapa, Pinnow, & Chval, 2016; Lara-Alecio et al., 2012; Peercy et al., 2015), the socioemotional effects on ELLs of mainstreaming them into English-only classes has drawn relatively little empirical attention. Even after exhaustive searching, I only identified two studies on this topic, one by Pappamihiel (2002) and the other by Parra, Evans, Fletcher, and Combs (2014). Pappamihiel's (2002) study, which involved a survey of 178 middle school Mexican

immigrant students and focus group meetings with a sample of the survey respondents, compared the levels of anxiety ELLs experienced in ESL classes and in mainstream classes. Perhaps not surprisingly, the students reported feeling much more anxiety in mainstream classes. Along similar lines, Parra and colleagues (2014) examined the unintended consequences of Arizona's enactment of Proposition 203, which eliminated bilingual education programs in the state, resulting in the placement of ELL students in English-only classrooms without any form of English language services. These researchers reported that over time the students "experienced clear psychological effects like anxiety and depression symptomatology, anger, school phobia, and eating and sleeping difficulties" (Parra et al., 2014, p. 33). Given the potentially damaging socioemotional effects of mainstreaming ELLs, especially when done prematurely and without language supports to make academic content taught in English comprehensible to them, raising mainstream teachers' awareness about the lived experiences of ELLs in English-only classroom settings seems essential and perhaps a good starting point for conversations about how to teach ELLs. Thus, the inclusion of this topic in the Livemore School District's SEI professional learning initiative, particularly at the start of the three-day professional learning series of sessions, is noteworthy and commendable.

Teachers' lack of insight into students' lives is connected, at least in part, to the demographic mismatch between the student population and the teaching force evident these days in U.S. schools. While the K-12 student population has become more racially/ethnically and linguistically diverse over the years, the teacher workforce has continued to be overwhelmingly White (about 80%) and monolingual English-speaking (Taie & Goldring, 2018; Villegas, SaizdeLaMora, Martin, & Mills, 2018). Thus, many of today's teachers have limited personal insight into the lives of the growing number of students of color and English language learners

enrolled in schools (Lucas & Grinberg, 2008; Tellez & Waxman, 2006; Villegas, Strom, & Lucas, 2012). This cultural and linguistic disconnect leaves a large proportion of teachers vulnerable to developing misconceptions and negative beliefs about students who are different from them (Lucas, Villegas, & Martin, 2015). Because teachers' beliefs tend to shape their practices (van den Bergh, Denessen, Hornstra, Voeten, & Holland, 2010), typically to the detriment of students from marginalized groups, including ELLs (Karabenick & Clemens Noda, 2004; Lucas et al., 2015; Pettit, 2011; Reeves, 2006; Sharkey & Layzer, 2000; Walker, Shafer, & liams, 2004), teachers need to experience learning opportunities that prompt them to reflect on their beliefs and practices. This is exactly what the language immersion activities and the guided exploration of cultural differences, both conducted during the initial SEI session, seemed to do for Linda, for example. That is, they led her to question her previously unexamined assumption that ELL students "are not trying" and realize that something other than not putting effort into their school work could be at play, such as anxiety. Although, Gayle and Ann may not have intentionally sought to address teacher beliefs as part of the SEI initiative, by helping the participating mainstream teachers to be more aware of ELLs' lived experiences in English-only school settings, they triggered the type of reflection that enabled one of the three focal teachers to become aware of her inclination to judge ELLs who seemed to her to be "not trying."

In terms of professional learning practices, the data I reported above regarding the teachers' gained empathy for ELLs suggest that the language immersion activities (the video of the Mandarin lesson and the El Perrito Bombero lesson) Gayle and Ann used during the third SEI professional learning session—which purposefully placed teacher participants in the double role of 'student' and 'linguistic other' in a class—proved to be a powerful intervention, jolting the three focal teachers into gaining awareness of and developing more empathy for ELLs'

experience when immersed in English instruction without language supports. In the past 10 years or so, researchers have documented the use of language immersion activities, sometimes also called 'shock experiences' in the literature, to help both pre-service and in-service teachers develop empathy for ELLs' lived experiences and also cultivate an understanding of the importance of using language supports in teaching ELLs (see Bohon, McKelvey, Rhodes, Robnolt, 2017; de Oliveira, 2011; Turgan Dost, 2016; Galguera, 2011; Settlage, Gort, & Ceglie, 2014; Wright-Maley & Green, 2015; Zhang & Pelttari, 2013). Wright-Maley and Green (2015) posited that the use of a "shock-and-show simulation activity" was necessary to address the problem that "while professors can espouse the need for visuals, building background knowledge, and sentence frames, pre-service teachers do not always internalize such strategies or fully understand their helpfulness for ELLs" (p. 2). Galguera (2011) also attested to the power of language immersion activities, especially when the instructor models the use of scaffolds for teachers as part of those activities.

In the field of science, it is not unusual for instructors or facilitators of professional learning initiatives designed to prepare teachers for inquiry-based instruction to model for participants desirable practices (e.g., Crippen, Biesinger, & Ebert, 2010; Donnelly & Argyle, 2011; Grove, Dixon, & Pop, 2009; Johnson, 2007; Johnson & Marx, 2009; Roehrig, Michlin, Schmitt, MacNabb, & Dubinsky, 2012; Rushton et al., 2011; Singer et al., 2011). In these studies, teachers experience the targeted instructional strategy as learners and subsequently debrief on the experience. These studies suggest that these activities tend to stimulate teachers' reflection on their own practice. For the most part, these studies report favorable teacher learning results.

Although research on the features of effective professional development does not explicitly attend to 'language immersion experiences,' it certainly underscores the importance of actively engaging teachers in learning, which is a critical element of all language immersion activities. Seminal research by Garet et al. (2001), Penuel et al. (2007), and Desimone (2009) found professional development that engaged teachers actively in learning tended to produce desired results. The value of active learning has been confirmed more recently by a review of research on professional learning interventions for teachers authored by Darling-Hammond et al. (2017). That review examined research published during the seven-year period between 2010 and 2016. Darling-Hammond and co-authors found that of the 35 studies examined, 34 used some form of active learning (e.g., observing teachers, reviewing student work, practice teaching targeted strategies followed by reflective feedback) as a central component of the professional learning initiative, typically generating the type of learning sought.

From the perspective of complexity thinking, teacher learning occurs under particular sets of conditions that either sustain or limit such learning (Opfer & Pedder, 2011). Those conditions involve interactions between and among elements in the systems within which teacher learning is embedded. My data suggest that the three teachers' apparent gain in awareness of and empathy for ELLs experiences when immersed in English for content area instruction was primarily facilitated by elements from the professional learning system itself (the SEI professional learning initiative) and the individual teacher system. As discussed above, the three activities Gayle and Ann used to give the teachers' insight into the experiences of ELL students in mainstream classes (the Moises video, the video of a lesson taught in Mandarin, and the El Perrito Bombero Spanish language immersion experience) contributed to the results they had hoped for. As previously discussed, all three focal teachers identified these activities as being particularly

helpful in prompting awareness and empathy on their part. James commented on how the Moises video was "really powerful" in that it gave him insight into the struggles of ELLs with math word problems in English when they come across written language they don't understand. This insight seems to have facilitated his development of more empathy for his ELLs. As he put it, "that gave me a little more empathy towards the ELL students" (James, Interview 2, January 12, 2018). Linda reported having basic knowledge of Spanish, but her struggle to complete the El Perrito Bombero activity gave her "a taste of the anxiety that ELLs feel. I got an awareness" (Linda, Interview 2, January 12, 2018). Both Linda and Kathy appreciated being placed in the shoes of ELLs, which both reported as giving them a better understanding of ELLs and the ability to "relate" more to these students. Linda added, "when I can relate to students, I am much better at teaching them" (Linda, Interview 2, January 12, 2018). In a similar vein, Kathy praised the activities that "put us in their shoes, so I could better understand how to teach them...those activities that brought awareness to how they feel, I really just learned more about the emotional aspect of it" (Kathy, Interview 2, January 12, 2018).

My data also suggest that elements from the individual teacher system might have interacted with the nature of the professional learning opportunities described above to create favorable conditions for gaining awareness of and empathy for the ELL student experience in mainstream classrooms. For example, the fact that all three focal teachers volunteered to participate in the SEI professional learning initiative could be taken as an indicator of their sense of responsibility to help all students learn and openness to learning from activities in the initiative. For James, it was internal motivation to improve as an educator that led him to volunteer. Both Linda and Kathy felt limited in their existing ways of addressing ELL students' needs and their sense of professionalism prompted them to volunteer in order to learn appropriate

instructional strategies and related ideas that would be helpful to ELL students, especially knowing that this population is likely to continue growing in the district in the years ahead.

Another teacher element that might have played a facilitating role is that all three teachers were favorably predisposed towards ELLs, prior to starting the SEI initiative. While they admitted not knowing how to teach this student population, all three reported using some strategies to make these learners feel welcome in their classrooms and to lessen their anxiety. For example, Kathy mentioned using the very limited knowledge of Spanish she had as a means of engaging with her ELL students and to put them at ease, even before beginning the SEI initiative. During the first SEI session she gave an example of how her use of Spanish in the classroom was of help with a Spanish-speaking ELL student who was often disengaged in class activities:

I tried to speak Spanish and thought I was doing an okay job. It was very hilarious for some of the Spanish speaking students. I did have a student who was tough (to deal with). The ESL teacher recommended that I try not to enable him, and that they really wanted him to speak English, but it just wasn't happening. Then he would sit there and get naughty because he'd be idled and bored. So, I...started to translate things a little bit more and tried having a conversation with him (in Spanish)...and he would shake his head and share the correct (Spanish) pronunciation. So, he became a part of the class and it did help to keep him interested and engaged. (SEI Session Observation 1, November 15, 2017)

Two ways Linda tried engaging her ELL students in class and helping them feel a part of it prior to participating in the SEI initiative was by carefully selecting English-speaking students with whom to pair them for collaborative group work and translating worksheets into Spanish for Spanish-speaking ELLs. James consciously tried to create a relaxed classroom atmosphere

where all students would be willing to take learning risks. In speaking about his strengths as a teacher during my first interview with him, James stated, "I have created an environment (in the classroom) where students feel comfortable to participate" and then added, "even Andriy (an ELL student with very limited English language proficiency) participated in the lesson (referring to the lesson I had just observed). He may have answered incorrectly, but he was willing to put himself out there to see if it was right" (James, Interview 1, December 12, 2017).

Perhaps another facilitating element or factor at the teacher level, applicable to both Linda and James, is their personal experiences with linguistic diversity and people who speak languages other than English. As mentioned above, Linda is married to someone of Hispanic background and who spoke Spanish fluently. She also had made an effort to learn Spanish and had travel experiences where she was not fluent in the language used by native speakers of those countries. Likewise, James had made an effort to learn Spanish and used his developing knowledge of the language, even if basic, to speak with native Spanish speakers in countries to which he traveled. He also reported that throughout his life (i.e., personal upbringing and workplace experiences) he has known individuals for whom English was not their first language.

James described an experience where he felt the need to come to the defense of a co-worker who he thought was being disrespected because he had limited proficiency with English:

At my other job (a customer) ordered something and the person (who didn't have a command of the English language) was taking the order...the other person started screaming at him repeating what (he) wanted. I said, he is not deaf, you just have to slow it down. The customer was not being very empathetic...I (said) come on man, grow up.

You are an adult (so) let's figure this out. (James, Interview 2, January 12, 2018)

A growing body of research shows that teachers with more exposure to linguistic diversity and people who speak a language other than English, the more favorable their attitudes toward and beliefs about ELLs are likely to be (Byrnes, Kiger, & Manning, 1997; Flores & Smith, 2008; Karabenick & Clemens Noda, 2004; Polat, 2010; Shin & Krashen, 1996; Walker-Dalhouse, Sanders, & Dalhouse, 2009). Thus, the background experiences of the teachers with linguistic diversity supported their favorable views of ELL students.

In brief, I have described the professional learning activities designed to sensitize the SEI participants to the experiences of ELLs in mainstream classes. As self-reported by the teachers, all three gained awareness of and empathy for ELLs' experiences when these students are immersed in English-only classroom settings. Although, teachers may have held positive dispositions towards culturally and linguistically diverse students prior to their participation in the district's SEI professional learning initiative, by helping teachers experience "what it is like to be in ELLs' shoes," it seems that the active, even "shock-based" learning activities helped them become more empathetic towards the struggles and challenges ELLs may experience in mainstream classes. Furthermore, the learning experiences led Linda to reflect and reconsider her previous view of ELL students who seemed not engaged in her class. That is, that their disengagement might not be related to lack of effort—as she said she used to assume—but rather to the difficulties of participating in an English-only environment. By questioning her previously unexamined assumption about ELLs' classroom behavior, Linda embraced an assets perspective of these students. I argue that the three teachers' increasing awareness of and empathy for ELLs' likely experiences in mainstream classes may well support and encourage their willingness to incorporate instructional supports for ELLs in their classes, thus facilitating these students' learning. However, this causal connection is speculation on my part, but resonates with the

findings of other studies (Bohon et al., 2017; de Oliveira, 2011; Galguera, 2011; Turgut Dost, 2016).

Theme Two: Being Content Area and Language Teachers Simultaneously: (Not) Knowing What to do with Language Learners' English Proficiencies

This theme encapsulates some of the linguistically oriented knowledge and insights the three participating teachers needed for developing lesson plans that incorporate sheltered English instruction. The learning opportunities supporting this aspect of the participants' preparation occurred during the initial day of Livemore School District's SEI professional learning initiative.

Learning opportunities related to teachers' linguistic knowledge. The idea of English language proficiency levels was introduced in the morning of the initial SEI professional learning session as part of an overview of the ESL Department at Livemore School District. This overview touched on a variety of topics, including how students are identified for and 'exited' from the district's ESL program; the types of resources available through the program for mainstream teachers who have ELLs in their classes; and the need for ESL and mainstream teachers to collaborate in support if ELL students' learning. After introductions, Jada got the substantive portion of the day started as follows:

The reason you are here today is that the next level of building [district] capacity for [teaching ELLs] is at the middle school level. [As I already discussed, during the previous year Jada focused ESL program's resources on preparing 90 elementary school teachers to use sheltered English instruction in their classes.] Why science and social studies? There is a lot of academic vocabulary that you teach. You may think to yourself that they [ELLs] don't speak English, shouldn't they be taught by the ESL teacher? But you are critical to the success of ELLs, not only by helping them learn your content but

also in helping to develop their English language proficiency [in the context of the particular content area you teach]. We know that you cannot do it alone. In the next three days we hope to provide you with...resources and strategies, as well as to connect you with the language specialists, the ESL teachers from your respective schools, to support you and your students. (SEI Session Observation 1, November 15, 2017)

Jada then turned the program over to Ann and Gayle.

After the facilitators introduced themselves and identified the names of the ESL teachers assigned to the participants' schools, Gayle explained the type of assistance the mainstream teachers could expect from the ESL teachers:

We wanted you to know that they [ESL teachers] are the language experts. So, whether it is about modifying assignments, understanding your ESL students' background a little more, or learning about their levels [of English language proficiency] when it comes to listening, speaking, reading, and writing, they have all that information, which can really help you. So, email them, find them [referring to the ESL teachers assigned to each school]. They are a great resource. (SEI Session Observation 1, November 15, 2017)

Using a PowerPoint presentation, the facilitators proceeded to explain that all students whose primary language is one other than English are tested to determine their English language proficiency (ELP) level. Elaborating on the process, they added that the assessment used for this purpose yields scores in the range of 1 to 6. As discussed in Chapter 1, school districts in Northeast State are required to use ACCESS 2.0, an assessment aligned to the English Language Development Standards produced by the World Class Instructional Design and Assessment (WIDA) consortium; the scores are used by the state to monitor ELL students' progress in learning academic English. Gayle emphasized that students who score below 4.5 are considered

to have 'limited English proficiency' (or are designated "ELLs," given the recent change in terminology adopted by the state) and qualify for the district's ESL services. Focusing the teachers' attention on a PowerPoint slide that visually depicted the differences in ELP levels, Gayle described those differences in broad terms:

A student who comes in with zero English is going to be at level 1, which is entering. Then it goes to beginning, which is level 2. As students learn more English, they progress to levels 3, 4, 5, and 6. A student...around 4.5 to 5 can pretty much handle being in your classroom. There might be some vocabulary issues, but they have a good understanding of the English language and can pretty much keep up with the rest of the class with some additional supports. If you are a 6...you know what you are doing. That is the proficiency levels, and you will get handouts for this. There will be more explanations [later in the day]. (SEI Session Observation 1, November 15, 2017)

Ann then commented on the rate of language progression one could expect from ELLs:

Take a look at levels 1 and 2 [still referring to the same PowerPoint slide]. Many of your students might be at a level 2, although it depends on how long they have been in this country. I don't want to generalize, but I will. Most students go from level 1 to level 2 very quickly. But, from level 2 to 3 they might stay there for a while. (SEI Session Observation 1, November 15, 2017)

To wrap up the introductory presentation of ELL students' identification process, Ann mentioned that the district assesses their English language proficiency annually and uses the scores to track their English language development over time and make decisions about when to exit them from the ESL program. She added, "this [referring to students' ELP levels] is

something that is really important for you to know about your students, which we will talk about later" (SEI Session Observation 1, November 15, 2017).

Following this overview of English language proficiency levels, Gayle introduced the Can Do descriptors aligned with ELP levels as follows:

The Can Do descriptors, this is what we [ESL teachers] use...this is going to be a great tool for you to use...It breaks down each language ELP level. It starts with 1 all the way to 5, and it goes by the domains of language, which are listening, speaking, reading, and writing. It tells you what you can expect that student to do at that level. If you have a student at a level 1 in your 8th grade social studies class, you can't expect them to take the unit test at the end. This gives you a better idea of how you can modify their work, what you can expect from them...The Can Do descriptors are a great tool that will help you when it comes to creating lesson plans. (SEI Session Observation 1, November 15, 2017)

At that point the facilitators distributed a copy of the Can Do descriptors for the middle grades (6-8) to the teachers. For the rest of the morning, they addressed a variety of other topics that provided background information for planning instruction for ELLs, a central idea addressed in the afternoon. Those topics included an overview of sheltered English instruction, factors that influence second language acquisition, and the effects of immersion in English-only instruction for ELLs. Perhaps most directly related to instructional planning was the discussion of culture and culturally responsive teaching, during which the idea that students' cultural background (including their native language) needed to be viewed by teachers as a resource in teaching them.

In the afternoon, the facilitators picked up on the idea of English language proficiency they had broadly introduced that morning. This occurred during the discussion of instructional

planning. Ann and Gayle told the teachers that to build the students' foundational skills for accessing grade level material taught in English, attention needed to be paid to four language domains—listening, speaking, reading, and writing. The facilitators emphasized that although the rigor of academic content should not be reduced when teaching ELLs, during instructional planning teachers needed to take into account a variety of factors, one of which was the learners' English language proficiency.

In preparation for an activity, the facilitators distributed a handout with ELP scores for three fictitious students. For each, the handout reported the ELP level score by language domain (listening, speaking, reading, writing) as well as a composite score, which was the average of the scores of the four domains. Ann discussed the difference between the two types of scores as follows:

The students get one composite score that we use to exit or enter them [from or into the ESL program. Then they get a speaking score, a reading score, a listening score, and a writing score. Those language domain scores are more helpful [for instructional planning] than the composite score. I am going to show you three students who have the same composite score, but they are totally different in their needs as their scores differ in each of the language domains. (SEI Session Observation 1, November 15, 2017)

At this point Ann directed the teachers to get into small groups to discuss what they considered the strengths and weaknesses of the three students, based on the domain scores reported for each. As the teachers began to work on their task, the room was abuzz with chatter. After approximately fifteen minutes, the facilitators brought the teachers back for a whole group discussion about each student. During that discussion, several teachers commented on the value of having their ELL students' scores for the different language domains. For example, one

teacher commented, "I really like to look at this for my ELLs because it gives you a really good breakdown of what the strengths and weaknesses are for each kid" (SEI Session Observation 1, November 15, 2017).

During the whole group discussion of the three fictitious students, one of the teacher participants [not a focal teacher] asked if it was the responsibility of the ESL teacher at their respective schools to give mainstream teachers the ELP levels for ELL students in their classes. Both Gayle and Ann noted that Jada was working on a process for the ESL department to get this information out to mainstream teachers, but one did not yet exist. Ann then voluntarily shared the type of information she informally shares with the teachers in the schools where she teaches:

Well, I can share what I do, and these are things that we have to discuss as a department. At the beginning of the school year, I share with the teachers their students' ACCESS scores for all four [language] domains. I also hand them the Can Do descriptors and tell them that in their spare time to peruse this information, and if they have any questions to let (her) know...If you want these scores...I think you can go to your ESL teachers and ask...for it. They can provide it to you. (SEI Session Observation 1, November 15, 2017)

Taking a different approach to the teacher's original question, Gayle said:

As a department we are coming up with a form so that we (ESL teachers) are all using the same form (and) attach it to the Can Do Descriptors to give to each of our teachers...Our supervisor (Jada) just wants it to be uniform...to be sure that we are all doing the same thing in the schools. (SEI Session Observation 1, November 15, 2017)

While both facilitators encouraged session participants to ask the ESL teacher at their schools for their ELLs' ELP scores, Ann offered to informally give them the information at the end of the

day, if they were interested. About half of the 14 teacher participants acted on the invitation, but none of them were the three focal teachers in my study.

Gayle and Ann engaged the teachers in a second activity aimed at helping them plan and implement instruction based on ELLs' English language proficiency levels by developing language objectives. Focusing the teachers' attention on a PowerPoint slide, Gayle told them that in planning sheltered instruction for ELLs, they needed to: develop clearly defined content and language objectives; address concepts that are appropriate to the age and educational background levels of their ELL students; use supplementary materials; offer relevant adaptations; and use meaningful activities that integrate lesson concepts with English language practice opportunities for listening, speaking, reading, and/or writing. Ann warned the participants that the language objective component of lesson planning was probably, "the most overwhelming." At this point, the teachers began to grumble about having to add language objectives to their lesson plans. Ann quickly clarified that while ESL teachers had to write language objectives, mainstream teachers were not expected to do so. As if to explain why the activity to follow was relevant to them, she added, "it is something to keep in mind. You want to keep in mind the language structures of every lesson" (SEI Session Observation 1, November 15, 2017).

Gayle then had the teachers engage in a think-pair-share activity intended to help them explore the difference between content and language objectives. James and Kathy, who were in a group of four working on the task together, had an opportunity to report back to the entire group during the debriefing. James said that, "a content objective is curriculum-based and the outcomes of what the students are learning." Kathy explained that a language objective "is like language skills or vocabulary words or something like that," to which James added, "I think

language objectives have to deal with communication like the reading, writing, speaking, and listening skills" (SEI Session Observation 1, November 15, 2017). To bring the activity to closure and introduce a follow-up idea, Gayle commented:

Language objectives are how [students] would use that content. How [they] would show [their] understanding of the content. So, [they] can do that through listening, speaking, reading, and writing. Something to consider when you are writing these objectives is the linguistic complexity, language forms and conventions, and vocabulary usage. (SEI Session Observation 1, November 15, 2017)

Once again, some of the teachers began talking to one another and moving in their chairs, seemingly feeling discomfort with the presentation. Recognizing that the technical vocabulary might have been difficult for the teachers to grasp, Ann said:

Consider the task you are asking your students to complete. For your ELL students it may be easier...to understand your content if information was presented, or if the passage they are reading provides the same content [you are teaching the other students] but perhaps in shorter sentences or in words they understand. (SEI Session Observation 1, November 15, 2017)

Gayle concluded her direct presentation of language objectives by giving an example of each, as used in science teaching. For a content objective, the PowerPoint slide she used listed the following: Students will be able to follow multiple directions to accurately perform an experiment. To illustrate a language objective, the following was provided: Students will be able to use sequence words such as first, second, third, before, after, then, and finally to summarize steps in an experiment. She then instructed the teachers to get into content-specific groups [science and social studies]. Using the handout discussed earlier with the ELP levels of three

fictitious ELL students, she asked each group to select one of the three students and to develop a language objective for that fictional learner for one lesson they had recently taught.

Seemingly unsure about the task given, the teachers looked around and began asking each other if they had understood what was expected. Noticing the teachers' confusion, Gayle and Ann walked around the room visiting the different groups and tried to address the teachers' questions and concerns. For example, sensing that the teachers in a group were feeling uncomfortable with the linguistic terms used in the presentation (e.g., linguistic complexity, language forms, vocabulary usage), Gayle told them:

This does not require teachers to become grammar experts. [They just need to be] aware of syntax used in their subject area, which I think is very important. When you are thinking language, don't just think grammar or the conventions of English. You want to keep in mind those four domains, listening, reading, speaking, and writing. (SEI Session1, November 15, 2017)

While interacting with another group, Ann stressed the importance of referencing the Can Do descriptors in relation to the language level for the particular domain the teacher had chosen to focus on during the lesson:

Maybe you know the student is weak in speaking because you saw their ELP level, so the language domain you are focusing on is speaking. So, depending on whatever the activity you are doing in that lesson, [it will focus on] a certain domain. You don't need to develop a language objective for all four language domains. (SEI Session Observation 1, November 15, 2017)

After 20 minutes, the facilitators reconvened the group as a whole to report out the language objectives they had come up with. However, there was only enough time for one group to report. A teacher from one of the science groups reported:

So, we are doing a lesson on the levels of organization of an organism. Like, the smallest part is a cell, cells form tissues, tissues form organs and such. Instead of having them complete a flow chart with those five levels, describing them, and giving examples, the ELLs could label pictures for each level of organization. (SEI Session Observation 1, November 15, 2017)

Unfortunately, the teacher reporting for her group did not specify which of the three fictitious students the group had selected for their language objective. Nor, had she indicated the language domain targeted or the student's ELP level for that particular domain. To try to fill in some of the gaps in the teacher's response, Ann interjected:

If they are a level 2, they can have a word bank, or they can cut the words out, and glue it to each picture. That is another way to evaluate...that they understand what the different levels of organization are. (SEI Session Observation 1, November 15, 2017)

Interestingly, neither the reporting teacher nor Ann actually gave a language objective in their response. Instead, described a lesson adaptation for an ELL student.

What teachers seemed to learn. Analysis of the data I gathered, primarily through interviews with the three focal teachers, suggests that they varied somewhat in their understanding of the value of knowing their ELL students' ELP levels for instructional planning purposes. Overall, Linda appeared to have the firmest grasp of this idea, or at least she was able to communicate it the clearest in one of my interviews with her. Although Linda had not stayed after the first SEI session to get Dwede's ELP levels from Ann, she promptly sought out and

obtained that information, along with other details about the students' background, from the ESL teacher assigned to Willard Middle School, the site where she taught. In reflecting on what she had learned from the initial SEI session, two months earlier, Linda shared:

I immediately got scores for the four language domains [for Dwede], so I was able to cross-reference [the scores] with the Can Do Descriptors. I got the scores from the ESL teacher. I immediately emailed her to get more information [about Dwede]...I learned...that she understands me conversationally with no problems. It's more when it comes to reading comprehension and doing independent work that is a struggle for her....She is from Liberia, where they speak English, although it is different there [a variation of American English]. This is why she understands me. She has the conversation piece of it [referring to the idea of basic interpersonal communication skills (BICS) discussed in the session] but she doesn't have the academic side of it as much [referring to the cognitive academic language proficiency [CALP] mentioned in the session]....Made me understand my student better. (Linda, Interview 2, January 12, 2018)

This explanation of Dwede's English language skills suggests that Linda had learned how to use the Can Do descriptors to make sense of her student's ELP scores for the different language domains, a skill that could be of much help to Linda in planning and enacting instruction for Dwede and other ELL students.

Linda mentioned experiencing some frustration prior to participating in the district's SEI initiative because, "I didn't know coming in who to go to about an ELL student. Who should I talk to, and what not." Then she added, "the biggest thing I implemented (following the first SEI session) was going to the ESL teacher. Just knowing who to go to, to get that information"

(Interview 2, January 12, 2018). Another takeaway from the initial SEI session Linda mentioned was the reminder that, "I need to get to know my students so that I can adjust my instruction for them" (Interview 2, January 12, 2018). That is, Linda understood that to adapt her instructional plans for Dwede (and other students), she needed background information about them.

Linda, a candidate for National Board certification, appeared to understand the importance of taking her students' background knowledge and experiences into account when planning instruction for them, even before beginning her participation in the district's SEI professional learning initiative. This understanding was evident in her discussion of how the makeup of her classes typically shaped her planning of hands-on activities, which she uses with all her classes. As she expressed in my final interview with her:

When it comes to hand-on activities I try to do them with every class. How I do them can change. Whether I do them with groups, partners or not with partners, choosing their partners or whether I group them, that changes from class to class. How I give them directions [also changes]. Whether I give them a written copy of it or put them up on the board, or both. Whether we read through all the directions or I just hand them the directions [for them to read] and I just facilitate. Whether we do an example together, or I show an example, or I don't give any examples...it depends on the group of students. (Linda, Interview 3, February 12, 2018)

That is, Linda did not seem to need to learn the role that information about students plays in teaching them, although the reminder seemed helpful. In fact, the first of five core propositions of the National Professional Board for Professional Teaching Standards, which summarize the knowledge, skills, abilities and commitments expected of National Board certified teachers, calls for teachers to take student differences into account in their teaching. What Linda appeared to

have gained from the first SEI session—in addition to knowing who she should go to in order to get background information about ELLs, including their ELP levels—was an initial understanding that while planning and enacting instruction for ELL students, she needed to consider and focus on their current English language proficiency and how to develop it while teaching them science and not just their knowledge of science alone. This became clear when I asked her if participating in the district's SEI professional learning program had influenced how she planned her lessons:

I think a little bit. I (now) at least take into consideration what language skills I want my students to get out of this [a lesson]. I don't think it changed it [her overall instructional planning and approach] significantly because I was already doing some of that without realizing it. (Linda, Interview 2, January 12, 2018)

Thus, Linda seemed to become more conscious that, as a science teacher, she is responsible for teaching ELL students not just academic content but also academic language.

My review of the instructional plans Linda shared with me for the three lessons I observed in her class did not include language objectives, however. Nor did they have any specific reference to Dwede's language development. I actually did not expect to see language objectives in the teachers' lesson plans given Ann's comment that mainstream teachers were not being asked to include these. Nevertheless, I observed several instances in which Linda used language scaffolds to support Dwede's learning, seemingly taking into account the students' language needs (e.g., struggles with reading comprehension, and writing). I also noticed that Linda gave detailed attention to teaching content-specific vocabulary to all students, not just Dwede. I give examples of these practices in my discussion of the next theme generated out of my data, which focuses on the teachers' use of SEI practices in their teaching.

Kathy also found the presentations and discussions of students' English language proficiency levels to be "useful." She broadly summarized what this meant to her as follows, "I learned about the [proficiency] levels, like emerging and beginning....and what they [the students] should know (about language) at those thresholds, at those language levels. That was useful to me" (Kathy, Interview 2, January 12, 2018). However, her comment does not make explicit what made learning about ELP levels "useful" for teaching or any other purposes. Returning to this topic later in the same interview, Kathy again mentioned that before participating in the SEI initiative she did not know about "language levels" or "language objectives." Referring specifically to the latter, she confessed:

I'm still confused about it and I need to learn more about how to write a language objective. I have to wrap my head around that one. I have to practice doing that...I just need more time...All I would need now are examples of [language objectives] that are specific to my content. (Kathy, Interview 2, January 12, 2018)

The above comment suggests that because the SEI facilitators (who were both ESL teachers at the elementary school level) had not given examples of language objectives applicable to social studies—Kathy's content area—she had not quite understood how to write or work with these objectives. Apparently, the activity that placed the teachers in subject-specific groups to develop language objectives for a given ELL for a lesson they had recently taught had not given Kathy clarity about the concept. This comes as no surprise to me since the teachers seemed confused about that activity from the start. Additionally, the one example of a 'language objective' reported out by a science teacher to the whole group was problematic, as discussed above. However, despite Kathy's lack of clarity about language objectives, she mentioned that

she liked the idea of using them. When I pressed her to explain what she saw of merit to using language objectives, she explained:

Just the fact that it will help me reach them [ELLs] better, not just what they need to learn [about social studies], but what the kids need [to learn about language]. Just making sure. If I have it [a language objective] in my lesson plan, as I look at my plan during the day [it will help me] stay on track. So, it would remind me to make sure that I give language the attention it needs...Not just...let's practice these words...but what specifically am I going to hit home today. (Kathy, Second Interview, January 12, 2018)

While Kathy's explanation of the value of language objectives was vague, it nevertheless communicates a general recognition that as a social studies teacher, it is important for her to help her ELL students develop language [or at least vocabulary] that is specific to social studies.

Although Kathy expressed that learning about ELL students' ELP levels was "useful," she did not meet Ann after the first SEI session to get the scores for Rose-Merline, the ELL student in the class I observed. And she had not reached out to get the scores from the ESL teacher assigned to Creekside Middle School, where she taught. Kathy explained that while she and the ESL teacher, who spent the entire day in the school, shared hall duty during the 9th period, they were unable to use this time to talk about Rose-Merline as a result of a shortage of substitute teachers "we always have to cover for teachers who are absent" (Kathy, Interview 3, February 12, 2018). Thus, Kathy had not yet succeeded in leveraging the ESL teacher's language expertise or knowledge about individual ELL students, as Linda had. As a result, Kathy had only a sketchy understanding of Rose-Merline's language proficiency. For example, she described Rose-Merline as being "in the lowest possible English language level. I am not sure how long she has been in the country. I know she is new to our school this year. I would

assume not long because she doesn't speak English" (Kathy, Interview 1, December 13, 2017). Noticeably absent from this description of Rose-Merline are details about the students' English language skills in the different domains of language that could help Kathy determine how to scaffold instruction or develop a language objective for her.

The idea of ELL students' ELP levels also caught James' attention. Upon reflecting on his experience in the initial SEI session, James stated with conviction, "definitely, the English language proficiency levels was one take away" (James, Interview 2, January 12, 2018). He admitted that he previously had never given much thought to the process of learning English or to the idea that ELLs must go through different language phases to become English proficient. As he openly stated in the same interview, "that was new information to me." Beyond stating that the idea of English language proficiency was new to him, James did not attempt to articulate how he might use this idea, the 'Can Do descriptors,' or 'language objectives' in planning and teaching ELL students in his classes.

Like the two other focal teachers, James had not obtained from Ann the ELP scores for Andriy and Lindaly, the two ELL students in the class I observed. And like Linda, he had not reached out to get those students' scores, or any other background information, from the ESL teacher assigned to Willard Middle School, the site where he taught. The reason he initially gave for not making contact with the ESL teacher was that,

She is only here [at Willard Middle School] for half of a day [in the morning] and then goes to another school. I work all morning and my only period off is period six, and she is gone by then....I guess I can always send her an email. (James, Interview 2, January 12, 2018)

A few minutes later, James returned to this topic and added, "I know if I reached out to the ESL teacher...she would be more than willing to help." While it initially seemed that a scheduling conflict prevented James from communicating in person with the ESL teacher, this was not the only obstacle keeping him from reaching out. In my final interview with James, he gave a somewhat different interpretation of why he had not yet established personal contact with the ESL teacher. As he explained then, "I see her [the ESL teacher] quite a bit in the morning, but everyone is just so busy and hustling. The best way for me to get in touch...is to email her" (James, Interview 3, February 12, 2018).

When I had previously asked him whether he had emailed the ESL teacher, James politely responded, "No I haven't. I am glad you said that, and I will make note of that" (James, Interview 2, January 12, 2018). That is, even though James had twice identified asking the ESL teacher for his ELL students' ELP levels by email as the best option, he had not acted on this possibility. James' lack of follow through in establishing personal or virtual contact with the ESL teacher regarding his students' ELP scores is likely explained, at least in part, by his statement that "everyone is just so busy and hustling."

In brief, my data suggest that the three focal teachers varied in their understanding of the value of knowing their ELL students' English language proficiency for instructional planning purposes. Of the three, Linda seemed to be the only one to see a direct connection between knowing ELL students' ELP levels and developing appropriate instructional adaptations for them. Perhaps this insight motivated Linda to actively seek out Dwede's ELP levels from the ESL teacher in her school. Since she did, it is not surprising that in speaking about Dwede's linguistic and academic background, Linda spoke with clarity and detail. In contrast, neither Kathy nor James seemed able to explain with clarity how they might use their ELL students'

ELP levels for instructional planning purposes. Perhaps this seeming lack of clarity helps explains, at least in part, why neither of them reached out to the ESL teacher in their respective schools by email in order to get around the scheduling complications between themselves and the ESL instructor they each reported.

Discussion. Three central ideas were embedded in the professional learning experiences described above regarding the teachers' use of information about their ELL students' language proficiency for instructional planning purposes, perhaps the most fundamental being that teaching involves building on students' background knowledge and experiences. Arguably, when teaching ELLs academic content in English—as the focal teachers in this study were expected to do—students' English language proficiency is a key factor to consider when planning lessons for them (Baecher, Artigliere, Patterson, & Spatzer, 2012; Hoffman & Zollman, 2016; Kim, Kondo, Blair, Mancilla, Chapman, & Wilmes, 2016; Meyer, Mahalingappa, & Brugar, 2019). It makes sense, then, that Gayle and Ann addressed the importance of ELL students' ELP levels during the initial day of Livemore School District's SEI professional learning initiative. The idea of planning instruction to build on what students know and can do is consistent with constructivist views of learning, whereby learners are thought to use their prior knowledge and experiences to make sense of new ideas encountered in school (Bada, 2015; Brunner, 1966; Piaget, 1977). Because this perspective assumes that all students are capable learners who bring valuable resources to school learning, it can promote an asset view of students. As such, much empirical and conceptual work on linguistically and culturally responsive teaching tends to assume, either explicitly or implicitly, this assets perspective on learning (see for example, Avalos & Secada, 2010; Gay, 2010; Hollie, 2017; Lucas & Villegas, 2011; Shapiro, 2014; Villegas & Lucas, 2007). An important contribution that constructivist

views of learning can make is to challenge deficit beliefs about ELLs' abilities and potential that many teachers have been found to hold (Lucas et al., 2015; Rodela, Rodriguez-Mojica, & Cochrun, 2019).

At several points in the initial SEI session, Gayle and Ann communicated to the teacher participants that student's ELP levels in the domains of listening, speaking, reading, and writing, when taken together, represented that student's language learning profile. By sharing with the teachers, the WIDA Can Do descriptors, the facilitators aimed to help them learn to interpret ELLs' scores in the four language domains and to use this information for instructional planning purposes. Unfortunately, despite the overall positive response the SEI participants had to the activity where they had to discuss the strengths and needs of three fictitious ELLs who had the same overall level of English language proficiency but different language learning profiles, the facilitators ran into obstacles in getting at least two of the three focal teachers (and likely others who participated in the SEI initiative as well) to understand the connection between students' ELP scores and their instructional planning. For one thing, Gayle and Ann 'covered' a lot of content in a brief span of time. To do so they had to move very quickly through the material, possibly depriving the participants of the time needed to integrate the new ideas into their customary way of thinking about instructional planning. Making matters worse, some of the terms used (e.g., features of academic language, linguistic complexity, language forms and conventions, and vocabulary usage), which the facilitators introduced with minimal explanation, created confusion for the teachers. Equally, if not more problematic, the idea of language objectives, which was the means by which teachers were to apply their understanding of ELL students' ELP scores to their instructional lessons met with resistance on the part of teacher participants who feared they would soon be asked to add language objectives to their lesson

plans. Possibly adding to the problem was the direct instructional approach the facilitators took during much of day 1 to 'transmit' a lot of information to the teachers. While their presentation style was aided by PowerPoint slides and a willingness to entertain questions and comments from the participants throughout the presentation, it is likely that placing the teachers in a passive role for a major portion of the day watered down the learning experience for them, as research suggests lecture-based professional learning activities do not engage teachers, while active learning experience are meaningful and more likely to engage teachers with the content (Desimone, 2011; Patton, Parker, & Tannehill, 2015; Quick, Holtzman, & Chaney, 2009; Sparks & Hirsh, 2000). This point was underscored by James during my second interview with him when he commented:

The notes on the PowerPoint, stuff like that doesn't help me as a learner. I know that I can always go back to look at it, but like I said, I just forget to do so, especially after a long day like that. (James, Interview 2, January 12, 2018)

The second salient idea running through the professional learning opportunities related to theme two was that *content area teachers are also language teachers*. Over the past few decades, scholars have pointed out that language plays a central role in teaching and learning (Schleppegrell, 2004; Vygotsky, 1987). This perspective is reflected in the new Common Core standards, which require students to go beyond basic skills and learn to use language in sophisticated ways (Pease-Alvarez, Samway, & Cifka-Herrera, 2010). For example, students are now expected to construct explanations, develop arguments based on evidence, and ask questions to clarify their own thinking. While the language demands embedded in the new academic standards are challenging for all students, they are especially demanding for ELLs who are learning academic content in English, a language they are still learning. To help ELLs succeed

in today's schools and meet the new academic language expectations, mainstream teachers need to teach them how English is used in the different content areas (Bunch, 2013), or what others have called *academic language* (Schleppegrell, 2004), *academic English* (Anstrom, DiCerbo, Butler, Katz, Millet, & Rivera, 2010), or *academic literacy* (Bunch, 2013). To do this type of teaching, advocates of sheltered English instruction contend that teachers must be equipped to identify the language demands of the curriculum they teach and use this insight (along with knowledge about the ELP levels of the particular ELLs in their classes) to develop language objectives for their lessons (Gottlieb, 2013; Short, Vogt, & Echevarría, 2011)

Even though the professional learning opportunities described as part of theme two aimed to prepare the participants in the district's SEI initiative to plan instruction for ELLs by using language objectives for lesson planning, that goal was undermined by the set of factors I previously discussed. Interestingly, while an essential aspect of planning for language objectives is the ability to identify the language demands embedded in the curriculum, this skill was largely ignored by the SEI facilitators. According to Gottlieb (2013), the academic language demands of the curriculum are evident at the word, sentence, and discourse levels. At the word level, teachers need to attend to vocabulary usage in spoken/written texts. At the sentence level, teachers need to identify the language forms and conventions (i.e., the grammatical structures) used in the lesson. At the discourse level, teachers need to determine both the amount and density of speech/written text, how text is organized, and the cohesion of ideas. While in their presentation of language objectives, the facilitators mentioned the terms "linguistic complexity," "language forms and conventions," and "vocabulary usage," these crucial concepts, used by WIDA in its language standards for science and social studies, were not examined at all in the SEI session. In fact, the facilitators appeared to assume that these terms were common

knowledge for the participants, thus requiring no explanation. As I previously reported, in explaining what language objectives were, Gayle told the participants:

Language objectives are how [students] would use that content. How [they] would show [their] understanding of the content. So, [they] can do that through listening, speaking, reading and writing. Something to consider when you are writing these objectives is the *linguistic complexity*, *language forms and conventions*, and *vocabulary usage*. (SEI Session Observation 1, November 15, 2017)

Only after Gayle heard the teachers grumbling did she try to explain these linguistic terms. As she put it:

Consider the task you are asking your students to complete. For your ELL students it may be easier...to understand your content if information was presented, or if the passage they are reading, provides the same content [being taught to other students] but perhaps in shorter sentences or in words they understand. (SEI Session Observation 1, November 15, 2017)

While this explanation quieted the teachers' grumbling, it was far from being clear.

In the language objective activity that followed, Gayle again had to explain to a small group of teachers that to identify the language demands of a lesson, they did not have to be "grammar experts," which appeared to be the teachers' concern. She went on to say that all teachers needed was:

[To be] aware of syntax used in their subject area, which I think is very important. When you are thinking language, don't just think grammar or the conventions of English. You want to keep in mind those four domains, listening, reading, speaking, and writing. (SEI Session Observation 1, November 15, 2017)

Like the previous explanation, this one too was vague.

In short, my data suggest that the three study participants did not necessarily come to see themselves as the 'language teachers' Gayle and Ann had hoped for, although all three clearly understood that they were responsible for teaching a lot of subject-specific vocabulary to their students, including ELLs. This is a topic I address in detail in my subsequent discussion of theme three.

The third and final core idea related to instructional planning for ELLs presented in the SEI initiative is that *content area teachers and ESL teachers need to collaborate to support ELL students' learning*. As Bunch (2013) argued:

Just as the Common Core standards envision the development of literacy to be a shared responsibility between language arts teachers and teachers in other disciplines..., the preparation of ELLs for the kinds of language, literature, and learning demands called for by the new standards can no longer be seen as the sole responsibility of a small cadre of language specialists teaching ESL courses.... (p. 301)

The importance of collaborating with ESL teachers was introduced to the content area teachers at the very start of the SEI initiative. As Gayle identified the names of the ESL teachers assigned to the different schools, she referred to them as the "language experts" who can give content area teachers helpful information about the backgrounds of ELL students in their classes, including information about their ELP levels. Later during the activity where teachers discussed the strengths and needs of three fictitious ELLs who had different language learning profiles, one teacher participant asked if it was the ESL teacher's responsibility to give mainstream teachers this type of information for ELL students in their classes. Although Gayle had already told the participants that they could get their ELL students' ELP levels directly from the ESL teacher in

the school, the facilitators responded with some caution to the question on the floor. Ann emphasized that she gives content area teachers ELP scores and the Can Do descriptors, encourages them to review the materials "in their spare time," and to let her know if they have any questions. Gayle then added that the ESL department was coming up with a standardized procedure for getting information about ELL students to mainstream teachers, but none existed yet. However, both encouraged the teachers to speak directly with the ESL teacher at their school or email him or her to get the information. But then Ann offered to informally share with participants the ELP levels for their ELL students at the conclusion of the day's activities.

Two problems stood out to me about the call for collaboration between content area teachers and ESL teachers at Livemore School District. One is the limited nature of the collaboration, as it was described by the SEI facilitators. The collaborative tasks promoted in the wider academic literature include joint lesson planning, mapping and aligning the ESL and content area curriculum, parallel teaching by which the ESL teacher focuses on the same or similar desired outcomes as a content area teacher, co-development of instructional materials to help differentiate instruction for ELLs, collaborative assessment of students' work, and coteaching (Ahmed Hersi, Horan, & Lewis, 2016; Davison, 2006; Honigsfeld and Dove, 2010; Pardini, 2006; Peercy, Ditter, & Destefano, 2016). Compared to these options, collaboration that primarily involves having the ESL teacher give content area teachers the ELP scores for ELLs in their classes seems quite narrow. The second problem is the absence of a clear structure to support even the simple distribution of information the ESL department envisions. Without such support, the teachers must initiate the needed contact on their own. In situations such as the ones described by Kathy and James, they must overcome organizational barriers (coverage assignments, conflicting schedules) to establish communication. If teachers succeed in obtaining their "spare time." These problems may help explain James' perspective, that teachers "have to go above and beyond to make sure that things get done" (James, Interview 2, January 12, 2018). Even if Jada succeeds in standardizing the information giving process to ensure that all content area teachers receive relevant background information about their ELL students, the apparent lack of principal involvement in the SEI initiative (other than distributing the invitation to attend the SEI professional learning sessions to his or her teachers), will continue to create problems for any content area teacher who wants to get more input from the "language experts" in their school because there is still no school-level support to ensure that the teachers have time and opportunities to make this happen. Research shows that when principals are engaged in similar or the same professional learning experiences as their teachers are, they not only learn about the topic at hand but also learn about the type of supports the teachers need to facilitate their learning and implementation. As Pawan and Sietman (2007) warned, this type of teacher-to-teacher collaboration is not likely to happen without school leadership support.

As the above discussion suggests that interactions between and among elements in the *professional learning system* (attempting to cover too much content in a relatively brief time, introducing technical terms without first building participants' understanding of them, the direct instructional approach used by the facilitators), *district level system* (the lack of structures to support the collaboration between content area teachers and ESL), *school level system* (the minimal involvement by principals with the SEI professional learning initiative, and the *individual teacher system* (pressure on their time) created unfavorable conditions for participating teachers to learn about and change their planning of instruction for ELLs. At least this seemed to be the case for Kathy and James. This conclusion raises a question about why

participating in the SEI initiative seems to have succeeded in getting Linda to broaden her thinking about instructional planning (i.e., getting her to think systematically about issues of language in addition to all the other student variables she already took into account when planning instruction for her students). I contend that Linda's apparent success was prompted by the alignment of her view of teaching (as building on what students know and can do at a given time) with the view of teaching (which also calls for teachers to build their teaching on what is already familiar to students) that informed the instructional planning approach promoted by the SEI initiative in day 1.

Theme Three: From the Known to the New: Refining the Already-in-Place and Trialing the Not-Yet-in Place for the Benefit of ELLs and Other Students

The three focal teachers began this study reporting that they felt unprepared to appropriately meet the instructional needs of their ELL students. In fact, this lack of preparation was the primary reason all three gave for volunteering to participate in Livemore School District's SEI professional learning initiative. This third and final theme focuses on what the focal teachers appeared to have learned about sheltered English instructional strategies and their attempts to transform that knowledge into practice. Four sub-themes surfaced from my analysis of relevant data—valuing and using ELL students' native language, developing content area vocabulary, scaffolding instruction to make content comprehensible to ELLs, and strategies that benefit ELLs are good for all students.

Learning opportunities related to the theme. One could argue that all the professional learning experiences in the SEI initiative were pertinent to theme three since the overall goal of the initiative was to prepare participants to use SEI strategies in their teaching. However, in this section I opted for highlighting only those learning experiences that related to the teachers' use

of SEI practices in their classrooms, some of which were described previously. That is, several activities had more than one learning purpose.

The importance of leveraging ELLs' native language and culture as a resource for teaching and learning was an idea that Gayle and Ann stressed throughout the SEI initiative. In day 1, participants were introduced to the FABRIC paradigm, which as I discussed in Chapter 4, is a learning framework developed by Northeast State Department of Education to guide and support districts and schools in the state to develop their capacity to teach ELLs. Focusing specifically on the framework's "culture strand," the facilitators asked the participants to brainstorm in groups what culture meant to them. Following the brainstorming, Gayle facilitated a whole group reading and discussion of a page from the FABRIC guide book in which culture and its implications for teaching is outlined. In that page, culture is defined as "the way all people see the world around them, including education. Students, teachers, and parents interpret each other's actions through its lens" (Jones & Ramella, n.d., p. 8). The page also identified examples of different aspects of everyday life inside and outside school that can vary across cultural groups. During this part of the session, a central topic discussed had to do with steps that teachers might take to support ELL students who might experience difficulties adjusting to a new culture. Ann concluded the activity with the following summary statement:

Folks, the takeaway here is that ELLs' native language, cultural background, and lived experiences should be viewed as a resource and leveraged in your lessons. While we want to help [ELLs] acclimate to our culture, it shouldn't be at the expense of their culture, which is equally important. (SEI Observation 1, November 15, 2017)

The morning of day 2 was devoted to the topic of building students' background knowledge for learning, an idea the serves as the foundation for SEI practices. In addressing this

topic, the facilitators engaged the teachers in whole-group and small-group discussions.

Participants were also engaged in a variety of other activities that served a double purpose—

providing an opportunity for participants to process ideas the facilitators had introduced, while also modeling for them strategies to use in teaching ELLs. Gayle and Ann also used PowerPoint slides throughout this and other sessions in the SEI series to present ideas, highlight key points, provide examples of practices discussed, and give directions for activities used.

The facilitators first reviewed the importance of *linking* concepts or ideas to be taught to ELL students' background experiences and *bridging* the new concepts and ideas to the learners' prior knowledge. After having participants meet in small groups to discuss differences between the notions of activating prior knowledge and building background, Gayle and Ann moved through several PowerPoint slides as they reviewed a variety of instructional strategies teachers could use to activate and leverage students' prior knowledge (e.g., KWL chart, graphic organizers, questioning techniques, structured discussions, quick writes-help ELLs connect prior experiences to lesson, student journals). Participants were then given time to discuss with a "buddy" different ideas for bridging or connecting a previous lesson to a new one.

Ann then introduced another essential strategy used to build ELL students' background for instruction in English—explicit teaching of vocabulary. As she put it:

To help ELLs learn academic vocabulary, teachers should relate new terms to ELLs' background knowledge. This is really key for your ELLs. I know...books give us vocabulary [words], and they are usually highlighted in bold. Those are probably not the words that you want to teach your ELLs because they will be too advanced for them.

What you might want to do is to preview the book, and give [ELLs] different words

that...[are] more on their [ELP] level and will help them understand the content. This is where differentiation comes in. (SEI Observation 2, November 29, 2017)

Stressing the importance of explicitly teaching vocabulary, Ann added:

Key content vocabulary needs to be *explicitly* taught and highlighted for students. ELLs need to be able to define and use vocabulary in academic settings. To help ELLs learn academic vocabulary, teachers should relate new terms to ELLs' background knowledge. (SEI Observation 2, November 29, 2017)

As a review, the facilitators distributed a handout that asked participants to fill in a missing word in a list of sentences regarding the importance of teaching vocabulary. Beyond serving as a review, this activity modeled for participants a strategy they could be used to teach ELLs.

After a break, the facilitators explained that as ELLs learn new vocabulary in English, it is important—to the extent possible—to help them make connections to their native language.

As she explained:

You need to know that language and thinking are closely related. As ELLs learn English, it is important for them to make connections to their native language. As ELLs develop their native language, or what we call L1, they will be better able to transfer their prior knowledge to English. It will also help if you teach cognates that support ELLs' learning. For example, the word "family" is similar to the Spanish word "familia." (SEI Observation 2, November 29, 2017)

The teachers were then given a handout outlining three tiers of vocabulary instruction—tier 1 (basic words, such as "house" and "dog"), tier 2 (high utility words, such as "emerge" and "navigate"), and tier 3 (academic content words, such as "ecosystem" and "germinate"). Ann emphasized the importance of teaching ELLs words from each tier and provided examples of

how to do so. She also explained the connection between ELLs' ELP levels and the different vocabulary tiers:

Your beginner students are probably at a tier 1. Your level 2 students are probably between a tier 1 and a tier 2. Your ELP levels 3s, they're going to be your tier 2 people. So, in your classrooms you probably teach tier 3 words. This is a problem when you have a student who comes in and he is at tier 1. Yet, you are trying to get him to understand tier 3 words. That tier 1 student is not going to learn those tier 3 words unless you make a gigantic effort to make that connection through building [their] background knowledge. Or, as I said before, you might have to choose different words that are closely related but simplified. So, make it more of a tier 2 word than a tier 3 word. [ELLs] are not going to understand unless you make an effort to help them out. (SEI Observation 2, November 29, 2017)

Teachers were given a packet of resources (instructional materials they could use with ELLs to teach them vocabulary, such as graphic organizers, charts, and sentence starters) along with a reference handout that outlined what students typically can handle in terms of vocabulary at different levels of English language proficiency. After the teachers looked over the materials, they were asked to meet in small groups to discuss how they might use those resources in their respective classrooms. Then the facilitators reconvened the whole group to further discuss ways they might incorporate the resources just given to them into their instruction. To conclude the day 2 morning session, Ann and Gayle had the teachers work in small groups to summarize on chart paper what they had learned about building ELLs' background knowledge for learning and to make an illustration that would help them remember. In doing so, they modeled another

strategy the teachers could use to help ELLs summarize what they had learned from an activity or lesson.

The substantive portion of the third SEI session began with a brief activity assessing key concepts that had been introduced in the first and second sessions (e.g., affective filter, English language proficiency levels, key features of building background knowledge). The assessment took the form of a "chunk and chew" activity in which participants at each table received a handout and were asked to fill in the blanks. Unbeknown to the teachers, Ann had given each group a slightly different handout. One group's handout contained a word bank to help them complete the sentences. Another group's handout had a word bank, and the first letter of the initial word in each blank was already written in. A third group's handout had no adaptations. After discussing their answers in groups, Gayle asked the participants to describe their handout.

This assessment activity served as a transition to the topic of scaffolding instruction to help ELLs access academic content taught in English. Using a direct presentation style aided by PowerPoint slides, Ann went on to explain four types of scaffolds for student learning (adaptations; supplemental materials; strategies for comprehensible input; and sensory, graphic, and interactive supports). During her presentation of each type of scaffold, Ann gave relevant examples. She then had the teachers discuss how they felt in the earlier "chunk and chew" activity in which they had different versions of the task, with some receiving more support than others. Ann used the variation in the task given to them earlier in the day as an example of an "adaptation" intended to support different ELP levels. She then emphasized that in teaching, "fairness" involves giving each learner according to his or her needs (not necessarily giving all students the same).

To help the teachers better grasp the effects of using visuals, gestures, body and facial language, repetition, and graphic organizers as scaffolds in teaching to foster comprehensible input, Ann had them watch the video of a lesson taught in Mandarin, which depicts a health lesson being taught entirely in Mandarin (see discussion of this video and its use as a learning activity under theme one). Ann introduced the video as follows, "we are going to view two different versions of the same lesson. See which one you think is the best lesson" (SEI Observation 3, December 13, 2017). She then had the participants view the two versions of the lesson, with the first one including no scaffolds and the second one including visuals, gestures, body and facial language, repetition, and a graphic organizer in order to provide speakers of languages other than English comprehensible input. After watching both videos, Ann reminded the group, "keep in mind this might be what some of your ELLs might feel like sitting in your class" (SEI Observation 3, December 13, 2017). Ann instructed the teachers to work with a partner to reflect on a recent lesson they had taught, and then consider how ELLs might be given comprehensible input for that lesson.

The facilitators then engaged participants in El Perrito Bombero activity, which they purposefully used to demonstrate how scaffolds can help ELLs access academic content taught in English (see description of this activity as part of theme one). After the participants had completed the comprehension questions for the Spanish language and been given time to share how they felt during the task, Ann distributed another Spanish language reading and said:

I just want to show you what your students are up against. I hope you get the point that I was getting at. You...struggled with a kindergarten passage. This [holding a second reading in the air] is a fifth-grade passage. Can you imagine what your students have to go through? I was just trying to put into perspective all of the things we have talked

about this morning. How they're really necessary for [ELLs]. So, what does this all mean? Instruction should be scaffolded to increase comprehensible input; which in turn helps to decrease the affective filter, while allowing ELLs to access the content. (SEI Observation 2, December 13, 2017)

The morning portion of the session concluded with Ann distributing additional resource packets with different types of scaffolds to use with their ELLs. Ann introduced the packet as follows:

The thing I like about this [referring to the *GO TO Strategies for English Language Learners K-12*] is that it tells you what the teacher actions are, and what the student actions are. It also gives you the English language proficiency levels [of the students the scaffold is intended for]...It tells you what [scaffolds] you can use for vocabulary, what you can use for building background, what you can use for comprehensible input... (SEI Observation 3, December 13, 2017)

Given the major role that assessments play in today's classrooms, it was surprising that the district's SEI professional learning initiative devoted relatively little time to adapting assessments for ELLs. Instead, the facilitators opted for addressing assessment issues when they surfaced in a discussion of a topic on the agenda, or when it was brought up by the participants. For example, while discussing students' ELP levels and the Can Do descriptors, Gayle mentioned almost in passing that in addition to adapting classroom activities for ELLs, assessment also needed to be adapted for them.

Another instance in which the topic of assessment came up for conversation occurred in day 2. It happened in the context of a discussion during which Gayle introduced the idea that ELLs may be familiar with concepts being taught, but could lack the English language

proficiency to demonstrate their understanding of those concepts. One of the participants (not a focal teacher) asked if having ELLs complete class assignments or take assessments in their native language was an appropriate strategy for them to use. In response to this question, the facilitators identified three options to keep in mind when deciding whether or not to adapt an assessment for an ELL student. One was to administer the assessment in English if they thought the student in question was sufficiently proficient in English to complete it in that language. The second option was to adapt the assessment for a student who might know the concepts being assessed, but would likely struggle to display that knowledge if the assessment was administered in English, without any modifications. The third option was to allow students who had only rudimentary knowledge of English to take the assessment in their native language. While the discussion did not go much further than this, it did help participants understand that, at least in some situations, adapting assessments for ELLs was an acceptable strategy. Lastly, the "chunk and chew" assessment activity from day 3, which I described above, modeled for participants how they might adapt an assessment for their ELL students.

What the teachers seemed to learn. The four subthemes that emerged from my review of data collected mostly through interviews with the focal teachers, but also through observations of the teachers' classroom teaching and SEI professional learning sessions are presented below. The subthemes were: valuing and using ELL students' native language, developing content area vocabulary, scaffolding instruction to make content comprehensible, and using strategies that benefit ELLs are good for all students.

Valuing and using ELL students' native language. It should be noted that all three focal teachers used ELLs' native language (particularly Spanish given that the majority of ELL students in the district were Spanish speaking and the teachers had some familiarity with

Spanish) in the classrooms prior to their participation in the district's SEI professional learning initiative. However, my data suggest that the SEI sessions reinforced what they were already doing with respect to using students' native language to make academic content comprehensible to ELL students and seemingly gave Kathy a better understanding of the importance of doing so consistently in the classroom.

The importance of having students retain their native language surfaced in my initial interview with James. He reported that this topic had been the focus of a conversation he recently had with his class. Recalling this conversation, James said:

I actually asked the students the other day, how many of you speak more than one language when you are outside of school, or even in school, it doesn't matter. I asked them what their first language is. Some said Russian, others said Spanish, other students said French Creole. We got into a discussion about how they shouldn't lose it [their native language]. Don't lose it. You have to be able to speak English properly because that is just the majority of what we have here. But, ... you don't want [to lose your native language]. When you grow up and have a family, you want to be able to teach your kids another language. (James, Interview 1, December 7, 2017)

Although James did not elaborate on why he thought bilingualism was of value, other than to tell the students that they would want to teach their future children another language, the above excerpt suggests that he respected students' use of their native language.

As someone who had enough fluency with Spanish "to get by" in conversations, James reported using it with his Spanish-speaking students as a way of establishing connections with them, something he appeared to value (examples of this type of interaction appear in my discussion of theme two). However, throughout my three observations in James' classroom, I

never heard him use Spanish with Lindaly, the ELL student in his class who was a Spanish speaker from the Dominican Republic. Nor did I hear him use Spanish to provide students with comprehensible input during content instruction, a topic to which I return below.

Both Linda and Kathy also mentioned using Spanish in their classrooms as a means of making ELL students feel comfortable and engaged in class. For example, Kathy shared how she successfully used Spanish to engage an ELL student who was misbehaving in class. Her effort to reach out and be friendly, which included having the student help her with the pronunciation of words in Spanish, turned out to positively influence the student's in-class behavior and participation. Beyond using Spanish to help ELLs feel more comfortable in class, both Linda and Kathy considered it important to use the students' native language for instructional purposes, even before beginning the district's SEI professional learning initiative. As I reported in my presentation of theme one, Linda gave Spanish-speaking ELLs worksheets in Spanish and would then ask her husband, who is of Latinx background and a fluent Spanish speaker, to read the students' work and let her know if they had done it right. After participating in the SEI professional learning sessions, however, Linda reported that, "now, I give my ELL students a little background paragraph in their native language before they come in to do the [science] lab" (Linda, Interview 2, January 12, 2018). This is something I noticed in one of my observations, which I discuss later in this chapter.

Along related lines, Kathy reported that, even before the SEI initiative started, she would use Google to translate worksheets and directions for activities into ELL students' native language. In fact, she considered her use of ELLs' native language for instructional purposes as a source of "rebellion." According to her, in the past, administrators and ESL teachers in the district discouraged the use of languages other than English in class. She explained, "before, I

was told it's [English-only] immersion...I don't agree with that mentality" (Kathy, Interview 1, December 13, 2017). Another act of 'rebellion,' in addition to translating worksheets for ELLs' use, was keeping and using a sample textbook from a Social Studies series the district once considered purchasing:

I do have a textbook that we didn't buy, but we had a sample. The book has a paragraph in English and a paragraph in Spanish. It provides a quick summary and questions [about the content]. It is a really great resource. (Kathy, Interview 1, December 13, 2017)

Kathy shared with me that she uses this resource to support her Spanish-speaking ELLs.

According to Kathy, her participation in the SEI professional learning sessions affirmed her prior practice of using ELL students' first language in the classroom. Equally important, it also gave her insight into its use for instructional purposes. As she put it, "I have put [instructional material] in their native language before, but now I have this new awareness of how I need to go about it" (Kathy, Interview 2, January 12, 2018). Kathy also shared that she interpreted Gayle's and Ann's encouragement for teachers to leverage ELLs' native language for instructional purposes as evidence of a change in district practice, with which she agreed.

Unlike Linda and Kathy, James expressed uncertainty regarding the use of ELLs' first language for instructional purposes, however:

I am also, like, confused. Is it okay to give a Spanish-speaking student a Spanish worksheet, or should they have the English worksheet? I don't want to discourage them speaking their first language, but I also want to push English as well. So, giving them worksheets with the Spanish translation on there, is that harmful to them? Is it helpful to them? I don't know, so I am not sure if that is...appropriate to do. (James, Interview 1, December 7, 2017)

That is, while James encouraged his students to retain their native language and used his familiarity with Spanish to connect with Spanish-speaking ELLs, his doubt about the merit of using learners' native language in instruction, appeared to keep him from doing so—at least with respect to written materials.

Kathy's and Linda's interest in having more supplementary resources in languages other than English suggests that they valued the use of ELL students' native language for instructional purposes. Perhaps because he is conflicted about the use of languages other than English for teaching purposes, James also expressed an interest in having more supplementary resources in different languages. All three teachers expressed disappointment that the supplementary materials the district had provided them for teaching ELLs were primarily in Spanish. They were also frustrated that it seemed difficult to find grade-level science and social studies materials in languages other than English. As Kathy stated, "I really feel like they should give us multi-language resources. Buy a textbook in Spanish if they have that..." (Kathy, Interview 1, December 13, 2017). Even James—who expressed doubts about using students' first language in teaching and learning situations—noted, "it's sad that they only have Spanish resources but not so much for other languages" (James, Interview 1, December 7, 2017).

Developing ELL students' content area vocabulary. All three teachers discussed the prevalent role vocabulary plays in their respective content areas (science and social studies) as well as the need to have all students, not just ELLs, know subject-specific vocabulary words in order to access academic content. In fact, the reason Jada gave for targeting science and social studies middle school teachers for participation in the SEI professional learning initiative was that, "there is a lot of academic vocabulary that you teach." James' comments to his class, which he shared with me, echoed Jada's thinking. As he told his students, "we have a lot of

complicated terms in 8th grade social studies.... Vocabulary is the foundation to what we are learning.... You have to learn what the words mean" (James, Interview 3, February 12, 2018). Linda similarly shared that, "vocabulary is a big one for me because of the struggle I've had with it...[even] my English speakers don't know the [science-related] vocabulary that I am teaching...we do have challenging vocabulary" (Linda, Interview 2, January 12, 2018).

Although vocabulary instruction may already have been a central part of the three focal teachers' instructional practice prior to their participation in the SEI initiative, learning the importance of explicitly teaching vocabulary to ELLs seemed to be a novel idea to them. This was illustrated by Linda's reaction to the packet of resources for vocabulary development that she and other SEI participants received during day 2:

I have used some of those things before [referring to the types of resources included in the packet, such as graphic organizers, charts, and sentence starters], but I never used them in this context [to teach academic vocabulary to ELLs]. (Linda, Interview 2, January 12, 2018)

In a similar vein, ideas introduced as part of the SEI initiative prompted James and Kathy to reflect on their own teaching of vocabulary. James admitted that the sessions led him to "reconsider how I teach vocabulary" (James, Interview 3, February 12, 2018), while Kathy realized she "needed to be more specific and particular about vocabulary [instruction]...I didn't realize how important that was...I wasn't aware of how I really should stress vocabulary more" (Kathy, Interview 2, January 12, 2018).

The teachers were all appreciative of the various instructional resources and strategies they were provided through the district's SEI initiative to teach vocabulary. As James expressed, "I feel the PD sessions have given me resources or activities to help with teaching vocabulary"

(James, Interview 3, February 12, 2018). Likewise, Linda underscored that, "the resources were all so helpful" (Linda, Interview 2, January 12, 2018). Kathy, too, found the resource packet valuable. I observed her using one of the graphic organizers presented on day 2, taken from a part of the session teachers explored ways of developing ELLs' content area vocabulary. Specifically, Kathy was using the Frayer model graphic organizer to help *all students* in her class grasp the meaning of the word *cede*. During my third interview with Kathy, I mentioned seeing her use the graphic organizer and inquired about it. She shared, "that was the first time I used it. I really enjoyed it. I would definitely use the graphic organizer again with vocab words, especially tough ones" (Linda, Interview 3, February 12, 2018).

In addition to finding the resources helpful, the teachers also reported using some of the vocabulary-related instructional strategies Gayle and Ann presented in the second SEI session. For example, before conducting my first observation with James, I noticed posters on a desk near me that looked like the *graffiti* activity the facilitators had used during the first SEI session for purposes of having teacher participants brainstorm different ideas and thoughts regarding the word "culture." Scrawled across the posters were terms and illustrations related to the word *speech*. I asked James about it, and he told me he had used the graffiti activity to have students in his class brainstorm ideas that came to their minds when they thought about the word *speech*. James added that this activity was part of his introduction to the Bill of Rights and freedom of speech concepts. Additionally, James reported using the building background knowledge activity, which Gayle had modeled for SEI participants in day 2, to teach his class about the Bill of Rights and freedom of speech:

I asked them to give me an illustration that goes along with this word [speech] so you can show me that you know what we are talking about...You have to understand those concepts [referring to Bill of Rights and freedom of speech] because they are complex ideas. So, I think being able to illustrate these concepts to learn more about the Bill of Rights, that was helpful from that particular PD. (James, Interview 2, January 12, 2018)

Linda seemed to gain a new awareness of different types of strategies she could use to teach science-related vocabulary. As she reported, "doing vocabulary each unit [which is something she does regularly] is already helpful, since I already have to teach it [as part of]...my curriculum. Now, I just change how I do it" (Linda, Interview 2, January 12, 2018). Later in the interview, Linda clarified what she meant by this:

The explicit [instruction of] vocabulary is probably the one [practice] that I have implemented most, [although] in a very minor way, I guess. When I set them [students in class] off to do a WebQuest or do a reading, I'll make sure to stop by [Dwede]...If I know there is a word she won't understand—like right now we are doing rocks, sedimentary rocks—I [am] explicit about defining and explaining that word to her. (Linda, Interview 2, January 12, 2018)

Just as James had mentioned that the graffiti activity had been helpful to him, Linda found one of the strategies Ann modeled during the El Perrito Bombero lesson helped her realize how powerful visuals can be in teaching vocabulary. As she explained:

We were given tools to help us [during the El Perrito Bombero lesson]. Putting vocabulary [referring to key terms from the assigned Spanish language reading] on the board and we have a picture here [referring to how Gayle modeled the activity by first showing key words in the reading selection with pictures to facilitate their understanding of the Spanish language text]. This really helps, and now I can answer the questions [referring to the comprehension questions the SEI participants had to answer based on the

El Perrito Bombero reading]. The success I felt was like okay, now I know what to do to help my own students to feel successful. (Linda, Interview 2, January 12, 2018)

I found it very interesting that the teachers' self-reported attempts to apply what they had learned from the SEI initiative about developing ELLs' content-specific vocabulary were mostly examples involving whole class instruction, not just teaching ELLs. Thus, the SEI initiative may have changed, at least to some extent, the teachers' general approach to teaching vocabulary in their respective content areas. The appropriation of SEI practices for teaching vocabulary to the entire class could be explained by the makeup of science and social studies classes at Livemore School district. As previously discussed, classes in these two content areas include students with a wide range of academic and language skills. It is possible that the focal teachers found SEI practices, which were presented to them in the context of teaching ELLs, would be productive in classes with English proficient students reflecting a wide range of academic skills, but particularly those students who were struggling with the demanding academic vocabulary in science and social studies. I return to this topic later in the chapter.

In brief, the three focal teachers indicated that vocabulary instruction was something they already did with all students in their classes since it was a fundamental component of teaching their content areas. They reported getting useful instructional resources and strategies to develop students' content-specific vocabulary from the SEI sessions, some of which the SEI facilitators had actually modeled in the SEI professional learning sessions. The teachers also reported several attempts to provide explicit vocabulary instruction to all students, not just ELLs, a few of which I got a glimpse of during my observations in their classrooms. Thus, my classroom observation data lends some support to the teachers' self-reported use of SEI practices in their teaching.

Scaffolding instruction to make content comprehensible. As presented in the Livemore School District's SEI professional learning initiative, scaffolding instruction for ELLs is a strategy that allows teachers to keep the cognitive demands of instruction high by providing the students some type of language support to help them access that content, that is, to make it comprehensible to them. Scaffolding was presented as a broad strategy that included the use of instructional modifications, supplemental material, and language supports. Given the overlapping nature of the different types of scaffolding the facilitators presented, in this section I will discuss the strategies the three focal teachers reported using to give ELLs to make content comprehensible.

In my interviews with James, he offered a few examples of strategies he had used to help Andriy and Lindaly gain access to the academic content of his social studies lessons and to help them complete assigned learning tasks. For instance, he mentioned using sentence starters to support his two ELL students complete an essay assignment in which they had to explain how the U.S. Constitution guards against tyranny. The assignment asked the students to focus on four concepts (federalism, separation of powers, checks and balances, and large states vs small states), explain how each helped to guard against tyranny, and provide evidence to support their explanations. James described this scaffolding work as follows:

I sat with each ESL student individually. I said let's focus on one paragraph and let's talk about how these four main ideas [federalism, separation of powers, checks and balances, large states vs small states] are important. Just give me like one detail [for each idea]. I wrote the question down [How does the constitution guards against tyranny?]...and had them answer it. Then, I told them to put that [federalism helps to guard against tyranny

by....Separation of powers is set-up to guard against tyranny by...] into an essay...I scaffolded the lesson for them. (James, Interview 3, February 12, 2018)

Although I observed this lesson, I was unable to see what Andriy and Lindaly wrote for each of the four concepts. During my second observation in this class, all students—including Andriy and Lindaly—placed their written explanations for how each of the four concepts central to the assignment guarded against tyranny. All the explanations were placed into four buckets, and were then randomly selected and read by students. For example, one of the explanations was that "federalism guards against tyranny by sharing the power between the central and state government" (James, Observation 2, January 19, 2018). In my third interview with James, he commented that both Andriy and Lindaly had been successful in completing an essay assignment.

Giving students, in advance, notes for a PowerPoint presentation was a strategy that both Linda and Kathy used. However, they each approached their use of this scaffold differently. I observed Linda giving Dwede, the ELL student the class, her lecture notes and a copy of the PowerPoint presentation that she subsequently used in a lesson to help the student follow along with her presentation while taking notes. Linda explained her reasoning for providing Dwede this type of support as follows:

I recognized that notetaking would be difficult for her, especially transferring [ideas] from the board to her paper. She...still took notes but it's from the paper [referring to the presentation notes Linda had given the student] to her paper, as opposed to having to look up [to the projected PowerPoint slide] and down [to her paper]. If she...falls behind, no one would [notice] because she has a paper right next to her and she can keep going. (Linda, Interview 3, February 12, 2018)

From where I was sitting that day, Linda's scaffolding strategy seemed to help Dwede follow Linda's presentation, and prompt her with respect to what notes to take from it. Only at one point did I see Dwede check the notes Linda had previously given her, seemingly searching for the information she might have missed from the previous PowerPoint slide.

Using a related but somewhat different approach, Kathy reported giving *all students in the class* "open notes [for a PowerPoint presentation she used] because many of the kids can't listen and take notes at the same time, or at least not yet as 8th graders" (Kathy, Interview 3, February 12, 2018). Since I observed the lesson in which this took place, I noticed that the notes Kathy had given the students were taken directly from the PowerPoint slides she used to teach the class about Washington's presidency, and the state of the nation's finances after the Revolutionary War. The sentence notes had blank spaces for key words or phrases, which the students were expected to fill-in as Kathy moved along with her presentation. Although Kathy indicated that using this type of scaffolding was part of her typical teaching repertoire, she nevertheless added that participating in the district's SEI sessions had helped her adapt how she organized her PowerPoint presentations and notes:

It [referring to the SEI initiative] made me rethink how to use visuals in my PowerPoint presentations with the notes. I used to place visuals, but they were just pictures on my slides. Now, I make a point to show examples in my pictures, and draw attention to the pictures, and [include] more graphs. For example, we did tariffs one day. To show the importance of tariffs, I [used] a visual with arrows illustrating goods coming into one country, and taxes and dollar signs on the arrows to show the flow and connection between goods and tariffs. I was trying to break down the concept of tariffs in picture form through the presentation of the notes. (Kathy, Interview 3, February 12, 2018)

Thus, while Linda offered Dwede individualized support to enable her to successfully complete the same task all the other students in the class were expected to do (taking notes from a PowerPoint presentation), Kathy gave careful attention to the visual input on the slides in order to make the same academic content comprehensible to all students.

Linda felt that as a science teacher she had an advantage when it came to making content comprehensible to ELLs because her teaching typically included a variety of input (e.g., manipulatives, hands-on activities, demonstrations, visuals, and group work). Nevertheless, participating in the district's SEI initiative gave her ideas for other strategies she could use to offer ELLs *language supports*. Using the example of her labs to make this point, Linda stated:

The labs are a physical representation of things, where we make models of things. We do hands-on activities that...bring props in automatically...*But now* [after participating in the SEI sessions], I put labels on everything [in the labs], or maybe I give my ELL students a little background paragraph in their native language before they come in to do the lab. (Linda, Interview 2, January 12, 2018)

This scaffolding example again shows Linda was not just concerned with using multiple forms of input (e.g., manipulatives, hands-on activities, demonstrations, visuals, and group work) to support the learning of all her students but was also committed to taking into account Dwede's particular language needs as she planned and enacted science lessons.

Another strategy Linda reported using to give Dwede access to academic content was to adapt the content of her lessons by reducing the vocabulary load for this learner. The next example illustrates this scaffolding strategy:

We do the layers of the Earth, and I have [the students] break down the mantle into the six layers. For [Dwede]...instead of getting her to get every single layer, I had her focus

on the four main ones. She did the four main layers first and created a model, while everyone else focused on the six layers. [This] lessened the amount of content [and] the amount of vocabulary involved...and just focused on the big picture...the overview of the layers of the Earth. Let's look at the [big] idea. I wanted her to get that the Earth is broken...into layers, and these are the main layers and [how] they are different...So, she was able to get what the layers are made out of and [their] importance to us. (Linda, Interview 2, January 12, 2018)

This example is consistent with Gayle's suggestion that one way to adapt instruction for ELL students, without reducing the academic rigor of a lesson, is to cut down on academic content to lessen the language demands for the students, while keeping them focused on broad academic goals.

Linda also described how she adapted the directions for a WebQuest assignment to allow Dwede to complete the required work independently, just as other students in the class were expected to do. In this example, Dwede received the same handout as her peers but it included two important adaptations. First, Linda provided the synonym "compacted" above the word "compressed." When I asked Linda why she had included a synonym in the handout, she responded:

In class we had used one of the words and not the other. So, I put the synonym on top of it so that she would know that they mean the same thing. This [the word "compressed"] is what we had talked about in class. (Linda, Interview 3, February 12, 2018)

The second adaptation entailed labeling the websites on Dwede's handout for each corresponding question so that she would know exactly where to go to find the answers, while other students were just given a list of different websites to visit from which they could find

information to complete the WebQuest's questions. Linda explained her reasoning for these adaptations as follows:

When I thought about the lesson, I thought about what I wanted her to get out of it. Do I want her to get the information [to answer the WebQuest questions]? Do I want her to get the idea of researching? I decided to put researching by the wayside, even though that was my goal for the rest of the class. For [Dwede] specifically, I wanted her to get the content. (Linda, Interview 3, February 12, 2018)

The two examples presented immediately above signals that Linda had developed a reasoned way of adapting instruction for ELL students (in both cases for Dwede) to make the academic content of lessons accessible and comprehensible to them.

James and Kathy also identified different ways they had adapted assessments to meet the needs of their ELL students. James described one of his attempts at adapting assessments as follows:

I gave a test today and I shortened it for my ELL students. I only had them do the words and the ideas that were...the 'meat and potatoes' of what we were learning about...I cut down their assessments...to focus on the main ideas. (James, Interview 3, February 12, 2018)

James also reported using an alternative assessment approach with Andriy and Lindaly. He described this particular assessment as follows:

I told them, let's focus on what is important for you, and that's vocabulary and basic background knowledge....So, instead of taking a long test and writing an essay, I want you to make flashcards with pictures and the meanings behind these words. So, I differentiated their test. (James, Interview 1, December 7, 2017)

Concerned that Rose-Merline's ELP level would keep her from completing a Google slides presentation project satisfactorily, Kathy adapted the assessed task to make it more closely aligned with the student's English language proficiency. She explained the adaptation of this assessment as follows:

I took the more technical [part of the project] out for her...the National Bank and the loose vs strict interpretation of the constitution. I omitted that for her because you need...strong vocabulary and language to get that. I told her not to worry about it, but I gave her the normal instructions, [but told her not to do those two parts]. (Kathy, Interview 3, February 12, 2018)

Using yet another assessment modification strategy, one inspired by what she had learned about the importance of leveraging ELL students' native language in their education, Kathy decided to give Rose-Merline a copy of a test in both English and French prior to the administration of the test. In my second interview with Kathy, she explained how this assessment adaptation strategy worked:

I put the test in French and in English. She studied in English, but if she needed clarification, she could refer to the French test too. She wanted both, and she studied in English, but she liked looking at both if there was a word she missed [in the English version of the test]. (Kathy, Interview 2, January 12, 2018)

To summarize, my data suggest that scaffolding was a practice the three focal teachers were familiar with prior to attending the SEI professional learning sessions. This familiarity may have facilitated the application of a variety of scaffolding strategies examined (and modeled) in the SEI sessions into the three focal teachers' instructional practices. Although I did not directly collect data on the language needs of the ELL students taught by the three focal teachers, which

would be needed to determine the appropriateness of the various strategies the teachers reported using (some of which I observed) to "shelter" academic content instruction for those students, the reasoned ways in which Linda and Kathy (to a lesser extent) explained some of their scaffolding choices suggests that they learned much about this practice in their SEI sessions. The teachers' self-reported use of scaffolding strategies also receives some support from my classroom observation data. While James reported using several scaffolding strategies, some of which I observed, he seemed less conversant than Linda and Kathy about his reasoning for using those strategies.

Strategies that benefit ELLs are good for all students. The idea that strategies that benefit ELL students are good for all students was raised on different occasions throughout the three SEI sessions. Gayle and Ann noted that many of the SEI instructional strategies or activities may already be familiar to the participants, and perhaps they had previously used some of the strategies with their ELLs or with their English-speaking students. The facilitators also noted that many of the strategies used to shelter content instruction for ELLs were just good teaching practices that benefit all students, especially those who struggle academically. As Gayle stated:

I think some of what we are presenting to you is familiar because you probably already use it but didn't know it was also helpful to your ELL students. I think that is why some of these strategies are just good strategies to use in your classes because they help everyone. (SEI Observation 1, November 15, 2017)

In sync with the above comment by Gayle, Jada also emphasized the across the board benefits of the SEI strategies during my interview with her when she said, "these are best practices not only for our students [referring to ESL students] but really for all students" (Jada Interview, November 29, 2017).

Linda referenced the benefits of SEI practices for all students as she reflected on how her participation in the district's professional learning initiative changed her practice:

It has changed it [referring to her teaching practice]. Mostly in my awareness. In my awareness beyond my ELL students. This was discussed during the PD sessions where some of the things we [studied] were beneficial to all students who are struggling. (Linda, Interview 2, January 12, 2018).

Linda also discussed the usefulness of the teaching strategies and material resources explored in the SEI session for English-speaking students, particularly those who are struggling:

I also think that some of these tools could be used for more than just ELLs...[They] would be beneficial across the board. To have some of these strategies especially if they [referring to teachers] are struggling with a student, and don't know how to help them learn...this is another way. (Linda, Interview 2, January 12, 2018)

In selecting instructional strategies for use in their teaching, all three focal teachers seemed to prioritize, either in words or in practice, those strategies they deemed beneficial to all students. James, for example, expressed that he selected strategies "based on whatever works and fits into my lesson... If I can come up with something that everybody can benefit from, great" (James, Interview 3, February 12, 2018). Although I observed James differentiating instruction for Andriy and Lindaly, he generally focused his teaching on the whole class. Even when using strategies and resources from the packets distributed in the SEI initiative, he reported using them with all students in the class, not just ELLs.

In one of the interviews I had with Linda, she was explicit about why she prioritized instructional strategies that she considered beneficial for all students:

If there is something that can benefit my whole group of students but also makes for less planning, I am going to use it. If there is something beneficial to every student, then I am going to give it to every student...Not saying that I always do...sometimes it just makes it easier. (Linda, Interview 3, February 12, 2018)

The need to make her work as a teacher "easier," possibly by reducing the time needed to differentiate instruction for students in her class (which seems implied in the quote), is likely related to the wide range in student ability in the classes Linda teaches. Planning instruction that addresses the learning needs of students with widely different academic and language skills is time-consuming. And as Linda informed in an interview, "I only have one prep period" (Linda, Interview 2, 2018). Yet, despite the stress she feels on her time, Linda probably planned and implemented more individualized language supports for her ELL student, as discussed above, than James and Kathy had.

Although Kathy reported using a couple of strategies to shelter instruction for Rose-Merline, particularly doing Google translations of teaching and test materials, she seemed most interested in using the strategies and tools explored during the SEI sessions with the entire class. In fact, Kathy created a binder, where she put all the resources and materials from the three SEI sessions. She shared, "I keep my binder at home so when I do my lessons I check it to see if there is something [in the binder] I can use" (Kathy, Interview 3, February 12, 2018). Later in the same interview, Kathy again mentioned that she would "use the resources for any class, at any level, because it is just so useful. Like who wouldn't benefit from graphic organizers. I am definitely inclined to incorporate [all the resources in her binder] into my everyday teaching"

(Kathy, Interview 3, February 12, 2018). I observed Kathy using the "thumbs up, thumbs down" activity that Gayle and Ann used in the initial SEI session with her entire class. Kathy also shared that she had already used the opinion activity (modeled during the second SEI session) as an introductory lesson on the challenges the framers of the U.S. Constitution faced when having to agree on a form of government.

For Kathy and James, the strategies and resources used in the SEI initiative to develop ELLs' academic vocabulary were most applicable for all their students. Kathy expressed this idea as follows:

Vocabulary is the base of everything and vocabulary was stressed [during the SEI sessions]. If [students] understand [vocabulary], then they can build [their] knowledge base from there. I would use those techniques without ELLs in my class...I think the vocabulary stuff is huge and it works for everyone...it benefits them all. (Kathy, Interview 3, February 12, 2018)

Along related lines, James' interest, in using with his whole class, what he picked up from the SEI sessions about the development of vocabulary was expressed as follows:

We have a lot of complicated terms in 8th grade social studies. Instead of saying, read this, you should know what these terms mean...I like to have students figure out what those terms mean. Let's draw it, let's act it out, let's do something that can help these words make sense to you. (James, Interview 2, January 12, 2018)

James appropriation of tools from the SEI initiative for whole class instruction was similarly evident in his use of the 'building background knowledge' activity that had been modeled in one of the SEI sessions, to introduce the concepts of Bill of Rights and freedom of speech.

Discussion. As the data presented above suggest, the three teachers in my study appeared to have learned much about sheltered English instructional practices through their participation in Livemore School District's SEI professional learning initiative. My analysis also shows that the teachers used some of those practices in their teaching. To begin with, although all three teachers reported using ELLs' native language in the classroom prior to their participation in the district's SEI sessions (e.g., having informal exchanges with the students, using a Spanish-English bilingual text as supplementary material for Spanish-speaking students, translating activity sheets and handouts into students' native language through Google Translate, allowing Spanish-speaking ELLs to complete worksheets in Spanish), hearing Gayle and Ann speak about the benefits of leveraging students' native language in the classroom validated the teachers' intuitive approach to teaching ELLs. Because language and thinking are closely related (Vygotsky, 1987), supporting ELL students' use of their native language helps them learn academic content (DaSilva Iddings & Rose, 2012). This idea is supported by the results of a comprehensive review of the research on instructional strategies for ELL students conducted by Protheroe (2011). Specifically, from the available evidence Protheroe concluded that the use of the students' native languages in school helps their ability to use and understand English.

Even though James encouraged his ELL students not to lose their native language as they learned English, and he willingly used Spanish in informal interactions with Spanish-speaking ELLs for purposes of building relationships with them, he struggled with the idea of using a language other than English for instruction, largely from fear that it would impede the students' ability to develop English language proficiency. While James did not mention the district's past immersion practices, as Kathy did, it is possible that this immersion perspective influenced his thinking. James is not unique in feeling conflicted about the role of a language other than

English in U.S. classrooms. The tension between teachers' personal beliefs about importance of bilingualism on one hand, and the integration of ELLs' native language into their teaching on the other, has been previously reported by Arellano-Houchin, Flamenco, Merlos, and Segura (2001), Escamilla, Chávez, and Vigil (2005), and Kibler and Roman (2013).

My data also show that the three focal teachers appeared very receptive to Gayle's and Ann's message regarding the importance of explicitly teaching ELL students' content area vocabulary, a tenet of sheltered English instruction (Echevarría & Vogt, 2010; Gottlieb, 2013). Additionally, they expressed much appreciation for the many instructional strategies modeled by the SEI facilitators (e.g., linking, bridging, modeling) and tools provided to support their teaching of subject-specific vocabulary (e.g., graphic organizers, sentence frames, word maps). In fact, ideas about vocabulary development seemed to be the major takeaway for two of the three teachers (James and Kathy), both teachers of social studies. Interestingly, while the discussion of ELLs' vocabulary development was part of a larger conversation about the need to include language objectives in every lesson, the idea of language objectives was generally resisted by the SEI participants (theme two discussion). Since including language objectives in lesson planning, along with content objectives, is the primary mechanism for integrating the teaching of language and content in the SEI model (Gottlieb, 2013; Markos & Himmel, 2016; Short et al., 2012), the overall negative reaction this portion of the SEI initiative elicited from the participants combined with the difficulty the participants appeared to have with language objectives in the initial session, raises questions about the depth of the focal teachers' understanding of sheltered English instruction and their ability to faithfully implement SEI strategies into their teaching. Regardless, all three teachers found the strategies and tools for vocabulary teaching useful not only for ELLs, but for all of their students, especially those in

need of building their knowledge of subject-specific vocabulary as a foundation for learning academic content. I also documented multiple instances (some described by teacher in their interviews and/or others captured in my classroom observations) in which the focal teachers explicitly taught content-specific vocabulary with the use of resources and tools taken from the SEI initiative. For the most part, these instances involved the entire class, not individual ELL students.

The three focal teachers also seemed to be drawn to the many scaffolding strategies presented in the SEI sessions. Advocates for sheltered English instruction view scaffolding as a primary strategy for lowering the language demands of content area instruction in order to help make content taught in English comprehensible to ELLs (Bunch, Kibler, & Pimentel, 2012; Krashen, 1981; Short et al., 2011). While the teachers reported having familiarity with the use of scaffolding in teaching prior to their participation in the SEI initiative, they nevertheless appreciated the SEI facilitators modeling a variety of scaffolding strategies to teach them (the participants) about sheltered English instruction. Perhaps, experiencing different scaffolds as students themselves while learning about SEI, and in some cases reflecting on those experiences and discussing them from the teacher perspective, helped the focal teachers develop a clearer understanding of the use of scaffolds in teaching and their value. Certainly, the Mandarin lesson and the El Perrito Bombero language immersion experience, which all three teachers mentioned in my interviews with them, jolted the teachers into realizing the importance of using language scaffolds to give ELLs access to academic content taught in English. Research confirms the powerful influence that language immersion experiences tend to have on teachers' thinking about ELLs and how to teach them (Galguera, 2011; Settlage et al., 2014; Zhang & Stephens, 2011).

The three teachers enthusiastically commented on the resource packets the SEI facilitators had shared with them, which included numerous scaffolding tools for their use in teaching. And just as the teachers found the ideas for teaching ELLs content vocabulary to be beneficial for all students, not just ELLs, they also emphasized that the scaffolding tools were valuable for the entire class. My data confirmed this last point. It includes a number of instances in which the three focal teachers reported using a particular scaffolding strategy or tool, most of which I also captured in my classroom observations.

The view that strategies and tools that were presented in the district's SEI sessions as supports in teaching ELLs subject-specific vocabulary and academic concepts, shared to different degrees by my three study participants, requires unpacking. On the one hand, the idea that everyone benefits from graphic organizers so why not use them with the whole class, best expressed by Kathy, is intuitively appealing. The scaffolding is a compelling strategy and the three teachers, who have been teaching for six to eleven years, have probably experienced success with the use of scaffolding tools. They reported having limited time and being stretched trying to meet the needs of students with a wide range of academic abilities in the classes they teach. However, one major problem with the perspective that a particular scaffolding strategy can be used with all students in the class is that it can ultimately give teachers an excuse for not differentiating instruction for ELLs (or any other groups of students for that matter) based on their particular learning needs since "just good teaching" is believed to work "for all students" (deJong & Harper, 2005). Unfortunately, the one-size-fits-all approach to teaching, even when good practices are involved, will not consistently address the particular language and academic needs of individual ELL students. To put it in James words, some students "kind of fall through the cracks" (James, Interview 2, January 12, 2018).

Another problem with this holistic way of thinking about scaffolding is that it ignores the thinking process teachers must engage in when selecting scaffolds that will meet the language and content needs of particular ELL students in their classes. That is, scaffolding becomes one more thing to add to the "bag of tricks" teachers like to have. To plan for scaffolding instruction for ELLs, as conceptualized within the SEI model, teachers need to know their students' English language proficiency in the domains of listening, speaking, reading, and writing (Gottlieb, 2013; Himmel, Short, Richards-Tutor & Echevarría, 2009); be able to identify the language demands embedded in the learning tasks and written materials to be used in a lesson (DaSilva Iddings & Rose, 2012; Short & Echevarría, 2006); and be skilled at developing objectives that promote language and content learning (Markos & Himmel, 2016). I suspect that to integrate into their teaching the approach to scaffolding promoted by advocates of sheltered English instruction, the three focal teachers will need follow up professional learning opportunities. While the three sessions documented in this study offered the teachers a foundation for thinking about how to teach ELLs in their classes—something that was most evident in Linda's work with Dwede they still need more professional support to help them make sheltered English instructional practices an integral part of their teaching.

Without question, the professional learning opportunities described above as part of theme three were highly engaging and well received by the three focal teachers, as my interview data show. The SEI facilitators used a participatory approach with hands-on activities to demonstrate the practices they wanted the teachers to learn. Referring to these types of activities, James commented, "I liked how they modeled the activities for us and we took part in them. We experienced the activities like our students will. That was very helpful" (James, Interview 2, January 12, 2018). Echoing this sentiment, Kathy commented:

I liked the specific activities that drew my attention to the issues that ESL learners have. Like when we did the one where they [referring to Gayle and Ann] gave us the word bank of the numbers. It was like how many word groups are in the English language [referring to the day 2 handout titled *Why is vocabulary important*?]. The ones that really brought awareness to what they [ELLs] have to deal with. You know, put us in their shoes so we could better understand how to teach them. (Kathy, Interview 2, January 12, 2018)

The three teachers also commented favorably on the opportunities they were given to discuss ideas in groups. For example, James mentioned that, "there are things I took with me from those workshops...because we were able to work in groups and ...discuss things. They stuck with me" (James, Interview 2, January 12, 2018). The teachers also appreciated the relevance of ideas introduced in the SEI sessions to their daily lives in classrooms, and Kathy highlighted the variety of activities as very engaging. As she put it, the sessions "had PowerPoints, there were videos, there was group work and independent work, there was artwork on the post-its. They [referring to the two facilitators] really did a good job" (Linda, Interview 2, January 12, 2018). In short, these learning opportunities reflected salient characteristics or features of successful professional learning described in the research literature (Banilower et al., 2007; Borko et al., 2010; Darling-Hammond et al., 2017; Desimone, 2009; Desimone et al., 2002; Garet et al. 2001; Ingvarson et al., 2005; Penuel et al., 2007; Soine & Lumpe, 2014).

Finally, my analysis revealed that elements or factors from the different systems that make up the broader teacher learning system interacted with one another in complex ways to both facilitate what the three focal teachers seemed to learn from their participation in Livemore School District's SEI professional learning initiative and their attempts at using SEI strategies in

their classrooms. From a facilitating perspective, the SEI professional learning system itself was probably the most influential. As I discussed above, the learning opportunities were expertly designed to engage the teachers in learning about how to teach subject specific vocabulary to ELL students and how to scaffold student learning to make academic content taught in English comprehensible to them. The teachers' overall professional learning might have been stronger, if in discussions of scaffolding, more attention had been given to the thinking process that enables teachers to connect scaffolds with ELL students' particular language learning needs.

Two elements in the district level system, one of these being an apparent shift in district "thinking" regarding the use of ELLs' first language, from that of immersing students in English to that of seeing their home language as an asset to learning. This shift in perspective was brought to my attention by Kathy, a veteran teacher in Livemore School District. Throughout the three-days of professional learning, the facilitators emphasized that a student's native language was a resource and should be leveraged by teachers to support his or her learning. This view of students' native language is consistent with the principles that inform the SEI model.

Another district element that surfaced in my analysis has to do with how social studies and science classes are configured. Specifically, science and social studies classes are purposely configured to reflect a wide variation in students' academic abilities. All three teachers commented on the challenge involved in teaching classes with a mix of student abilities. As such, the teachers were already using some differentiation in their teaching. The SEI professional learning they experienced added one more factor—language—for them to consider in their planning and delivery of instruction. And while the teachers seemed truly committed to their ELL students, they did not welcome the thought of having to add one more thing to think about in their teaching. Of the three teachers, James was the most expressive of the time

commitment that he believed would be required to systematically plan for and teach to ELL students' language needs. For example, in discussing potential barriers to the implementation of SEI practices during his second interview, James shared:

Teachers want to do it, but they need to go *above and beyond* to make sure it gets done. I feel like sometimes we get bogged down with everything else we have to do that we all lump the students together...It's just the way things go sometimes. (James, Interview 2, January 12, 2018)

At another point in the same interview, James candidly admitted, "I'm happy about what I got out of that particular workshop, but in terms of my ELL students, I've been trying to implement some of the practices, but sometimes it just keeps slipping my mind" (James, Interview 2, January 12, 2018).

Along similar lines, Linda identified "lack of time" as the most pressing barrier to the systematic implementation of SEI strategies in her teaching since she has multiple demands on it, one of which is the responsibility she feels as a member of the district's committee responsible for revising the science curriculum to align with the new standards. As she explained:

I think time is going to be the biggest factor that is going to hinder getting all this done [referring to the work of sheltering instruction for ELLs]....I have a 40-minute prep period every day. That's it. Just finding the time to implement all of these ideas. (Linda, Interview 2, January 12, 2018)

James' and Linda's comments, above, help explain why the idea of adding language objectives to lesson plans was resisted by the participants in the SEI initiative. Similarly, the pressure of time the teachers feel might also play a role in the teachers' view that SEI strategies and tools are good for all students, not just ELLs.

A few elements at the individual teacher level might also influence the use of SEI strategies in the three teachers' classrooms. The experience of teaching students with disabilities was likely a factor that facilitated their understanding of the use of instructional differentiation to address individual students' learning needs and scaffolding student learning. Linda also hypothesized that as a science teacher who relies largely on hands-on activities, cooperative group work, a lot of visuals, and labs, she has an advantage teaching ELLs. Linda also reported willingness to seek out resources and other supports for her ELL students. This willingness to seek out information might explain why of the three teachers Linda was the only one to reach out to the ESL teacher to obtain Dwede's ELP levels and other background information, both of which Linda considered necessary to offer more effective instruction for her.

In brief, the conditions for teacher learning and change at Livemore School District, as related to teaching ELLs, involve interactions between and among different elements at the different levels of the broader teacher learning system, creating some support (e.g., engaging learning opportunities, an assets view of students' native language, caring teachers who expressed a commitment to teaching ELLs, experience differentiating instruction and scaffolding learning for students with disabilities, being a science teacher, willingness to reach out for support) as well as constrains (e.g., district policy of configuring science and social studies classes to include a mix of students with a wide range of ability levels, and the pull on teachers' time). Thus, teacher learning and change does not follow a linear path (from features of professional development to teacher learning and change). It emerges from conditions that reflect non-linear dynamics.

CHAPTER SIX: CONCLUSION

In this study, I set out to learn what teachers learned from professional learning opportunities provided to them and what system-based factors shaped, supported, encouraged or hindered their use of ideas gained from those professional learning experiences, if any, in their teaching. To this goal, I conducted a small, basic qualitative study to explore the experiences of three middle school, content area teachers (two social studies and one science) as they participated in their district's professional learning initiative on sheltered English instruction (SEI) designed to prepare them to use SEI strategies to teach ELL students in their classes. My research was guided by the following question: What did three mainstream teachers seem to gain from professional learning opportunities focused on sheltered English instruction, and how did those insights appear to play out in their practice?

To answer my research question, I collected and analyzed data from interviews (with the three focal teachers, the district's Bilingual/ESL supervisor, and the two district SEI professional learning facilitators), from observations (of the three full-day SEI professional learning sessions and of the teachers while teaching), and from documents used during the observed events (e.g., SEI handouts and PowerPoint presentations, lesson plans, handouts distributed to students during lessons observed). To provide background for the study, I also reviewed public documents reporting information about state and school district policies, programs for ELL students, and relevant demographic and other statistics. In this chapter, I summarize the study's key findings, highlight the main contributions the study makes, and offer recommendations for research and practice.

Central Ideas

In this section, I will highlight four central ideas, which collectively address my research question. First, the three focal teachers reported gaining increased awareness of and empathy for the experiences of ELLs in English-only instructional contexts. The teachers entered the SEI initiative already sensitive to the tension and anxiety ELL students tend to feel when taught academic content in a language unfamiliar to them. Watching a video about an ELL student's struggles in a U.S. school, and being placed in the role of student to learn academic content in a language other than English as part of the SEI initiative, deepened the focal teachers' awareness of how ELL students in their classes must feel, and strengthened their empathy toward them. This awareness is important because it challenges the assumption, held by many teachers (see studies by Galguera, 2011; Hutchinson, 2013; Lucas et al., 2015; Pappamihiel, 2007; Polat, 2010; Reeves, 2006; Settlage et al., 2014; Walker et al., 2004; Walker-Dalhouse et al., 2009; Wright-Maley & Green, 2015; Zhang & Pelltari, 2014), that ELL students' reluctance to participate in classroom activities in mainstream classrooms reflects a lack of effort or interest in school learning. This insight seemed particularly helpful to Linda, who came to understand that what might appear as students' lack of trying at first glance, could actually be a manifestation of their emotional state within the classroom situation. Beyond this, personally experiencing a lesson in a language other than English, first without scaffolds and then with scaffolds, has been shown to motivate mainstream teachers to change their teaching practices and find ways to help ELL students gain access to academic content taught in English, as Gayle aptly pointed out in an interview, and researchers like Galguera (2011), Settlage et al. (2014), and Zhang and Pelltari (2014) have confirmed. The experience of being placed in the student's role in the SEI professional learning sessions provided teachers some insight into what their ELL students

experience in English-only class settings, and also model for them the type of instructional strategies that are helpful to engage ELL students and support their learning. Teachers, thus motivated, are more likely to be open to learning about new practices. This seemed to have been the case with respect to Linda, who of the three focal teachers was able to articulate best what she learned from the SEI sessions and use those strategies in her teaching.

Another central idea emerging from this study is that the teachers varied somewhat regarding the practical importance they gave to learning about their particular ELL students' English language proficiency levels for instructional planning purposes. Regarding ELL students' English language proficiency (ELP) levels, Livemore School District's SEI professional learning initiative had several related teacher learning objectives. First, the presenters aimed to get participants to understand that knowing an ELL student's ELP levels for the domains of listening, speaking, reading, and writing was much more useful for instructional planning purposes than just knowing the student's overall English language proficiency level. This is because students with identical ELP level composite scores could have very different language needs, as indicated by their specific proficiency level for each language domain. To promote this idea, the SEI facilitators first helped the participants use the WIDA Can Do descriptors to interpret a fictitious student's ELP level for each of the four language domains, thereby making the student's particular English language profile evident to the teachers. Then, they asked the participants to compare the language profiles of three fictitious ELL students who had the same ELP level composite score and asked them to identify the specific language needs of each learner based on his or her particular profile. A related objective was to teach the participants how to develop and use language objectives in lesson plans, based on their ELL students' language needs. Ultimately, this sequence of professional learning activities aimed to

have participants use information about their ELL students' ELP levels in planning instruction for them. To help the teachers access this information, the facilitators encouraged them to ask the ESL teacher assigned to their respective schools for it. As detailed in the previous chapter, of the three teachers in my study, only Linda actually sought and obtained her ELL student's (Dwede's) ELP levels, along with other background information about her. Linda's initiative to seek out this information helps explain why her explanations of Dwede's linguistic and academic needs were more detailed and nuanced, compared to the more general impressions James and Kathy shared about their own ELL students' needs. According to proponents of sheltered English instruction, good teaching for ELLs begins with a clear understanding of the students' English language proficiency in the four language domains (Echevarría et al., 2011; Echevarría et al., 2004; Echevarría & Vogt, 2010; Gottlieb, 2013; Himmel et al., 2009; Markos & Himmel, 2016; Short et al., 2011; Short et al., 2012). In keeping with this thinking, Linda seemed to be better positioned than James and Kathy to incorporate specific SEI practices in her teaching.

A third major idea, perhaps flowing from the above, is that the teachers varied somewhat in the approaches they seemingly took from the SEI initiative and used to scaffold instruction for ELL students. Although the three focal teachers reacted positively to the idea of using scaffolds to make academic content comprehensible to ELL students, they differed somewhat in how they approached this in their own classrooms. Linda used multiple forms of input (e.g., manipulatives, hands-on activities, demonstrations, visuals, group work) to support the learning of all of her students (including Dwede), a practice she largely attributed to the nature of science instruction, which she saw as lending itself to these extra-linguistics supports. At the same time, however, Linda also took Dwede's particular learning needs into account in her teaching. I documented multiple examples of Linda giving Dwede individualized supports of different types

to help her complete assignments independently (adapted assignment directions, giving her copies of lecture notes and PowerPoint presentation) and to gain access to academic content (e.g., reducing the vocabulary load of the learning task, giving her, in advance, a paragraph that outlined in accessible language the various lab activities). In contrast, although James and Kathy embraced and reported acting on the idea of modifying assessments for ELL students, in the teaching situations I observed, both tended to scaffold instruction for all students in the class in a uniform way. That is, all students received the same scaffold. As I discussed in the previous chapter, when teachers use a uniform approach to scaffolding learning for the entire class, the specific learning needs of ELL students are at risk of being overlooked (de Jong, 2013; de Jong & Harper, 2005; Lucas & Grinberg, 2008; Markos & Himmel, 2016; McIntyre et al., 2010).

Beyond the ideas concerning the particular teachers highlighted above, I also found that the learning opportunities in Livemore School District's SEI initiative, with a few exceptions, reflected the features emphasized in the literature as supportive of teacher learning. Specifically, the learning activities were *sustained over time* (including three full-day sessions over a period of nearly a month), involved *teachers working collaboratively in groups* in many session activities, were *focused on developing the participants' facility with SEI teaching practices* in the context of science and social studies teaching, *engaged teachers actively* with content, and were *relevant to the participants' daily lives* in classrooms (Banilower et al., 2007; Darling-Hammond et al., 2009; Desimone et al., 2002; Garet et al., 2001; Ingvarson et al. 2005; Penuel et al., 2007).

Perhaps even more important from the perspective of the three focal teachers were the many learning opportunities that engaged them in learning about an SEI strategy while also experiencing it as the students themselves would, thereby giving the teachers insight into those practices. This type of experiential professional learning has more recently been found to exert

substantial influence on teacher learning and change (Darling-Hammond et al., 2017). As Darling-Hammond and colleagues (2017) concluded from their recent review of research on professional learning, "modeling of instruction help[ed] teachers to have a vision of practice on which to anchor their own learning and growth" (p. 11). In the preparation of teachers to teach ELLs, language immersion experiences, one form of experiential teacher learning opportunity, has been increasingly used over the past decade with much success (see Bohon et al., 2017; de Oliveira, 2011; Turgut Dost, 2016; Galguera, 2011; Settlage et al., 2014; Wright-Maley & Green, 2015; Zhang & Pelttari, 2013).

Through my study I sought to answer, what three middle school mainstream teachers seemed to learn from a professional learning experience focused on sheltered English instruction, and how those insights appeared to play out in their practice. Based on my data analysis, teachers gained an awareness for and empathy towards their ELL students, which helped to provide an understanding to the importance of providing sheltered English instructional supports in their lessons. The teachers reported learning about English language proficiency levels but they varied in the use of ELL's English language proficiency levels for instructional planning purposes. Only Linda reached out to her ESL teacher to obtain this information and additional background information about her ELL student because she understood the importance of the English language proficiency levels as a necessary component to appropriately adapt and shelter instruction for her ELL student. All three teachers were appreciative of the variety of resources and shelter English instruction strategies that was presented and modeled for them. They in turn were able to use some of these strategies in their practice. While some of these strategies were not unfamiliar to them given their previous experience of using these strategies to support students with disabilities, they nonetheless varied in the application of those strategies in their

classes. James and Kathy were able to incorporate sheltered English instructional strategies in their teaching but this was done as instructional support for all of their students, not necessarily to address the specific needs of the particular ELL students in their classes. Instead, their use of some SEI strategies was in response to pressure on their time to meet the needs of students with a wide range of ability levels along with their belief that the sheltered English instructional strategies was "just good teaching" that benefit all students. While Linda also reported a belief that the sheltered English instructional strategies could benefit all students, especially those who struggled academically, she was able to articulate and provide scaffold support to meet the specific needs of the particular ELL student in her class based on the student's English language proficiency levels. That is, having obtained the English language proficiency levels for the four language domains for her ELL student, Linda was able to provide targeted instruction that scaffolded her ELL student's access to the academic content while supporting her English language development.

Contributions to the Field

One of the contributions my study makes to the field is that it helps address the paucity of research on professional learning for practicing mainstream teachers of ELLs. This work is needed given the recent convergence of three educational trends, which I discussed in Chapter 1—the rise of the ELL student population in U.S. elementary and secondary schools (Kena et al., 2016; Samson & Lesaux, 2015), the growing practice of placing ELL students for instruction in mainstream classrooms instead of bilingual programs (Echevarría et al., 2006; Harper & de Jong, 2009; Ovando, 2003), and the lack of preparation for teaching ELLs reported by the overwhelming majority of mainstream teachers (Ballantyne et al., 2008; Evans et al., 2005; Gándara et al., 2005; Lucas, 2011; Reeves, 2006; Samson & Collins, 2012). Although a number

of studies on the topic have been conducted to date, especially in the past eight years, Lucas and colleagues (2018) concluded from their recent review of the extant research that much more empirical work is needed to help guide practice. Since initial teacher education programs have only recently begun to prepare future mainstream teachers to teach ELLs, the responsibility of developing the capacity of the teaching force for today's linguistically diverse classrooms falls largely on school districts, who need support to do so (Gándara et al., 2005; Hopkins et al., 2015; Lucas & Villegas, 2013; Samson & Collins, 2012).

Existing studies on the preparation of mainstream teachers to teach ELLs generally focus on the influence of particular activities (student-centered and inquiry-based learning activities, increasing ELL student talk and participation, vocabulary instruction), processes (e.g., systemic functional linguistics); and programs or models (e.g., Cognitive Academic Language Learning Approach, Guided Language Acquisition Design, Sheltered Instruction Observation Protocol) on teacher learning and change, without examining the broader context that shapes teachers' lives and practices. Departing from this linear, cause-effect mindset, my study used a complexitythinking framework to examine teacher learning and the enactment of that learning as complex, non-linear, and emergent as processes involving interactions between and among multiple mechanisms or systems (Opfer & Pedder, 2011). No other study that I am aware of on preparing practicing teachers to teach ELLs takes this perspective. Noting the absence of a complexity perspective in the research on preparing teachers to teach ELLs, Lucas and colleagues (2018) specifically called for studies that take this perspective. Herein lies the unique contribution my study makes to the field. My study also contributes to the field's understanding of practicing teachers' professional learning and change more generally since only a handful of studies that

examine these processes for purposes other than learning to teach ELLs use a complexity perspective (e.g., Martin & Dismuke, 2017; Rahman et al., 2014).

Overall, I used five nested systems to investigate teacher learning and change. At the center was the teacher system and what each focal teacher brought to the SEI professional learning initiative, including their awareness that despite their best efforts, they were not reaching ELL students in ways that met their expectations. Although worded somewhat differently, "dissonance" (Wheatley, 2002) or "cognitive conflict" (Cobb, Wood, & Yackel, 1990) between what they expected of themselves as teachers and the insecurity they felt about teaching ELLs was what motivated all three teachers in my study to "volunteer" for participation in the SEI professional learning initiative. The teachers also entered the SEI initiative with beliefs about linguistic diversity and speakers of languages other than English, derived largely from their studies of Spanish, interactions and relationships with people who spoke languages other than English, and traveled outside the U.S. to countries where a language other than English was the norm, factors that may have helped them develop more favorable views of ELLs (Lucas et al., 2015; Rodela et al., 2019; Villegas et al., 2012). Additionally, the teachers brought prior teaching preparation and experiences (a lack of preparation for teaching ELLs, substantial teaching experience in general, and some experience and in-service professional preparation for teaching students with disabilities in particular), and the view of teaching and learning their professional preparation and experience supported. Yet another factor in the lives of the three teachers, one which proved to be particularly influential for James and Kathy, was their need to manage the stress associated with having multiple professional (and probably personal) demands on their time.

Elements in the teacher system, identified above, interacted with elements in the Livemore School District's SEI professional learning initiative, the second system in the overall system of teacher learning and change impinging on this study. Elements in the professional learning system included the nature of the learning opportunities engaged in by teachers, resource materials shared, and ideas promoted. To reiterate what I have already discussed, with few exceptions, the learning opportunities offered through the SEI initiative, exemplified features of professional learning associated with teacher learning and change-for-improvement (see Borko et al., 2010; Darling-Hammond et al., 2017; Garet et al., 2002; Yoon et al., 2007). That is, learning activities were sustained over time (approximately four weeks) and intensive (three all-day meetings, each packed with a variety of learning experiences and ideas); relevant to the teachers' everyday work in classrooms (strategies for teaching ELL students, which all the teachers needed and sought); involved collaborations between and among teachers, in small and large groups, in a variety of tasks; and the activities were multimodal and used an active-learning approach by which strategies promoted were modeled for the teachers. That is, the teachers were placed in the role of students to gain first-hand experience with those strategies (just as students would experience them), and then engaged in reflection on those experiences from a teacher's perspective. The teachers were also given a wide variety of resources for use in supporting their work with ELLs.

Generally, the teachers seemed receptive to the major ideas the facilitators of the SEI initiative promoted—the need to be aware of ELL students' experience in English-only instructional settings, openness to using ELL students' native language in the classroom, explicitly teaching content area vocabulary to ELLs, and scaffolding instruction to make content comprehensible to ELLs. However, the SEI participants (including the three teachers in my

study) expressed some resistance to the idea of including language objectives in their lesson plans. I contend that the thought of adding language objectives to their lesson plans was difficult for the teachers to embrace because they perceived that the added task would be just one more thing to add to the many other demands already pressing on their time. To put it in complexity language, the dissonance or tension the teachers experienced between the adoption of a new practice and the time pressure they already felt (an element in the teacher system) took them over "the edge of chaos" (Marion, 1999; Waldrop, 1992). Also adding to the teachers' apparent rejection of the language objective was a lack of clarity in the facilitators' presentation of what language objectives were, what to consider when writing them, and why they were important (an element in the professional learning system).

The school where the focal teachers taught was a third system in the overall teacher learning and change system. My data suggest that at least two of the focal teachers may have encountered difficulties obtaining their ELL students' ELP levels (an idea from the professional learning system) because of unsupportive conditions at their respective schools. Although the principals of each school had supported the teachers' participation in the SEI initiative by sharing with them the invitation Jada had sent out and agreeing to their being away from teaching for three full days (which involved getting substitute teachers to cover their classes), neither seemed to be involved with the initiative in any substantive way. Given their minimal involvement and apparent lack of understanding of the initiative, their lack of leadership in facilitating time for the focal teachers to meet with the ESL teacher is not surprising. Thus, while the principals provided the teachers access to the initiative, ongoing support for the teachers' SEI related work was missing. For James and Kathy, this lack of school system support became a major barrier to their obtaining their ELL students' ELP scores, as the SEI facilitators had suggested. I suspect

that the time pressure both James and Kathy experienced (a teacher level element) kept them from fully grasping the importance of language objectives for instructional planning purposes, and, by extension, the need to know their ELL students' ELP scores (professional learning system ideas or elements). Interestingly, Linda, who also had to contend with pressure on her time and lack of school support to meet with the ESL teacher, overcame these inhibiting factors by obtaining Dwede's ELP levels by email. I argue that she did so because knowing about her students and using those insights in teaching them, a perspective assumed in the process of obtaining National Board certification, which Linda was engaged in at the time, seemed important enough for her to overcome the personal- and school-based barriers to getting the information about her ELL student's ELP levels. That is, Linda's view of teaching and learning (a teacher element) prompted her to work around the time pressure (another teacher element) and the lack of school support (a school element) to meet with the ESL teacher. As this suggests, teacher learning and the enactment of practices emerge from the interactions of elements in the different systems comprising the overall teacher learning and change system (Davis & Sumara, 2006; Opfer & Pedder, 2011), and the way in which these dynamics come together will vary from one teacher to another (Clarke & Hollingsworth, 2002).

From my data analysis, the school district emerged as a fourth system influencing teacher learning and change. While more distant from teachers and their classrooms than the school system, two district level factors supported the teacher learning and change processes in this study. One of these was the district's hiring of Jada two years earlier. As the Bilingual/ESL supervisor, Jada used her leadership position to develop the district's capacity to teach ELLs by preparing mainstream teachers to use SEI strategies in their classrooms. In her first year, she requested and received substantial financial support to implement an SEI professional learning

program for 90 elementary school teachers in the district. In the year I collected data for this study, she targeted for preparation middle school science and social studies teachers. Ann, a veteran teacher in the district and long-term Livemore resident, praised Jada's work in one of my interviews with her as making a difference in the district. I suspect that without Jada, the district might not have engaged in such a broad professional learning effort. A second district-level factor—the shift in thinking within the district, as reported by Kathy, going from immersing ELLs totally in English to valuing and using their native language in schools and classrooms, also facilitated the teachers' use of languages other than English in their teaching, a tenet of sheltered English instruction.

Beyond Jada's hiring and the adoption of a more assets-oriented view of students' native language, two other district-level factors appeared to exert a negative influence on the teachers' transformation of their teaching along the lines promoted by the sheltered English instructional model. While the district's central administration seemed to have given Jada considerable space to improve the education of ELLs enrolled in its schools, as evident in the support she received to hire more ESL teachers and implement a large initiative to support mainstream teachers' teaching of ELLs, the extent to which school administrators were involved in planning those efforts is unclear. The difficulties James and Kathy reported in scheduling a meeting with the ESL teachers suggest that there was minimal coordination of district and school supports to ensure the success of the SEI professional learning initiative. Another constraining district-level factor, primarily from the perspectives of James and Kathy, is the district's policy to configure science and social studies middle school classes to include a wide range of student abilities. All three teachers, but especially James and Kathy, expressed concerns about this district practice and the pressure it placed on them to meet the varied needs of the students in their class with

limited time to plan appropriate instructional supports. Asking them to regularly consider the specific language skills of ELL students in their classes and plan individualized lesson adaptations for them would clearly add to their work load. It is not surprising then that Kathy and James seemed inclined to use the instructional resources the SEI facilitators had shared with them, which both found very valuable, in scaffolding learning for the entire class, not necessarily for the individual ELL students they taught. That is, they resolved the dissonance between the pre-existing pressure on their time (a teacher system element) and the work entailed in adapting instruction to meet the individual language needs of ELL students (an element of the professional learning system) by incorporating SEI materials into their teaching of all students rather than reconstructing their practice along the lines required by sheltered instruction.

Even farther from teachers and their classrooms are state policies related to the education of ELL students, the fifth system evident in my data. This broader system was a driving force behind Livemore School District's SEI professional learning initiative, although mostly indirectly through expectations placed on the district. The ESSA plan recently adopted by the Northeast State Department of Education placed increased pressure on schools and districts to provide appropriate services to help develop ELLs' English language skills, and meet established accountability measures and timelines. The plan gives schools/districts a maximum of five years from the date an ELL student is first enrolled to achieve the established English language proficiency score. According to the plan, schools or districts that fail to meet academic and language proficiency growth targets for ELL students are identified as low-performing. I postulate that this pressure was the catalyst for Livemore School District's investment of considerable resources in developing its teaching force's capacity to teach ELLs. The SEI initiative I studied is a central component of this capacity building effort.

In short, my findings support the argument that an "important characteristic of the complexity of teacher learning is that it evolves as a nested system involving systems within systems" (Opfer & Pedder, 2011, p. 379). Teacher learning and change are not a direct result of professional learning opportunities, no matter how well-designed these are, as studies that take a process-product approach tend to assume. As complexity theorists contend, elements in the various systems interact and combine in different ways to shape teacher learning results. While the model of teacher learning and change conceptualized by Opfer and Pedder (2011) was comprised of three embedded systems—the teacher system; the learning activities, tasks, and practices; and the school system—I found five systems at work. In addition to the three in the Opfer and Pedder model, I found that the district and state policy contexts shaped the opportunities for teacher learning about ELLs in Livemore School District. It is likely that the two additional systems evident in my data are related to the particular focus of the professional learning initiative I studied—the preparation of teachers to teach ELL students—a concern of educational reformers in the current era of accountability given the growth of the ELL student population, their pattern of underachievement in schools, and the belief that the economic wellbeing of the U.S. is contingent on the academic performance of the overall student population, including ELLs.

In general, the major contribution my study makes is that it helped to generate deep insight into the "multicausal and multidimensional nature of teacher learning" (Opfer & Pedder, 2011, p. 394). Identifying the different systems and their interactions, as this study does, offers a description and an explanation, revealing the complexity of the multiple, overlapping systems that shape what is learned from professional learning initiatives and the influences that move that learning into practice.

Recommendations

Recommendations for Practice

Engage school administrators as active co-participants in teacher professional learning. In a seminal study of teacher professional learning, Hollingsworth (1999) found that teachers experienced considerable challenges enacting new practices in their teaching because of unsupportive conditions in their schools. Since then, other researchers have also demonstrated that support from school administrators is essential to efforts that aim to bring about teacher learning and change. As I discussed above, the principals of the two schools where the three teachers in my study taught gave access to the district's SEI professional learning initiative, but ongoing support for their use of practices introduced in the SEI sessions was absent. Given that supportive school conditions play a central role in the outcomes of teacher learning initiatives, those responsible for planning districtwide professional learning initiatives must secure the commitment and support of school principals for the goals of the initiative. This can be done by involving them in planning meetings, explicitly discussing with them the type of support that teachers in their schools will need, and helping them become informed of the types of practices teachers are being prepared to implement. Principals could also participate in the actual teacher learning sessions, to the extent possible. As Hilton and colleagues (2015) reported, school leaders in their study who were actively engaged co-participants, learning alongside their teachers, were a "positive influence on the capacity for teachers to enact and reflect on new knowledge and practices" (p. 104). This influence took the form of assisting teachers in class, adapting the curriculum to make it more consistent with the new practices, advocating for and/or providing additional learning opportunities to the teachers, and building time for collaborative discussions between and among teachers.

Consider the multiple elements that influence teacher learning and change in planning professional learning initiatives. Another implication of my study for professional developers is to avoid focusing their planning efforts solely on the specific features of professional learning (e.g., prolonged activities sustained over time, collective teacher participation, active learning, job-embedded). As my study demonstrated, teacher learning emerges through interactions of those features with elements from the other systems that comprise the overall system of teacher learning and change. If those other influences are not taken into consideration when designing professional learning initiatives, these efforts are not likely to result in the desired change in teacher practice. It is also important to reconsider the expectation that teachers will immediately align their practices with the targeted practice upon completion of the professional learning initiative. It would be more productive to embrace the complexity of the learning process by helping to develop and support the space for teacher learning to occur.

Provide follow-up coaching and expert support for teachers. One of the reasons I selected to study Livemore School District's SEI professional learning initiative was because the professional learning plan submitted to the state went beyond the minimum 15-hours of professional learning the state required of districts that sought participation in the SEI training-of-trainers program, of which Livemore School District was a part of in summer 2017.

Beyond the three full-day sessions, the plan also included additional support for teacher participants in the form of ongoing professional learning community (PLC) meetings, to be held during afterschool hours following the completion of the three core days of professional learning. Unfortunately, difficulties in getting these meetings on the schedule and poor attendance at the two meetings held, made this part of the SEI initiative much less productive than originally

envisioned. Because PLC meetings are considered collaborative learning spaces for teachers to process new ideas they are trying to implement in their teaching (e.g., DuFour, DuFour, Eaker, & Karhanek, 2004; Vescio, Ross, & Adams, 2008), those responsible for planning and implementing professional learning initiatives should give priority to including this type of follow-up support in their initiatives and also scheduling the meetings early in the school year to avoid scheduling difficulties later on. Additionally, because today's teachers have considerable professional and personal demands on their time, it would be beneficial to schedule those PLC meetings to occur during school hours so that they do not conflict with other responsibilities the teachers might have after the school day ends.

Beyond organizing PLC meetings, professional developers should consider offering teachers who participated in organized group sessions one-on-one support. According to Fullan (2001), while teachers have reported increased awareness and knowledge about new forms of practice, they need additional time to familiarize themselves with the concepts and strategies promoted in the professional learning initiative, SEI strategies in this case. Part of that learning involves their attempts at implementation. Fullan (2001) described this process as involving, "literally a dip in performance and confidence as one encounters an innovation that requires new skills and new understandings" (p. 40). Teachers need support through this implementation "dip" stage.

One-on-one coaching support could also help teachers work through difficulties they encountered in understanding ideas introduced during whole group professional learning sessions (e.g., Brooks & Adams, 2015; Chval et al., 2015; Crawford et al., 2018; Darling-Hammond et al., 2017; Johnson et al., 2016; Martin-Beltrán & Peercy, 2014; Peercy et al., 2015). For example, Kathy reported finding the idea of language objectives interesting but needed more

time to "wrap [her] head around it." A coach working with her could help demystify the process of writing language objectives by working with her on a lesson to unpack the language demands inherent in it, determine which of those demands Rose-Merline is likely to have difficulties with, and identify a specific way of modifying the lesson to support the student. Of course, this assumes that Kathy is willing to spend time planning and implementing this work and deviating from the uniform approach to teaching she seems most comfortable with. Simply put, providing teachers with one-on-one coaching and/or expert support both facilitates teacher learning and helps them implement the instructional practices introduced in the professional learning initiative.

Recommendations for Research

Developing and understanding the collaborative relationship between mainstream teachers and ESL teachers. Scholars have argued that ESL teachers should not be marginalized in schools (something that happens with frequency given that they are often assigned to work with students in more than one school, and are not seen as responsible for a specific aspect of the school curriculum), and that they should become more central to schools given their expertise with language teaching, a much needed skill in today's linguistically diverse schools (see Arkoudis, 2006; George, 2009; Harvey & Teemant, 2012; Liggett, 2010; Pawan & Ortloff, 2011). As my study shows, the ESL teachers in Livemore School District were introduced in the initial SEI session as the language experts who would support mainstream teachers teaching of ELLs through a relationship of collaboration. To advance this idea, which seems to merit attention, it would be helpful to better understand the processes and conditions that enable the development of these collaborative relationships. How are those relationships negotiated and established? How might opportunities for mutual professional learning occur

(i.e., content area teachers learning about the teaching of language while ESL teachers learn about the teaching of content areas)? Is the idea of having an ESL instructional coach viable? What might be involved in having an ESL instructional coach support and develop the disciplinary linguistic knowledge that content area teachers need to support ELL student learning?

Conduct more studies of teacher learning from non-linear and multicausal perspectives. We need more studies that examine the preparation of content area teachers to teach ELLs, which take a non-linear and multicausal perspective because they acknowledge the complexity of these processes. They also offer an in-depth understanding of the multiple systems at work and the elements, within each system, which interact with one another to create conditions that support or constrain the desired teacher learning, and its movement into classroom practice. Those studies should be conducted in different settings, including large and small, urban and suburban school districts; they should examine not only on districtwide professional learning initiatives (like the one examined in this study) but also schoolwide efforts that are likely to have more administrative support at the school level and involve more teachers from the same setting; and they should involve teachers with varying levels of teaching experience, not just experienced teachers as my study did. To better understand the process of moving teacher learning into classroom practice, it would be helpful to conduct studies that examine teacher practice over a longer period of time than I did in my study.

Final Thoughts

In this qualitative research, I worked to analyze and understand the nested systems of teacher professional learning. My study focused on the professional learning of three mainstream middle school content area teachers through their participation in their district's

sheltered English instruction professional learning initiative, followed by three classroom observations and teacher interviews. These teachers volunteered to participate in the SEI initiative because they recognized they lacked the knowledge and skills required to attend to the needs of their ELL students. Overall, the data suggest that the teachers did learn new ideas and instructional practices for meeting the academic and language needs of ELL students; however, one of the three teachers seemingly developed a better grasp of how to plan and enact instructional modifications that addressed the specific learning needs of particular ELL students in a class. It was fascinating to see in my data how elements from the five nested systems I uncovered interacted to mediate and shape what each teacher learned about SEI practices, and how the teachers attempted to enact that learning in their classrooms. Although I began this work knowing that teacher learning and change does not follow a direct line from learning opportunities to the application of ideas to which they had been introduced in their classrooms, the study has given me a deeper appreciation for the complex ways in which teacher learning and change emerge.

This study also gave me insights about my role as an instructional leader and researcher. It added clarity to the struggles I have previously experienced as an instructional leader with a traditional conception of teacher professional learning. Even though I know that my findings are specific to the context and participants of this investigation, I am now better able to identify potentially critical mediating elements and processes that instructional leaders need to take into account when planning professional learning opportunities for teachers. That is, the study has broadened my way of thinking about professional learning. The study also helped me develop as a novice researcher. I learned about the challenges of negotiating access to a research site; the importance of staying open to making change in one's research plan to accommodate the realities

of everyday life in schools and districts; the need to be patient with myself about those missed opportunities to ask just the right follow-up question; the panic one feels when beginning to make sense of numerous pages of observation notes and interview transcripts; the joy of beginning to see a pattern in data that initially was totally confusing; and the pride one feels knowing that all the work that went into this study adds insight to a growing body of work in the preparation of mainstream teachers to support the learning of culturally and linguistically diverse students.

References

- Achugar, M., Schleppegrell, M., & Oteíza, T. (2007). Engaging teachers in language analysis: A functional linguistic approach to reflective literacy. *English Teaching: Practice and Technique*, 6(2), 8-24.
- Adamson, K., Santau, A., & Lee, O. (2013). The impact of professional development on elementary teachers' strategies for teaching science with diverse student groups in urban elementary schools. *Journal of Science Teacher Education*, 24(3), 553-571. https://doi.org/10.1007/s10972-012-9306-z
- Aguirre-Muñoz, Z., Park, J., Amabisca, A., & Boscardin, C. K. (2008). Developing teacher capacity for serving ELLs' writing instructional needs: A case for systemic functional linguistics. *Bilingual Research Journal*, *31*(1-2), 295-322.

 http://dx.doi.org/10.1080/15235880802640755
- Ahmed Hersi, A., Horan, D. A., & Lewis, M. A. (2016). Redefining "community" through collaboration and co-teaching: A case study of an ESOL specialist, a literacy specialist, and a fifth-grade teacher. *Teachers and Teaching*, 22(8), 927-946.

 https://doi.org/10.1080/13540602.2016.1200543
- American Federation of Teachers. (2004). Closing the achievement gap: Focus on Latino students. *AFT Teachers Policy Brief*, *17*. Retrieved from http://files.eric.ed.gov/fulltext/ED497878.pdf
- Antoniou, P., & Kyriakides, L. (2013). A dynamic integrated approach to teacher professional development: Impact and sustainability of the effects on improving teacher behavior and student outcomes. *Teaching and Teacher Education*, 29, 1-12.

 https://doi.org/10.1016/j.tate.2012.08.001

- Anstrom, K., DiCerbo, P., Butler, F., Katz, A., Millet, J., & Rivera, C. (2010). *A Review of the literature on Academic English: Implications for K-12 English Language Learners*.

 Arlington, VA: The George Washington University Center for Equity and Excellence in Education.
- Archibald, S., Coggshall, J. G., Croft, A., & Goe, L. (2011). *High-quality professional*development for all teachers: Effectively allocating resources. Washington, DC: National

 Comprehensive Center for Teacher Quality. Retrieved from

 https://gtlcenter.org/sites/default/files/docs/HighQualityProfessionalDevelopment.pdf
- Arellano-Houchin, A., Flamenco, C., Merlos, M., & Segura, L. (2001). Has California's passage of Proposition 227 made a difference in the way we teach? *The Urban Review*, *33*(3), 221–235. https://doi.org/10.1023/A:101036600
- Arkoudis, S. (2006). Negotiating the rough ground between ESL and mainstream teachers. *International Journal of Bilingual Education and Bilingualism*, 9(4), 415-34.

 https://doi.org/10.2167/beb337.0
- Armour, K. M., & Makopoulou, K. (2012). Great expectations: Teacher learning in a national professional development programme. *Teaching and Teacher Education*, *28*(3), 336-346. https://doi.org/10.1016/j.tate.2011.10.006
- Arnold, R. D., & Wade, J. P. (2015). A definition of systems thinking: A systems approach.

 *Procedia Computer Science, 44, 669-678. https://doi.org/10.1016/j.procs.2015.03.050
- Avalos, B. (2011). Teacher professional development in Teaching and Teacher Education over ten years. *Teaching and Teacher Education*, 27(1), 10-20. http://dx.doi.org/10.1016/j.tate.2010.08.007

- Avalos, M.A., & Secada, W.G. (2019). Linguistically responsive teaching to foster ELL engagement, reasoning, and participation in a mathematics discourse community. In L. de Oliveira, K. Obenchain, B. Kenney & A. Oliveira (Eds.), *Teaching the Content Areas to English Language Learners in Secondary Schools: English Language Education* (Vol. 17, pp. 165-179). https://doi.org/10.1007/978-3-030-02245-7 11
- Bada, S. O. (2015). Constructivism learning theory: A paradigm for teaching and learning. *IOSR Journal of Research & Method in Education*, 5(6), 66-70. doi:10.9790/7388-05616670
- Baecher, L., Artigliere, M., Patterson, D. K., & Spatzer, A. (2012). Differentiated instruction for English language learners as "variations on a theme." *Middle School Journal*, *43*(3), 14-21. https://doi.org/10.1080/00940771.2012.11461807
- Baecher, L., Rorimer, S., & Smith, L. (2012). Video-mediated teacher collaborative inquiry: Focus on English language learners. *The High School Journal*, 95(3), 49-61. https://doi.org/10.1353/hsj.2012.0007
- Ballantyne, K. G., Sanderman, A. R., & Levy, J. (2008). Educating English Language Learners:

 Building teacher capacity. Washington, DC: National Clearinghouse for English

 Language Acquisition. Retrieved from

 http://www.ncela.us/files/uploads/3/EducatingELLsBuildingTeacherCapacityVol1.pdf
- Banilower, E. R., Heck, D. J., & Weiss, I. R. (2007). Can professional development make the vision of the standards a reality? The impact of the national science foundation's local systemic change through teacher enhancement initiative. *Journal of Research in Science Teaching*, 44(3), 375-395. https://doi.org/10.1002/tea.20145

- Barlow, A. T., Frick, T. M., Barker, H. L., & Phelps, A. J. (2014). Modeling instruction: The impact of professional development on instructional practices. *Science Educator*, 23(1), 14-26.
- Barron, A. E., Kemker, K., Harmes, C., & Kalaydjian, K. (2003). Large-scale research study on technology in K-12 school: Technology integration as it relates to the national technology Standards. *Journal of Research on Technology in Education: International Society for Technology in Education*, 35(4), 489-507.

 http://dx.doi.org/10.1080/15391523.2003.10782398
- Battey, D., Llamas-Flores, S., Burke, M., Guerra, P., Kang, H., & Kim, S. (2013). ELL policy and mathematics professional development colliding: Placing teacher experimentation within a sociopolitical context. *Teachers College Record*, 115(6), 1-44.
- Baxter, P., & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *The Qualitative Report*, *13*(4), 544-559. Retrieved from https://nsuworks.nova.edu/tqr/vol13/iss4/2
- Beijaard, D., Verloop, N., Wubbels, T., & Feiman-Nemser, S. (2000). The professional development of teachers. In R. Jan Simons, J. van der Linden & T. Duffy (Eds.), *New Learning* (pp. 261-274). Springer Netherlands.
- Blank, R. K., de las Alas, N., & Smith, C. (2008). Does teacher professional development have effects on teaching and learning? Analysis of evaluation findings from programs for mathematics and science teachers in 14 states. Washington, DC: Council of Chief State School Officers. Retrieved from http://www.ccsso.org/Documents/2008/Does_Teacher_Professional_Development_2008.pdf

- Bohon, L. L., McKelvey, S., Rhodes, J. A., & Robnolt, V. J. (2017). Training for content teachers of English language learners: Using experiential learning to improve instruction.

 Teacher Development, 21(5), 609-634. https://doi.org/10.1080/13664530.2016.1277256
- Borko, H. (2004). Professional development and teacher learning: Mapping the terrain. *Educational Researcher*, 33(8), 3-15. https://doi.org/10.3102/0013189X033008003
- Borko, H., Jacobs, J., & Koellner, K. (2010). Contemporary approaches to teacher professional development: Processes and content. In P. Peterson, E. Baker & B. McGaw (Eds.), *International encyclopedia of education* (pp. 548-556). Oxford, UK: Elsevier
- Bostock, S., Lisi-Neumann, K., & Collucci, M. (2016). Doing-it-ourselves development:

 (Re)defining, (re)designing and (re)valuing the role of teaching, learning, and literacies.

 In M. Knobel & J. Kalman (Eds.), *New literacies and teacher learning: Professional development and the digital turn* (pp. 43-64). New York, NY: Peter Lang.
- Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, 9(2), 27-40. http://dx.doi.org/10.3316/QRJ0902027
- Bowers, E., Fitts, S., Quirk, M., & Jung, W. (2010). Effective strategies for developing academic English: Professional development and teacher practices. *Bilingual Research Journal*, 33(1), 95-110. http://dx.doi.org/10.1080/15235881003733407
- Brancard, R., & QuinnWilliams, J. (2012). Learning labs: Collaborations for transformative teacher learning. *TESOL Journal*, *3*(3), 320-349. https://doi.org/10.1002/tesj.22
- Brechtel, M. (1992). Bringing the whole together: An integrated, whole language approach for the multilingual classroom. San Diego, CA: Dominie Press.
- Brisk, M., & Zisselsberger, M. (2011). "We've let them in on the secret": Using SFL theory to improve the teaching of writing to bilingual learners. In T. Lucas (Ed.), *Teacher*

- preparation for linguistically diverse classrooms: A resource for teacher educators (pp. 111-126). New York, NY: Routledge.
- Brooks, K., & Adams, S. R. (2015). Developing agency for advocacy: Collaborative inquiry-focused school-change projects as transformative learning for practicing teachers. *The New Educator*, 11(4), 292-308. http://dx.doi.org/10.1080/1547688X.2015.1087758
- Brown, A. L., & Campione, J. C. (1994). Guided discovery in a community of learners. In K. McGilly (Ed.), *Classroom lessons: Integrating cognitive theory and classroom practice* (pp. 229-270). Cambridge, MA: The MIT Press/Bradford Books.
- Brunner, J. (1966). Toward a theory of instruction. Cambridge, MA: Harvard Educational Press.
- Bunch, G. (2013). Pedagogical language knowledge: Preparing mainstream teachers for English learners in the new standards era. *Review of Research in Education*, *37*(1), 298-341. https://doi.org/10.3102/0091732X12461772
- Bunch, G. C., Kibler, A. K., & Pimentel, S. (2012). Realizing opportunities for English learners in the Common Core English language arts and disciplinary standards. Paper presented at the Understanding Language Conference, Stanford, CA. Downloaded on March 20, 2018 from https://ell.stanford.edu/sites/default/files/events/Bunch-Kibler-Pimentel_AERA_2013-04-08.pdf
- Burstein, J., Shore, J., Sabatini, J., Moulder, B., Lentini, J., Biggers, K., & Holtzman, S. (2014). From teacher professional development to the classroom: How NLP technology can enhance teachers' linguistic awareness to support curriculum development for English language learners. *Journal of Educational Computing Research*, *51*(1), 119-144. https://doi.org/10.2190/EC.51.1.f

- Buxton, C. A., Kayumova, S., & Allexsaht-Snider, M. (2013). Teacher, researcher, and accountability discourses: Creating space for democratic science teaching practices in middle schools. *Democracy and Education*, 21(2), 1-10.
- Buysse, V., Castro, D. C., & Peisner-Feinberg, E. (2010). Effects of a professional development program on classroom practices and outcomes for Latino dual language learners. *Early Childhood Research Quarterly*, 25(2), 194-206. https://doi.org/10.1016/j.ecresq.2009.10.001
- Byrnes, D. A., Kiger, G., & Manning, M. L. (1997). Teachers' attitudes about language diversity.

 *Teaching and Teacher Education, 13(6), 637-644. https://doi.org/10.1016/S0742-051X(97)80006-6
- Cadiero-Kaplan, K., & Rodríguez, J. L. (2008). The preparation of highly qualified teachers for English language learners: Educational responsiveness for unmet needs. *Equity & Excellence in Education*, 41(3), 372-387.
- Camarota, S. A., & Zeigler, K. (2015). One in five US residents speaks foreign language at home, record 61.8 million. Washington, DC: Center for Immigration Studies. Retrieved from http://cis.org/One-in-Five-US-Residents-Speaks-Foreign-Language-at-Home
- Carrejo, D. J., & Reinhartz, J. (2014). Teachers fostering the co-development of science literacy and language literacy with English language learners. *Teacher Development*, 18(3), 334-348. http://dx.doi.org/10.1080/13664530.2014.914564
- Casey, K. (2018). Moving toward mastery: Growing, developing and sustaining educators for competency-based education. Vienna, VA: iNACOL.

- Chamot, A. U., & O'Malley, J. M. (1987). A cognitive academic language learning approach:

 An ESL content-based curriculum. Washington, DC: National Clearinghouse for Bilingual Education.
- Choi, D. S., & Morrison, P. (2014). Learning to get it right: Understanding change processes in professional development for teachers of English learners. *Professional Development in Education*, 40(3), 416-435. http://dx.doi.org/10.1080/19415257.2013.806948
- Chval, K. B., Pinnow, R. J., & Thomas, A. (2015). Learning how to focus on language while teaching mathematics to English language learners: A case study of Courtney.
 Mathematics Education Research Journal, 27(1), 103-127.
 https://doi.org/10.1007/s13394-013-0101-8
- Clarke, D., & Hollingsworth, H. (2002). Elaborating a model of teacher professional growth.

 Teaching and Teacher Education, 18(9), 47-967. http://dx.doi.org/10.1016/S0742-051X(02)00053-7
- Clarke, A., & Collins, S. (2007). Complexity science and student teacher supervision. *Teaching* and *Teacher Education*, 23(2), 160-172. https://doi.org/10.1016/j.tate.2006.10.006
- Cline, Z., & Necochea, J. (2003). Specially Designed Academic Instruction in English (SDAIE):

 More than just good instruction. *Multicultural Perspectives*, *5*(1), 18-24.

 http://dx.doi.org/10.1207/S15327892MCP0501_4
- Cobb, P., Wood, T., & Yackel, E. (1990). Classrooms as learning environments for teachers and researchers. In R. B. Davis, C. A. Mayer & N. Noddings (Eds.), *Constructivist views on the teaching and learning of mathematics* (pp. 125–146). Reston, VA: National Council of Teachers of Mathematics.

- Coburn, C. E., Hill, H. C., & Spillane, J. P. (2016). Alignment and accountability in policy design and implementation: The common core state standards and implementation research. *Educational Researcher*, 45(4), 243-251.

 https://doi.org/10.3102/0013189X16651080
- Cochran-Smith, M., Ell, F., Ludlow, L., Grudnoff, L., & Aitken, G. (2014). The challenge and promise of complexity theory for teacher education research. *Teachers College Record*, 116(5), 1-38.
- Cochran-Smith, M., & Villegas, A. M. (2015). Framing teacher preparation research: An overview of the field, part 1. *Journal of Teacher Education*, 66(1), 7-20. https://doi.org/10.1177/0022487114549072
- Coleman, R., & Goldenberg, C. (2010). What does research say about effective practices for English learners? Part IV: Models for schools and districts. *Kappa Delta Pi Record*, 46(4), 156-163. http://dx.doi.org/10.1080/00228958.2010.10516546
- Collins, S., & Clarke, A. (2008). Activity frames and complexity thinking: Honouring both public and personal agendas in an emergent curriculum. *Teaching and Teacher Education*, 24(4), 1003-1014. https://doi.org/10.1016/j.tate.2007.11.002
- Common Core State Standards Initiative. (n.d.). *Standards in your state*. Retrieved from http://www.corestandards.org/standards-in-your-state/
- Council of Chief State School Officers (2016). *Major provisions of Every Student Succeeds Act*(ESSA) related to the education of English learners. Washington, DC: Council of Chief

 State School Officers. Retrieved from https://ccsso.org/sites/default/files/2017-11/ccsso%20resource%20on%20els%20and%20essa.pdf

- Crawford, J. (2000). *At war with diversity: US language policy in an age of anxiety*. Tonawanda, NY: Multilingual Matters.
- Crawford, J. (2004). *Educating English learners: Language diversity in the classroom* (5th ed.). Los Angeles, CA: Bilingual Education Services.
- Crawford, L., Schmeister, M., & Biggs, A. (2008). Impact of intensive professional development on teachers' use of sheltered instruction with students who are English language learners.

 Journal of In-Service Education, 34(3), 327-342.

 http://dx.doi.org/10.1080/13674580801950816
- Crippen, K. J., Biesinger, K. D., & Ebert, E. K. (2010). Using professional development to achieve classroom reform and science proficiency: An urban success story from southern Nevada, USA. *Professional Development in Education*, *36*(4), 637-661. https://doi.org/10.1080/19415250903396026
- Cummins, J. (1979). Cognitive/academic language proficiency, linguistic interdependence, the optimum age question, and some other matters. *Working Papers in Bilingualism*, 19.
- Cummins, J. (1981). The role of primary language development in promoting educational success for language minority students. In *Schooling and language minority students: A theoretical framework* (pp. 3-49). Sacramento, CA: CA Department of Education.
- Cummins, J. (2000). Language, power, and pedagogy: Bilingual children in the crossfire.

 Clevedon, UK: Multilingual Matters.
- Cummins, J. (2008). BICS and CALP: Empirical and theoretical status of the distinction. In B. Street & N. H. Hornberger (Eds.), *Encyclopedia of language and education: Vol. 2. Literacy* (2nd ed., pp. 71-83). New York, NY: Springer.

- Darling-Hammond, L. (2010). The flat world and education: How America's commitment to equity will determine our future. New York, NY: Teachers College Press.
- Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). *Effective teacher professional development*. Palo Alto, CA: Learning Policy Institute.
- Darling-Hammond, L., Wei, R. C., Andree, A., Richardson, N., & Orphanos, S. (2009).
 Professional learning in the learning profession: A status report on teacher development in the United States and abroad. *National Staff Development Council*. Retrieved from http://www.learningforward.org/docs/pdf/nsdcstudy2009.pdf
- DaSilva Iddings, A. C., & Rose, B. C. (2012). Developing pedagogical practices for English-language learners: a design-based approach. *Pedagogies: An International Journal*, 7(1), 32-51. http://dx.doi.org/10.1080/1554480X.2012.630510
- Davis, B., & Sumara, D. J. (2006). *Complexity and education: Inquiries into learning, teaching, and research*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Davison, C. (2006). Collaboration between ESL and content teachers: How do we know when we are doing it right? *International Journal of Bilingualism and Bilingual Education*, 9(4), 454-475. https://doi.org/10.2167/beb339.0
- Deaton, C., Deaton, B., & Koballa, T. (2014). Teachers' awareness of their diverse classrooms:

 The nature of elementary teachers' reflections on their science teaching practice. *Action in Teacher Education*, 36(3), 211-233. https://doi.org/10.1080/01626620.2014.917363
- de Jong, E. (2013). Preparing mainstream teachers for multilingual classrooms. *Journal of the Association of Mexican American Educators*, 7(2), 40-49.

- de Jong, E. J., & Harper, C. A. (2005). Preparing mainstream teachers for English-Language

 Learners: Is being a good teacher good enough? *Teacher Education Quarterly*, 32(2),

 101-124.
- de Oliveira, L. C. (2011). In their shoes: Teachers experience the needs of English language learners through a math simulation. *Multicultural Education*, 19(1), 59–62.
- de Oliveira, L. C., Gilmetdinova, A., & Pelaez-Morales, C. (2016). The use of Spanish by a monolingual kindergarten teacher to support English language learners. *Language and Education*, 30(1), 22-42. https://doi.org/10.1080/09500782.2015.1070860
- Desimone, L. M. (2009). Improving impact studies of teachers' professional development:

 Toward better conceptualizations and measures. *Educational Researcher*, *38*(3), 181-199.

 https://doi.org/10.3102/0013189X08331140
- Desimone, L. M. (2011). A primer on effective professional development. *Phi Delta Kappan*, 92(6), 68-71. https://doi.org/10.11772F003172171109200616
- Desimone, L. M., Porter, A. C., Garet, M. S., Yoon, K. S., & Birman, B. F. (2002). Effects of professional development on teachers' instruction: Results from a three-year longitudinal study. *Educational Evaluation and Policy Analysis*, 24(2), 81-112. https://doi.org/10.3102/01623737024002081
- Desimone, L., Smith, T., & Phillips, K. (2013). Linking student achievement growth to professional development participation and changes in instruction: A longitudinal study of elementary students and teachers in Title I schools. *Teachers College Record*, 115(5), 1-46.
- Dingle, M. P., Brownell, M. T., Leko, M. M., Boardman, A. G., & Haager, D. (2011).

 Developing effective special education reading teachers: The influence of professional

- development, context, and individual qualities. *Learning Disability Quarterly*, *34*(1), 87-103. https://doi.org/10.1177/073194871103400106
- Donnelly, L., & Argyle, S. (2011). Teachers' willingness to adopt nature of science activities following a physical science professional development. *Journal of Science Teacher Education*, 22(6), 475-490. https://doi.org/10.1007/s10972-011-9249-9
- DuFour, R., DuFour, R., Eaker, R., & Karhanek, G. (2004). Whatever it takes: How professional learning communities respond when kids don't learn. Bloomington, IN: Solution Tree.
- Easton, L. B. (2008). From professional development to professional learning. *Phi Delta Kappan*, 89(10), 755-761. https://doi.org/10.1177/003172170808901014
- Echevarría, J., Richards-Tutor, C., Canges, R., & Francis, D. (2011). Using the SIOP Model to promote the acquisition of language and science concepts with English learners. *Bilingual Research Journal*, 34, 1-18. https://doi.org/10.1080/15235882.2011.623600
- Echevarría, J., Short, D., & Powers, K. (2006). School reform and standards-based education: A model for English-language learners. *The Journal of Educational Research*, 99(4), 195-211. https://doi.org/10.3200/JOER.99.4.195-211
- Echevarría, J., & Vogt, M. (2010). Using the SIOP Model to improve literacy for English learners. *The NERA Journal*, 46(1), 8-15.
- Echevarría, J., Vogt, M., & Short, D. (2004). *Making content comprehensible for English learners: The SIOP model*. Boston, MA: Allyn and Bacon.
- Education Commission of the States. (2016). ESSA: Quick guides on top issues. Retrieved from https://www.ecs.org/wp-content/uploads/ESSA-Quick-guides-on-top-issues.pdf
- Eggins, S. (2004) *Introduction to systemic functional linguistics* (2nd ed.). London, UK: Continuum International Publishing Group.

- Escamilla, K. (2006). Semilingualism applied to the literacy behaviors of Spanish-speaking emerging bilinguals: Bi-illiteracy or emerging biliteracy?. *Teachers College Record*, 108(11), 2329-2353.
- Escamilla, K., Chávez, L., & Vigil, P. (2005). Rethinking the "gap": High-stakes testing and Spanish-speaking students in Colorado. *Journal of Teacher Education*, *56*(2), 132–144. https://doi.org/10.1177/0022487104273791
- Estapa, A., Pinnow, R. J., & Chval, K. B. (2016). Video as a professional development tool to support novice teachers as they learn to teach English language learners. *New Educator*, 12(1), 85–104.
- Evans, B. A., & Hornberger, N. H. (2005). No Child Left Behind: Repealing and unpeeling federal language education policy in the United States. *Language Policy*, 4(1), 87-106. https://doi.org/10.1007/s10993-004-6566-2
- Evans, C., Arnot-Hopffer, E., & Jurich, D. (2005). Making ends meet: Bringing bilingual education and mainstream students together in preservice teacher education. *Equity and Excellence in Education*, 38(1), 75-88. https://doi.org/10.1080/10665680590907855
- Feiman-Nemser, S. (2001). From preparation to practice: Designing a continuum to strengthen and sustain teaching. *Teachers College Record*, 103(6), 1013-1055.
- Fishman, B. J., Marx, R. W., Best, S., & Tal, R. T. (2003). Linking teacher and student learning to improve professional development in systemic reform. *Teaching and Teacher Education*, *19*(6), 643-658. http://dx.doi.org/10.1016/S0742-051X(03)00059-3
- Flores, M. (2005). How do teachers learn in the workplace? Findings from an empirical study carried out in Portugal. *Journal of In-service Education*, *31*(3), 485-508. doi:10.1080/13674580500200290

- Flores, B. B., & Smith, H. (2008). Teachers' characteristics and attitudinal beliefs about linguistic and cultural diversity. *Bilingual Research Journal*, *31*(1-2), 323-358. https://doi.org/10.1080/15235880802640789
- Freeman, D., & Freeman, Y. (1988). Sheltered English instruction. *ERIC Digests*. Washington, DC: ERIC Clearinghouse on Languages and Linguistics.
- Fullan, M. (2001). Leading in a culture of change. San Francisco, CA: Jossey-Bass.
- Fullan, M. (2007). Change the terms for teacher learning. *Journal of Staff Development*, 28(3), 35-36.
- Fránquiz, M.E., & Ortiz, A.A. (2016). Co-editors' introduction: Every Student Succeeds Act—A policy shift. *Bilingual Research Journal*, *39*(1), 1-3.

 https://doi.org/10.1080/15235882.2016.1148996
- Fry, R. (2008). *The role of schools in the English language learner achievement gap*.

 Washington, DC: Pew Hispanic Center. Retrieved from

 http://www.pewhispanic.org/files/reports/89.pdf
- Galguera, T. (2011). Participant structures as professional learning tasks and the development of pedagogical language knowledge among preservice teachers. *Teacher Education Quarterly*, 38(1), 85–106.
- Gándara, P., Maxwell-Jolly, J., & Driscoll, A. (2005). Listening to teachers of English Language

 Learners: A survey of California teachers' challenges, experiences, and professional

 development needs. Santa Cruz, CA: The Center for the Future of Teaching and Learning.
- García, E., Arias, M. B., Murri, N. J. H., & Serna, C. (2010). Developing responsive teachers: A challenge for a demographic reality. *Journal of Teacher Education*, 61(1-2), 132-142. https://doi.org/10.11772F0022487109347878

- Garet, M. S., Porter, A. C., Desimone, L., Birman, B. F., & Yoon, K. S. (2001). What makes professional development effective? Results from a national sample of teachers.

 *American Educational Research Journal, 38(4), 915-945.

 https://doi.org/10.3102/00028312038004915
- Gay, G. (2010). *Culturally responsive teaching: Theory, research, and practice*. New York, NY: Teachers College Press.
- Gee, J.P., Hull, G., & Lankshear, C. (1996). The new work order: Behind the language of the new capitalism. Boulder, CO: Westview.
- Genesee, F., Lindholm-Leary, K., Saunders, W., & Christian, D. (2006). *Educating English language learners: A synthesis of research evidence*. New York, NY: Cambridge University Press.
- George, C. (2009). Marginalization or collaboration: First year ESL teachers & the middle school context. *Middle Grades Research Journal*, *4*(1), 25-52.
- Gibbons, P. (2002). Scaffolding language, scaffolding learning. Portsmouth, NH: Heinemann
- Goos, M. (2008). Sociocultural perspectives on learning to teach mathematics. In B. Jaworski & T. Wood (Eds.), *The mathematics teacher educator as a developing professional* (pp. 75–92). Rotterdam, NL: Sense Publishers.
- Gottlieb, M. (2013). Essential actions: A handbook for implementing WIDA's framework for English language development standards. Madison, WI: Board of Regents of the University of Wisconsin System.
- Green, J. D., Gonzalez, E. M., López-Velásquez, A. M., & Howard, E. R. (2013). Hands-on professional development: middle school teachers' experiences with a curriculum

intervention research project. *Middle School Journal*, *45*(2), 27-32. http://dx.doi.org/10.1080/00940771.2013.11461884

Greenleaf, C. L., Hanson, T. L., Rosen, R., Boscardin, D. K., Herman, J., Schneider, S. A.,
 Madden, S., & Jones, B. (2011). Integrating literacy and science in biology: Teaching and learning impacts of reading apprenticeship professional development. *American Educational Research Journal*, 48(3), 647-717.
 https://doi.org/10.3102/0002831210384839

- Grove, C. M., Dixon, P. J., & Pop, M. M. (2009). Research experiences for teachers: Influences related to expectancy and value of changes to practice in the American classroom.

 *Professional Development in Education, 35(2), 247-260.

 http://dx.doi.org/10.1080/13674580802532712
- Gulamhussein, A. (2013). Teaching the teachers: Effective professional development in an era of high stakes accountability. Center for Public Education. Retrieved from http://www.centerforpubliceducation.org/Main-Menu/Staffingstudents/Teaching-the-Teachers-Full-Report.pdf
- Guskey, T. R. (2002). Professional development and teacher change. *Teachers and Teaching*, 8(3), 381-391. http://dx.doi.org/10.1080/135406002100000512
- Hakuta, K., Santos, M., & Fang, Z. (2013). Challenges and opportunities for language learning in the context of the CCSS and the NGSS. *Journal of Adolescent & Adult Literacy*, *56*(6), 451-454. https://doi.org/10.1002/JAAL.164

- Hall, G. E., Loucks, S. F., Rutherford, W. L., & Newlove, B. W. (1975). Levels of use of the innovation: A framework for analyzing innovation adoption. *Journal of Teacher Education*, 26(1), 52-56. https://doi.org/10.1177/002248717502600114
- Halliday, M. (1978) Language as social semiotic. London, UK: Edward Arnold.
- Hansen-Thomas, H. (2008). Sheltered instruction: Best practices for ELLs in the mainstream.

 *Kappa Delta Pi Record, 44(4), 165-169.

 http://dx.doi.org/10.1080/00228958.2008.10516517
- Hardin, B. J., Lower, J. K., Smallwood, G. R., Chakravarthi, S., Li, L., & Jordan, C. (2010).

 Teachers, families, and communities supporting English language learners in inclusive pre-kindergartens: An evaluation of a professional development model. *Journal of Early Childhood Teacher Education*, 31(1), 20-36.

 http://dx.doi.org/10.1080/10901020903539580
- Harper, C. A., & de Jong, E. J. (2009). English language teacher expertise: The elephant in the room. *Language and Education*, 23(2), 137-151.

 http://dx.doi.org/10.1080/09500780802152788
- Hart, J. E., & Lee, O. (2003). Teacher professional development to improve the science and literacy achievement of English language learners. *Bilingual Research Journal*, 27(3), 475-501. http://dx.doi.org/10.1080/00405841.2013.770328
- Harvey, L., & Teemant, A. (2012). Who does what and why? ESL administrators' perspectives on the roles of ESL specialists and mainstream teachers. *INTESOL Journal*, 9(1), 35-50.
- He, Y., Prater, K., & Steed, T. (2011). Moving beyond 'just good teaching': ESL professional development for all teachers. *Professional Development in Education*, *37*(1), 7-18. http://dx.doi.org/10.1080/19415250903467199

- Heller, J. I., Daehler, K. R., Wong, N., Shinohara, M., & Miratrix, L. W. (2012). Differential effects of three professional development models on teacher knowledge and student achievement in elementary science. *Journal of Research in Science Teaching*, 49(3), 333-362. https://doi.org/10.1002/tea.21004
- Hemphill, F. C., & Vanneman, A. (2011). Achievement gaps: How Hispanic and White students in public schools perform in mathematics and reading on the National Assessment of Educational Progress. Statistical Analysis Report. NCES 2011-459. *National Center for Education Statistics*.
- Herbert, P.M., & Jones, K. (2013). *Sheltered English instruction: Training-of-trainers manual*. Equity Assistance Center & Northeast State Department of Education.
- Hilton, A., Hilton, G., Dole, S., & Goos, M. (2015). School leaders as participants in teachers' professional development: The impact on teachers' and school leaders' professional growth. *Australian Journal of Teacher Education*, 40(12), 104-125. http://dx.doi.org/10.14221/ajte.2015v40n12.8
- Himmel, J., Short, D. J., Richards-Tutor, C., & Echevarría, J. E. (2009). *Using the SIOP model to improve middle school science instruction*. Washington, DC: Center for Research on Educational Achievement for English Language Learners.
- Ho, P., & Kao, G. (2018). Educational achievement and attainment differences among minorities and immigrants. In: B. Schneider (Ed.), *Handbook of the Sociology of Education in the*21st Century (pp. 109-129). https://doi.org/10.1007/978-3-319-76694-2_5
- Hochberg, E. D., & Desimone, L. M. (2010). Professional development in the accountability context: Building capacity to achieve standards. *Educational Psychologist*, *45*(2), 89-106. http://dx.doi.org/10.1080/00461521003703052

- Hoffman, L., & Zollman, A. (2016). What STEM teachers need to know and do for English language learners (ELLs): Using literacy to learn. *Journal of STEM Teacher Education*, 51(1), 83-94. doi: doi.org/10.30707/JSTE51.1Hoffman
- Hollie, S. (2017). Culturally and linguistically responsive teaching and learning: Classroom practices for student success. Huntington Beach, CA: Shell Education.
- Honigsfeld, A., & Dove, M. (2010). *Collaboration and co-teaching: Strategies for English learners*. Thousand Oaks, CA: Corwin.
- Hopkins, M., Lowenhaupt, R., & Sweet, T. M. (2015). Organizing English learner instruction in new immigrant destinations: District infrastructure and subject-specific school practice. *American Educational Research Journal*, 52(3), 408-439. https://doi.org/10.3102/0002831215584780
- Hopkins, M., Thompson, K. D., Linquanti, R., Hakuta, K., & August, D. (2013). Fully accounting for English learner performance: A key issue in ESEA reauthorization.

 Educational Researcher, 42(2), 101-108. http://dx.doi.org/10.3102/0013189X12471426
- Hutchinson, M. (2013). Bridging the gap: Preservice teachers and their knowledge of working with English language learners. *TESOL Journal*, *4*(1), 25-54.

 https://doi.org/10.1002/tesj.51
- Hutchinson M., & Hadjioannou X. (2011). Better serving the needs of limited English proficient (LEP) students in the mainstream classroom: Examining the impact of an inquiry-based hybrid professional development program. *Teachers and Teaching*, 17(1), 91-113. http://dx.doi.org/10.1080/13540602.2011.538499
- Ingvarson, L., Meiers, M., & Beavis, A. (2005). Factors affecting the impact of professional development programs on teachers' knowledge, practice, student outcomes & efficacy.

- Professional Development for Teachers and School Leaders, 13(10), 1-28. http://dx.doi.org/10.14507/epaa.v13n10.2005
- Jacob, S. A., & Furgerson, S. P. (2012). Writing interview protocols and conducting interviews:

 Tips for students new to the field of qualitative research, *The Qualitative Report*, *17*(42),

 1-10. Retrieved from https://nsuworks.nova.edu/tgr/vol17/iss42/3
- Jacob, A., & McGovern, K. (2015). *The Mirage: Confronting the hard truth about our quest for teacher development*. Retrieved from https://eric.ed.gov/?id=ED558206
- Janzen, J. (2008). Teaching English language learners in the content areas. *Review of Educational Research*, 78(4), 1010-1038. https://doi.org/10.3102/0034654308325580
- Jenkins, S., & Agamba, J. J. (2013). The missing link in the CCSS Initiative: Professional development for implementation. *Academy of Educational Leadership Journal*, 17(2), 69-79.
- Johnson, C. C. (2007). Whole-school collaborative sustained professional development and science teacher change: Signs of progress. *Journal of Science Teacher Education*, *18*(4), 629-661. https://doi.org/10.1007/s10972-007-9043-x
- Johnson, C. C. (2011). The road to culturally relevant science: Exploring how teachers navigate change in pedagogy. *Journal of Research in Science Teaching*, 48(2), 170-198. https://doi.org/10.1002/tea.20405
- Johnson, C. C., Bolshakova, V. J., & Waldron, T. (2016). When good intentions and reality meet: Large-scale reform of science teaching in urban schools with predominantly Latino ELL students. *Urban Education*, *51*(5), 476-513. https://doi.org/10.1177/0042085914543114

- Johnson, C., & Fargo, J. (2010). Urban school reform enabled by transformative professional development: Impact on teacher change and student learning of science. *Urban Education*, 45(1), 4-29. https://doi.org/10.1177/0042085909352073
- Johnson, C. C., Kahle, J. B., & Fargo, J. D. (2007). A study of the effect of sustained, whole-school professional development on student achievement in science. *Journal of Research in Science Teaching*, 44(6), 775-786. https://doi.org/10.1002/tea.20149
- Johnson, C. C., & Marx, S. (2009). Transformative professional development: A model for urban science education reform. *Journal of Science Teacher Education*, 20(2), 113-134. https://doi.org/10.1007/s10972-009-9127-x
- Jones, K. (n.d.). 'Professional Development' or 'Professional Learning' ... and does it matter?

 [Web log post]. Retrieved from http://www.ewc.wales/site/index.php/en/about/staff-room/son/43-english/about/blog-archive/93-ken-jones-professional-development-or-professional-learning-and-does-it-matter
- Jones, K., & Ramella, L. (n.d.). *FABRIIC* A Learning Paradigm for ELLs. Northeast State Department of Education.
- Jurasaite-Harbison, E., & Rex, L. A. (2010). School cultures as contexts for informal teacher learning. *Teaching and Teacher Education*, 26(2), 267-277.

 https://doi.org/10.1016/j.tate.2009.03.012
- Karabenick, S. A., & Clemens Noda, P. A. (2004). Professional development implications of teachers' beliefs and attitudes toward English language learners. *Bilingual Research Journal*, 28(1), 55-75. https://doi.org/10.1080/15235882.2004.10162612
- Kazemi, E., & Hubbard, A. (2008). New directions for the design and study of professional development: Attending to the coevolution of teachers' participation across contexts.

Journal of Teacher Education, 59(5), 428-441. https://doi.org/10.11772F0022487108324330

- Kena, G., Hussar W., McFarland J., de Brey C., Musu-Gillette, L., Wang, X., Zhang, J.,
 Rathbun, A., Wilkinson-Flicker, S., Diliberti M., Barmer, A., Bullock Mann, F., &
 Dunlop Velez, E. (2016). *The condition of education 2016* (NCES 2016-144).
 Washington, DC: U.S. Department of Education National Center for Education Statistics.
 Retrieved from https://nces.ed.gov/pubs2016/2016144.pdf
- Kibler, A.K., & Roman, D. (2013). Insights into professional development for teachers of English language learners: A focus on using students' native languages in the classroom. Bilingual Research Journal, 36(2), 187-207.

 http://dx.doi.org/10.1080/15235882.2013.820226
- Kim, A. A., Kondo, A., Blair, A., Mancilla, L., Chapman, M., & Wilmes, C. (2016).

 Interpretation and use of K–12 language proficiency assessment score reports:

 Perspectives of educators and parents (WCER Working Paper 2016-8). Wisconsin,

 Madison: University of Wisconsin-Wisconsin Center for Education Research
- Kim, J. S., Olson, C. B., Scarcella, R., Kramer, J., Pearson, M., van Dyk, D., Collins, P., & Land, R. E. (2011). A randomized experiment of a cognitive strategies approach to text-based analytical writing for mainstreamed Latino English language learners in grades 6 to 12.
 Journal of Research on Educational Effectiveness, 4(3), 231-263.
 https://doi.org/10.1080/19345747.2010.523513
- Kloss, H. (1977). The American bilingual tradition. Rowley, MA: Newbury House Publishers.
- Knight, S., & Wiseman, D. (2006). Lessons learned from a research synthesis on the effects of teachers' professional development on culturally diverse students. In K. Téllez & H.

- Waxman (Eds.), *Preparing quality teachers for English language learners: Research, policies, and practices* (pp. 71-98). Mahwah, NJ: Lawrence Erlbaum Associates.
- Knobel, M., & Kalman, J. (2016). Teacher learning, digital technologies and new literacies. In
 M. Knobel & J. Kalman (Eds.), New literacies and teacher learning: Professional development and the digital turn (pp. 1-20). New York, NY: Peter Lang.
- Krashen, S. (1981). Second language acquisition and second language learning. New York, NY:

 Prentice-Hall.
- Krashen, S. D. (2003). *Explorations in language acquisition and use*. Portsmouth, NH: Heinemann.
- Kwakman, K. (2003). Factors affecting teachers' participation in professional learning activities.

 *Teaching and Teacher Education, 19(2), 149-170. http://doi.org/10.1016/S0742-051X(02)00101-4
- Labone, E., & Long, J. (2016). Features of effective professional learning: a case study of the implementation of a system-based professional learning model. *Professional Development in Education*, 42(1), 54-77.

 http://dx.doi.org/10.1080/19415257.2014.948689
- Ladson-Billings, G. (1994). *The dreamkeepers: Successful teaching for African American students*. San Francisco, CA: Jossey-Bass.
- Lankshear, C. (1997). Language and the new capitalism. *International Journal of Inclusive Education*, *I*(4), 309-321. https://doi.org/10.1080/1360311970010402
- Lankshear, C., & Knobel, M. (2004). *A handbook for teacher research*. Maidenhead, UK: Open University Press.
- Lara-Alecio, R., Tong, F., Irby, B. J., Guerrero, C., Huerta, M., & Fan, Y. (2012). The effect of

- an instructional intervention on middle school English learners' science and English reading achievement. *Journal of Research in Science Teaching*, 49(8), 987-1011. https://doi.org/10.1002/tea.21031
- Lee, O., Adamson, K., Maerten-Rivera, J., Lewis, S., Thornton, C., & LeRoy, K. (2008).
 Teachers' perspectives on a professional development intervention to improve science instruction among English language learners. *Journal of Science Teacher Education*,
 19(1), 41-67. https://doi.org/10.1007/s10972-007-9081-4
- Lee, O., Lewis, S., Adamson, K., Maerten-Rivera, J., & Secada, W. G. (2008). Urban elementary school teachers' knowledge and practices in teaching science to English language learners. *Science Education*, 92(4), 733-758. https://doi.org/10.1002/sce.20255
- Lee, O., & Maerten-Rivera, J. (2012). Teacher change in elementary science instruction with English Language Learners: Results of a multiyear professional development intervention across multiple grades. *Teachers College Record*, 114(8), 1-42. doi:10.1002/tea.21314
- Lewis, S., Maerten-Rivera, J., Adamson, K., & Lee, O. (2011). Urban third grade teachers' practices and perceptions in science instruction with English language earners. *School Science and Mathematics*, 111(4), 156-163. https://doi.org/10.1111/j.1949-8594.2011.00073.x
- Lieberman, A., & Miller, L. (2014). Teachers as professionals: Evolving definitions of staff development. In L. Martin, S. Kragler, D. Quatroche & K. Bauserman (Eds.), *Handbook of professional development in education: Successful models and practices*, preK-12 (pp. 1-21). New York, NY: Guilford Press.

- Lieberman, A., & Pointer Mace, D. (2008). Teacher learning: the key to education reform.

 *Journal of Teacher Education, 59(3), 226-234.

 https://doi.org/10.1177/0022487108317020
- Liggett, T. (2010). "A little bit marginalized": The structural marginalization of English language teachers in urban and rural public schools. *Teaching Education*, 21(3), 217-232. https://doi.org/10.1080/10476211003695514
- Lotter, C. R., Thompson, S., Dickenson, T. S., Smiley, W. F., Blue, G., & Rea, M. (2018). The impact of a practice-teaching professional development model on teachers' inquiry instruction and inquiry efficacy beliefs. *International Journal of Science and Mathematics Education*, 16(2), 255-273. https://doi.org/10.1007/s10763-016-9779-x
- Lucas, T. (2011). Language, schooling, and the preparation of teachers for linguistic diversity. In
 T. Lucas (Ed.), Teacher preparation for linguistically diverse classrooms: A resource for teacher educators, (pp. 3-17). New York, NY: Routledge.
- Lucas, T., & Grinberg, J. (2008). Responding to the linguistic reality of mainstream classrooms:

 Preparing all teachers to teach English language learners. In M. Cochran-Smith, S.

 Feiman-Nemser & J. McIntyre (Eds.), *Handbook of research on teacher education:*Enduring issues in changing contexts (3rd ed., pp. 606-636). Mahwah, NJ: Lawrence Erlbaum Associates.
- Lucas, T., Strom, K., Bratkovich, M., & Wnuk, J. (2018). Inservice preparation of mainstream teachers of ELLs: A review of the empirical literature. *The Educational Forum*, 82(2), 156-173. https://doi.org/10.1080/00131725.2018.1420852

- Lucas, T., & Villegas, A. M. (2011). A framework for preparing linguistically responsive teachers. In Lucas, T. (Ed.), *Teacher preparation for linguistically diverse classrooms: A resource for teacher educators* (pp. 55-72). New York, NY: Routledge.
- Lucas, T., & Villegas, A. M. (2013). Preparing linguistically responsive teachers: Laying the foundation in preservice teacher education. *Theory into Practice*, *52*(2), 98-109. https://doi.org/10.1080/00405841.2013.770327
- Lucas, T., Villegas, A. M., & Freedson-Gonzalez, M. (2008). Linguistically responsive teacher education: Preparing classroom teachers to teach English language learners. *Journal of Teacher Education*, *59*(4), 361-373. https://doi.org/10.1177/0022487108322110
- Lucas, T., Villegas, A. M., & Martin, A. (2015). Teachers' beliefs about English language learners. In H. Fives & M.G. Gill (Eds.), *International Handbook of Research on Teachers' Beliefs* (pp. 453-474). New York, NY: Routledge.
- Lys, D., Ringler, M. C., & O'Neal, D. (2009). Changing teacher attitudes toward instruction of academic language through sustained school-university partnership. *International Journal of Educational Leadership Preparation*, 4(4), 1-7.
- Mack, N., Woodsong, C., MacQueen, K. M., Guest, G., & Namey, E. (2005). *Qualitative*research methods: A data collector's field guide. Research Triangle Park, NC: Family

 Health International.
- Main, K., Pendergast, D., & Virtue, D. C. (2015). Core features of effective continuing professional development for the middle years: A tool for reflection. *Research in Middle Level Education Online*, 38(10), 1-18.
 - http://dx.doi.org/10.1080/19404476.2015.11658177

- Marion, R. (1999). *The Edge of Organization: Chaos and Complexity Theories of Formal Social Systems*. Thousand Oaks, CA: Sage Publications.
- Markos, A., & Himmel, J. (2016). *Using sheltered instruction to support English learners*. Washington, DC: Center for Applied Linguistics.
- Marshall, D. F. (1986), The question of an official language: Language rights and the English language amendment. *International Journal of the Sociology of Language*, 60, 7-76. https://doi.org/10.1515/ijsl.1986.60.7
- Martin-Beltrán, M., & Peercy, M. M. (2014). Collaboration to teach English language learners:

 Opportunities for shared teacher learning. *Teachers and Teaching: Theory and Practice*,

 20(5), 721–737. https://doi.org/10.1080/13540602.2014.885704
- Martin, S. D., & Dismuke, S. (2017). Investigating differences in teacher practices through a complexity theory lens: The influence of teacher education. *Journal of Teacher Education*, 69(1), 22–39. https://doi.org/10.1177/0022487117702573
- Maxwell, J. A. (2010). Validity: How might you be wrong? In W. Luttrell (Ed.), *Qualitative* educational research: Readings in reflexive methodology and transformative practice (pp. 279-287). New York, NY: Routledge.
- McIntyre, E., Kyle, D., Chen, C. T., Muñoz, M., & Beldon, S. (2010). Teacher learning and ELL reading achievement in sheltered instruction classrooms: Linking professional development to student development. *Literacy Research and Instruction*, 49(4), 334-351. http://dx.doi.org/10.1080/19388070903229412
- Mellom, P. J., Straubhaar, R., Balderas, C., Ariail, M., & Portes, P. R. (2018). "They come with nothing:" How professional development in a culturally responsive pedagogy shapes

- teacher attitudes towards Latino/a English language learners. *Teaching and Teacher Education*, 71, 98–107. https://doi.org/10.1016/j.tate.2017.12.013
- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation* (3rd ed.). San Francisco, CA: Jossey-Bass.
- Meyer, C.K., Mahalingappa L.J., & Brugar K.A. (2019). Thinking inside the box: Using graphic novels to English language learners in the social studies classroom. In L. de Oliveira L.,
 K. Obenchain, R. Kenney & A. Oliveira (Eds.) *Teaching the Content Areas to English Language Learners in Secondary Schools. English Language Education* (Vol 17, pp 311-325). https://doi.org/10.1007/978-3-030-02245-7 11
- Mizell, H., Hord, S., Killion, J., & Hirsh, S. (2011). New standards put the spotlight on professional learning. *Journal of Staff Development*, 32(4), 10-12.
- Molle, D. (2013). Facilitating professional development for teachers of English language learners. *Teaching and Teacher Education*, *29*, 197-207. http://dx.doi.org/10.1016/j.tate.2012.10.002
- Moughamian, A. C., Rivera, M. O., & Francis, D. J. (2009). *Instructional models and strategies* for teaching English language learners. Portsmouth, NH: RMC Research Corporation, Center on Instruction.
- Nagy, W., & Townsend, D. (2012). Words as tools: Learning academic vocabulary as language acquisition. *Reading Research Quarterly*, 47(1), 91–108. https://doi.org/10.1002/RRQ.011
- National Center for Education Statistics (1992). *Digest of Educational Statistics, 1992*. Table 46: Enrollment in public elementary and secondary schools, by race or ethnicity and State: Fall 1986 and fall 1990. Washington, DC: U.S. Government Printing Office.

- Northeast State (1975). Northeast State Register. *The Division of Administrative Procedure of Northeast State*, 7(9), 1-56.
- Northeast State Department of Education (2018a). Approved bilingual waiver, 2017-18.

 Downloaded on January 20, 2019 from

 https://xx.gov/education/bilingual/policy/ApprovedWaiverRequests1718.pdf
- Northeast State Department of Education (2018b). DOE data report—2017-18 enrollment district reported data. Downloaded on January 20, 2019 from https://www.xx.gov/education/data/enr/enr18/county2.htm
- Northeast State Department of Education (2018c). English language learners in Northeast State.

 Downloaded on January 20, 2019 from

 https://www.state.xx.us/education/bilingual/policy/infographic.html
- Northeast State Office of Planning (1993). Population trend and locational analysis (Doc 100), Author.
- O'Hara, S., Pritchard, R., Huang, C., & Pella, S. (2013). The teaching using technology studio:

 Innovative professional development to meet the needs of English learners. *TESOL Journal*, 4(2), 274-294. https://doi.org/10.1002/tesj.58
- Opfer, V. D., & Pedder, D. (2011). Conceptualizing teacher professional learning. *Review of Educational Research*, 81(3), 376-407. https://doi.org/10.3102/0034654311413609
- Ovando, C. J. (2003). Bilingual education in the United States: Historical development and current issues. *Bilingual Research Journal*, *27*(1), 1-24.

 http://dx.doi.org/10.1080/15235882.2003.10162589
- Pappamihiel, N. E. (2002). English as a second language students and English language anxiety:

 Issues in the mainstream classroom. *Research in the Teaching of English*, 36(3), 327-355.

- Pappamihiel, E. (2007). Helping preservice content-area teachers relate to English language learners: An investigation of attitudes and beliefs. *TESL Canada Journal*, 24(2), 42-60. https://doi.org/10.18806/tesl.v24i2.138
- Pardini, P. (2006). In one voice: Mainstream and ELL teachers work side-by-side in the classroom teaching language through content. *Journal of Staff Development*, 27(4), 20-25.
- Parra, E. B., Evans, C. A., Fletcher, T., & Combs, M. C. (2014). The psychological impact of English language immersion on elementary age English language learners. *Journal of Multilingual Education Research*, 5(4), 33–65.
- Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). Thousand Oaks, CA: SAGE Publications.
- Patton, M. Q. (2015). *Qualitative research & evaluation methods: Integrating theory and practice* (4th ed.). Thousand Oaks, CA: SAGE Publications.
- Patton, K., Parker, M., & Tannehill, D. (2015). Helping teachers help themselves: Professional development that makes a difference. *NASSP Bulletin*, *99*(1), 26–42. https://doi.org/10.11772F0192636515576040
- Pawan, F., & Ortloff, J. H. (2011). Sustaining collaboration: English-as-a-second-language, and content-area teachers. *Teaching & Teacher Education*, 27(2), 463-471.

 https://doi.org/10.1016/j.tate.2010.09.016
- Pawan, F., & Sietman, G. B. (2007). *Helping English language learners succeed in middle and high schools*. Alexandria, VA: Teachers of English to Speakers of Other Languages.

- Pease-Alvarez, L., & Samway, K. D. (2010). Working with the system: Teachers of English learners negotiating a literacy instruction mandate. *Language Policy*, *9*(4), 313-334. https://doi.org/10.1007/s10993-010-9180-5
- Peercy, M. M., Ditter, M., & Destefano, M. (2016). "We need more consistency": Negotiating the division of labor in ESOL-mainstream teacher collaboration. *TESOL Journal*, 8(1), 215-239. https://doi.org/10.1002/tesj.269
- Peercy, M. M., Martin-Beltrán, M., Silverman, R. D., & Nunn, S. J. (2015). "Can I ask a question?" ESOL and mainstream teachers engaging in distributed and distributive learning to support English language learners' text comprehension. *Teacher Education Quarterly*, 42(4), 33–58
- Pellegrino, J. W., & Hilton, M. L. (2012). Education for life and work: developing transferable knowledge and skills in the 21st Century. Washington, DC: National Academies Press.

 Retrieved from http://www.nap.edu/read/13398/chapter/1
- Penuel, W. R., Fishman, B. J., Yamaguchi, R., & Gallagher, L. P. (2007). What makes professional development effective? Strategies that foster curriculum implementation. *American Educational Research Journal*, 44(4), 921-958.

 https://doi.org/10.3102/0002831207308221
- Penuel, W. R., Gallagher, L. P., & Moorthy, S. (2011). Preparing teachers to design sequences of instruction in Earth systems science: A comparison of three professional development programs. *American Educational Research Journal*, 48(4), 996-1025.
 https://doi.org/10.3102/0002831211410864

- Pettit, S. K. (2011). Teachers' beliefs about English Language Learners in the mainstream classroom: A review of the literature. *International Multilingual Research Journal*, *5*(2), 123-147. https://doi.org/10.1080/19313152.2011.594357
- Piaget, J. (1977). The development of thought: Equilibrium of cognitive structures. Translated by A. Rosin. New York, NY: Viking.
- Polat, N. (2010). A comparative analysis of pre- and in-service teacher beliefs about readiness and self-competency: Revisiting teacher education for ELLs. *System*, *38*(2), 228-244. https://doi.org/10.1016/j.system.2010.03.004
- Polly, D., McGee, J., Wang, C., Martin, C., Lambert, R., & Pugalee, D. K. (2015). Linking professional development, teacher outcomes, and student achievement: The case of a learner-centered mathematics program for elementary school teachers. *International Journal of Educational Research*, 72, 26-37. http://dx.doi.org/10.1016/j.ijer.2015.04.002
- Porter, A., McMaken, J., Hwang, J., & Yang, R. (2011). Common core standards: The New US intended curriculum. *Educational Researcher*, 40(3), 103-116. https://doi.org/10.3102/0013189X11405038
- Protheroe, N. (2011). Effective instruction for English-language learners. *Principal*, 90(3), 26-29.
- Pu, C. (2012). Narrative inquiry: Preservice teachers' understanding of teaching English learners.

 AILACTE Journal, 9(1), 1-18.
- Putnam, R. T., & Borko, H. (2000). What do new views of knowledge and thinking have to say about research on teacher learning? *Educational Researcher*, 29(1), 4-15. https://doi.org/10.3102/0013189X029001004

- Quick, H., Holtzman, D., & Chaney, K. (2009). Professional development and instructional practice: Conceptions and evidence of effectiveness. *Journal of Education for Students*Placed at Risk, 14(1), 45-71. https://doi.org/10.1080/10824660802715429
- Rahman, A., Hoban, G., & Nielsen, W. (2014). *Transcending teacher professional development:*From determinism to complexity. The Asian Conference on Education 2014 Official

 Conference Proceedings (p. 15-30). Nagoya, Japan: The International Academic Forum.
- Reeves, J. R. (2006). Secondary teacher attitudes toward including English-language learners in mainstream classrooms. *The Journal of Educational Research*, 99(3), 131-143. https://doi.org/10.3200/JOER.99.3.131-143
- Reeves, J. (2009). Teacher investment in learner identity. *Teaching and Teacher Education*, 25(1), 34-41. https://doi.org/10.1016/j.tate.2008.06.003
- Roehrig, G. H., Michlin, M., Schmitt, L., MacNabb, C., & Dubinsky, J. M. (2012). Teaching neuroscience to science teachers: Facilitating the translation of inquiry-based teaching instruction to the classroom. *CBE Life Sciences Education*, *11*(4), 413-424.

 https://doi.org/10.1187/cbe.12-04-0045
- Rodela, K., Rodriguez-Mojica, C., & Cochrun, A. (2019). 'You guys are bilingual aren't you?'

 Latinx educational leadership pathways in the new Latinx diaspora. *International Journal of Leadership in Education*, 1-24.

 https://doi.org/10.1080/13603124.2019.1566577
- Rodriguez, A. J. (2010). Exposing the impact of opp(reg)ressive policies on teacher development and on student learning. *Cultural Studies of Science Education*, *5*(4), 923-940. https://doi.org/10.1007/s11422-010-9281-7
- Rumbaut, R. G., Massey, D. S., & Bean, F. D. (2006). Linguistic life expectancies: Immigrant

- language retention in Southern California. *Population and Development Review*, 32(3), 447-460. https://doi.org/10.1111/j.1728-4457.2006.00132.x
- Rushton, G., Lotter, C., & Singer, J. (2011). Chemistry teachers' emerging expertise in inquiry teaching: The effect of a professional development model on beliefs and practice. *Journal of Science Teacher Education*, 22(1), 23-52. https://doi.org/10.1007/s10972-010-9224-x
- Russell, F. A. (2012). A culture of collaboration: Meeting the instructional needs of adolescent English language learners. *TESOL Journal*, *3*(3), 445-468. https://doi.org/10.1002/tesj.24
- Russell, F. A. (2014). Collaborative literacy work in a high school: Enhancing teacher capacity for English learner instruction in the mainstream. *International Journal of Inclusive Education*, *18*(11), 1189-1207. https://doi.org/10.1080/13603116.2014.884642
- Russell, F. A. (2015). Learning to teach English learners: Instructional coaching and developing novice high school teacher capacity. *Teacher Education Quarterly*, 42(1), 27-47.
- Saldaña, J. (2009). *The coding manual for qualitative researchers*. Thousand Oaks, CA: Sage Publications.
- Salomone, R. C. (2012). Educating English Learners: Reconciling bilingualism and accountability. *Harvard Law & Policy Review*, *6*(1), 115-145. Retrieved from http://harvardlpr.com/wp-content/uploads/2013/05/6.1 6 Salomone.pdf
- Samson, J. F., & Collins, B. A. (2012). Preparing all teachers to meet the needs of English

 Language Learners: Applying research to policy and practice for teacher effectiveness.

 Retrieved from http://files.eric.ed.gov/fulltext/ED535608.pdf
- Samson, J. F., & Lesaux, N. K. (2015). Disadvantaged language minority students and their teachers: A national picture. *Teachers College Record*, 117(2), 1-26.

- Santau, A. O., Secada, W., Maerten-Rivera, J., Cone, N., & Lee, O. (2010). US urban elementary teachers' knowledge and practices in teaching science to English language learners:

 Results from the first year of a professional development intervention. *Science Education*, 95(5), 771-793. https://doi.org/10.1080/09500690903280588
- Schleppegrell, M. J. (2001). Linguistic features of the language of schooling. *Linguistics and Education*, 12(4), 431-459. https://doi.org/10.1016/S0898-5898(01)00073-0
- Schleppegrell, M. (2004). *Language of schooling: A functional linguistics perspective*. Mahwah, NJ: Lawrence Erlbaum.
- Schleppegrell, M. J., Achugar, M., & Oteíza, T. (2004). The grammar of history: Enhancing content–based instruction through a functional focus on language. *TESOL Quarterly*, 38(1), 67-93. https://doi.org/10.2307/3588259
- Settlage, J., Gort, M., & Ceglie, R. J. (2014). Mediated language immersion and teacher ideologies: Investigating trauma pedagogy within a "Physics in Spanish" course activity. *Teacher Education Quarterly*, 41(3), 47–66.
- Shanahan, T., & Shea, L. M. (2012). Incorporating English language teaching through science for K-2 teachers. *Journal of Science Teacher Education*, 23(4), 407-428. https://doi.org/10.1007/s10972-012-9276-1
- Shapiro, S. (2014). "Words that you said got bigger": English language learners' lived experiences of deficit discourse. *Research in the Teaching of English*, 48(4), 386-406.
- Sharkey, J., & Layzer, C. (2000). Whose definition of success? Identifying factors that affect English language learners' access to academic success and resources. *TESOL Quarterly*, 34(2), 352-368. https://doi.org/10.2307/3587961

- Shea, L. M., Shanahan, T. B., Gomez-Zwiep, S., & Straits, W. (2012). Using science as a context for language learning: Impact and implications from two professional development programs. *Journal of Science Education*, *16*(2), 1-29.
- Shin, S. J. (2013). *Bilingualism in schools and society: Language, identity, and policy*. New York, NY: Routledge.
- Shin, F. H., & Krashen, S. (1996). Teacher attitudes towards the principles of bilingual education and toward students' participation in bilingual programs: Same or different? *Bilingual Research Journal*, 20(1), 45-53. https://doi.org/10.1080/15235882.1996.10668619
- Short, D., & Echevarría, J. (1999). *The Sheltered Instruction Observation Protocol: A tool for teacher-researcher collaboration and professional development* (Educational Practice Rep. No. 3). Santa Cruz, CA: Center for Research on Education, Diversity & Excellence. Retrieved from http://crede.berkeley.edu/products/print/erics/9909-short-SIOP.pdf
- Short, D. J., Echevarría, J., & Richards-Tutor, C. (2011). Research on academic literacy development in sheltered instruction classrooms. *Language Teaching Research*, *15*(3), 363-380. https://doi.org/10.1177/1362168811401155
- Short, D. J., Fidelman, C. G., & Louguit, M. (2012). Developing academic language in English language learners through sheltered instruction. *TESOL Quarterly*, 46(2), 334-361. https://doi.org/10.1002/tesq.20
- Short, D. J., Vogt, M., & Echevarría, J. (2011). *The SIOP Model for teaching science to English learners*. Boston, MA: Pearson.
- Singer, J., Lotter, C., Feller, R., & Gates, H. (2011). Exploring a model of situated professional development: Impact on classroom practice. *Journal of Science Teacher Education*, 22(3), 203-227. https://doi.org/10.1007/s10972-011-9229-0

- Skovdal, M., & Cornish, F. (2015). *Qualitative research for development*. Warwickshire, UK: Practical Action Publishing. http://dx.doi.org/10.3362/9781780448534
- Snow, C. E., & Uccelli, P. (2009). The challenge of academic language. In D. R. Olson & N. Torrance (Eds.), *The Cambridge handbook of literacy* (pp. 112–133). New York, NY: Cambridge University Press.
- Sobul, D. (1995). Specially Designed Academic Instruction in English. Retrieved from http://files.eric.ed.gov/fulltext/ED391357.pdf
- Soine, K. M., & Lumpe, A. (2014). Measuring characteristics of teacher professional development. *Teacher Development*, *18*(3), 303-333. https://doi.org/10.1080/13664530.2014.911775
- Song, S., & Samimy, K. (2015). The beliefs of secondary content teachers of English language learners regarding language learning and teaching. *International Journal of TESOL and Learning*, 4(1), 3-19.
- Sparks, D., & Hirsh, S. (2000). A national plan for improving professional development.

 Alexandria, VA: National Staff Development Council.
- Spradley, J. P. (1980). Participant observation. New York, NY: Holt, Reinhart and Winston.
- Stephens, C., & Johnson, D. C. (2015). "Good teaching for all students?": Sheltered instruction programming in Washington state language policy. *Language and Education*, 29(1), 31-45. https://doi.org/10.1080/09500782.2014.924965
- Stein, M. K., Smith, M. S., & Silver, E. (1999). The development of professional developers:

 Learning to assist teachers in new settings in new ways. *Harvard Educational* Review,

 69(3), 237-270. https://doi.org/10.17763/haer.69.3.h2267130727v6878

- Strom, K. J. (2015). Teaching as assemblage: Negotiating learning and practice in the first year of teaching. *Journal of Teacher Education*, 66(4), 321-333. https://doi.org/10.11772F0022487115589990
- Supovitz, J. A., Mayer, D. P., & Kahle, J. B. (2000). Promoting inquiry-based instructional practice: The longitudinal impact of professional development in the context of systemic reform. *Educational Policy*, *14*(3), 331-356.

 https://doi.org/10.1177/0895904800014003001
- Supovitz, J., & Turner, H. (2000). The effects of professional development on science teaching practices and classroom culture. *Journal of Research in Science Teaching*, *37*(9), 963-980. https://doi.org/10.1002/1098-2736(200011)37:9<963::AID-TEA6>3.0.CO;2-0
- Takeuchi, M., & Esmonde, I. (2011). Professional development as discourse change: Teaching mathematics to English learners. *Pedagogies: An International Journal*, *6*(4), 331-346. https://doi.org/10.1080/1554480X.2011.604904
- Taie, S., & Goldring, R. (2017). Characteristics of public elementary and secondary schools in the United States: Results from the 2015–16 National Teacher and Principal Survey (NCES 2017–071). Washington, DC: U.S. Department of Education, National Center for Education Statistics.
- Téllez, K., & Waxman, H. (2006). Preparing quality teachers for English language learners: An overview of the critical issues. In K. Téllez & H. Waxman (Eds.), *Preparing quality teachers for English language learners: Research, policies, and practices* (pp. 1-22). Mahwah, NJ: Lawrence Erlbaum.
- Townsend, D. R., Filippini, A., Collins, P., & Biancarosa, G. (2012). Evidence for the importance of academic word knowledge for the academic achievement of diverse

- middle school students. *Elementary School Journal*, *112*(3), 497-518. https://doi.org/10.1086/663301
- Turgut Dost, G. (2016). Preparing linguistically responsive teachers through experiential foreign language tasks: A phenomenological study. *Cogent Education*, *3*(1), 1-20. https://doi.org/10.1080/2331186X.2016.1169614
- Turkan, S., de Oliveira, L. C., Lee, O., & Phelps, G. (2014). Proposing a knowledge base for teaching academic content to English language learners: Disciplinary linguistic knowledge. *Teachers College Record*, 116(3), 1-30.
- Turkan, S., & Schramm-Possinger, M. (2014). Teaching content to English learners in the era of the Common Core standards. *R & D Connections*, 23, 1-10.
- U.S. Census Bureau (2018). Quick Facts: Northeast State. Downloaded February 15, 2019 from https://www.census.gov/quickfacts/fact/table/Northeast/RHI825217
- Valdés, G., Bunch, G., Snow, C., & Lee, C. (2005). Enhancing the development of students' language(s). In L. Darling-Hammond & J. Bransford (Eds.), *Preparing teachers for a changing world: What teachers should learn and be able to do* (pp. 126-168). San Francisco: Jossey-Bass.
- van den Bergh, L., Denessen, E., Hornstra, L. Voeten, M., & Holland, R. W. (2010). The implicit prejudiced attitudes of teachers: Relations to teacher expectation and the ethnic achievement gap. *American Educational Research Journal*, 47(2), 497-527. https://doi.org/10.31022F0002831209353594
- Vaughn, S., Martinez, L.R., Linan-Thompson, S., Reutebuch, C.K., Carlson, C.D., & Francis, D.J. (2009). Enhancing social studies vocabulary and comprehension for seventh-grade

- English language learners: Findings from two experimental studies. *Journal of Research* on *Educational Effectiveness*, 2(4), 297–324.
- Vescio, V., Ross, D., & Adams, A. (2008). A review of research on the impact of professional learning communities on teaching practice and student learning. *Teaching and Teacher Education*, 24(1), 80-91. https://doi.org/10.1016/j.tate.2007.01.004
- Villegas, A. M., & Lucas, T. (2002). Preparing culturally responsive teachers: Rethinking the curriculum. *Journal of Teacher Education*, *53*(1), 20-32. https://doi.org/10.1177/0022487102053001003
- Villegas, A. M., & Lucas, T. (2007). Preparing culturally and linguistically responsive teachers. *Educational Leadership*, 64(6), 28-33.
- Villegas, A. M., Strom, K., & Lucas, T. (2012). Closing the racial/ethnic gap between students of color and their teachers: An elusive goal. *Equity & Excellence in Education*, 45(2), 283-301. https://doi.org/10.1080/10665684.2012.656541
- Villegas, A. M., SaizdeLaMora, K., Martin, A. D., & Mills, T. (2018). Preparing future mainstream teachers to teach English language learners: A review of the empirical literature. *The Educational Forum*, 82(2), 138–155.
 https://doi.org/10.1080/00131725.2018.1420850
- Vygotsky, L. (1978). Interaction between learning and development. In M. Gauvain & M. Cole (Eds.) *Readings on the development of children* (2nd ed.) (pp. 29-36). New York, NY: W.H. Freeman and Company.
- Vygotsky, L. S. (1987). Thinking and speech. In R.W. Rieber & A.S. Carton (Eds.), *The collected works of L.S. Vygotsky, Volume 1: Problems of general psychology* (pp. 39–285). New York, NY: Plenum Press.

- Wade, S. E., Fauske, J. R., & Thompson, A. (2008). Prospective teachers' problem solving in online peer-led dialogues. *American Educational Research Journal*, 45(2), 398-442. http://dx.doi.org/10.3102/0002831207308224
- Waldrop, M. M. (1992). Complexity: The emerging science at the edge of order and chaos. New York, NY: Simon & Schuster.
- Walker, C. L., Ranney, S., & Fortune, T. W. (2005). Preparing preservice teachers for English language learners: A content-based approach. In D. J. Tedick (Ed.), *Second language teacher education: International perspectives* (pp. 313-333). Mahwah, NJ: Lawrence Erlbaum Associates.
- Walker, A., Shafer, J., & Iiams, M. (2004). 'Not in my classroom': Teacher attitudes towards

 English language learners in the mainstream classroom. *NABE Journal of Research and*Practice, 2(1), 130-160.
- Walker-Dalhouse, D., Sanders, V., & Dalhouse, A. D. (2009). A university and middle-school partnership: Preservice teachers' attitudes toward ELL students. *Literacy Research and Instruction*, 48(4), 337-349. http://dx.doi.org/10.1080/19388070802422423
- Webster-Wright, A. (2009). Reframing professional development through understanding authentic professional learning. *Review of Educational Research*, 79(2), 702-739. http://dx.doi.org/10.3102/0034654308330970
- Wee, B., Shepardson, D., Fast, J., & Harbor, J. (2007). Teaching and learning about inquiry:

 Insights and challenges in professional development. *Journal of Science Teacher Education*, 18(1), 63-89. https://doi.org/10.1007/s10972-006-9031-6

- Wheatley, K.F. (2002). The potential benefits of teacher efficacy doubts for educational reform.

 *Teaching and Teacher Education, 18(1), 5-22. https://doi.org/10.1016/S0742-051X(01)00047-6
- WIDA Consortium. (2014). 2012 Amplification of the English language development standards, kindergarten-grade 12. Madison, WI: Board of Regents of the University of Wisconsin System.
- Wilson, S. M., & Berne, J. (1999). Chapter 6: Teacher learning and the acquisition of professional knowledge: An examination of research on contemporary professional development. *Review of Research in Education*, *24*(1), 173-209. https://doi.org/10.3102/0091732X024001173
- Wolbers, K. A., Dostal, H. M., Skerrit, P., & Stephenson, B. (2017). The impact of three years of professional development on knowledge and implementation. *Journal of Educational Research*, 110(1), 61-71. https://doi.org/10.1080/00220671.2015.1039112
- Wong-Fillmore, L., & Snow, C. (2000). What teachers-need to know about language.

 Washington, DC: ERIC Clearinghouse on Language and Linguistics
- Wong-Fillmore, L., & Snow, C. (2005). What teachers need to know about language. In C. T. Adger, C. E. Snow & D. Christian (Eds.), *What teachers need to know about language* (pp. 7-54). Washington, DC: Center for Applied Linguistics.
- Wright, W. E. (2005). Evolution of federal policy and implications of No Child Left Behind for language minority students. Tempe, AZ: Language Policy Research Unit, Education Policy Studies Laboratory, Arizona State University.
- Wright-Maley, C., & Green, J.D. (2015). Experiencing the needs and challenges of ELLs:

 Improving knowledge and efficacy of pre-service teachers through the use of a language

- immersion simulation. *Cogent Education*, *2*(1), 1-17. https://doi.org/10.1080/2331186X.2015.1030176
- Yin, R. K. (2015). *Qualitative research from start to finish*. New York, NY: Guilford Publications.
- Yoon, B. (2008). Uninvited guests: The influence of teachers' roles and pedagogies on the positioning of English language learners in the regular classroom. *American Educational Research Journal*, 45(2), 495-522. http://dx.doi.org/10.3102/0002831208316200
- Yoon, K.S., Duncan, T., Lee Wen-Yu, S., Scarloss, B., & Shapley, K.L. (2007). Reviewing the evidence on how teacher professional development affects student achievement.

 Washington, DC: U.S. Department of Education, Institute of Education Sciences,

 National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Southwest. Retrieved from

 http://ies.ed.gov/ncee/edlabs/regions/southwest/pdf/rel_2007033.pdf
- Zhang, J., & Pelttari, C. (2014). Exploring the emotions and needs of English language learners: facilitating pre-service and in-service teachers' recognition of the tasks facing language learners. *Journal of Multilingual and Multicultural Development*, *35*(2), 179-194. https://doi.org/10.1080/01434632.2013.822505
- Zhang, S., & Stephens, V. (2013). Learning to teach English-language learners in mainstreamed secondary classrooms. *Teacher Education and Practice*, 26(1), 99-116.
- Zwiers, J. (2007). Teacher practices and perspectives for developing academic language.

 *International Journal of Applied Linguistics, 17(1), 93-116.

 https://doi.org/10.1111/j.1473-4192.2007.00135.x

Appendix A

First Interview Protocol—PD Facilitators

Thank you for meeting with me and agreeing to participate in this study. As we discussed in reviewing the consent documents, this study is for my doctoral dissertation at Montclair State University. The purpose of this interview is to learn about your experiences as an educator, the upcoming professional development sessions planned for district staff, and supports for and needs of the teachers who will participate in the sessions. Your responses will provide valuable insight and are helpful to me as the purpose of my study is to understand how teachers learn about Sheltered English Instruction from the district professional development sessions, and how that knowledge plays out in the teachers' classrooms.

I will audio record this interview session and take notes. I intend to use the information you provide in my research and writing. However, your name and all identifying information will be kept anonymous. What you tell me will remain confidential. I hope you will feel free to be candid in your responses. If you say anything during this session that you would like me to erase, just let me know and I will do so. Are you comfortable beginning the interview now?

BACKGROUND EXPERIENCES:

- 1. Tell me about yourself and your professional background.
- 2. Tell me about your experiences working with English Language Learners, previously as a teacher and now in this role.
- 3. Tell me about any prior preparation (can include pre-service) or pd you have received regarding SEI through the district or your own.
- 4. Please describe your responsibilities as it relates to organizing and facilitating the district's SEI pd? Is this a part of your job responsibility?
- 5. Please describe any previous experiences facilitating pd in this district (or other setting)?

SEI INITIATIVE:

- 1. What prompted the district to participate in the state's training-of-trainers SEI professional development initiative?
- 2. Please provide an overview of the district's (SEI) pd plan.
 - a. Follow-up...What knowledge and skills do you expect to be introduced? Why do you feel these topics/activities would be useful?
 - b. Follow-up...What other knowledge and skills did you originally plan to include in but did not address?
 - c. Follow-up...Did you find the state's training-of trainers program helpful to you in developing this pd plan?
 - d. Follow-up...Please tell me about the specific plan you have developed for the first PD session.

- 3. What are the district's goals and objectives in providing this SEI pd to teachers?
- 4. Please describe any previous district PD that were similar to the goals of the SEI pd?
- 5. Please describe the connection of the SEI PD initiative to any other district initiatives.
- 6. Please describe how teachers were/will be selected to participate in the district's SEI PD.
- 7. Please describe any follow-up support teachers will receive as it relates to the district's SEI PD initiative.
- 8. As you see it, what is the district's commitment to improving the education for English Language Learners?

Thank you. I appreciate your willingness to spend time talking with me today.

Appendix B

Second Interview Protocol—PD Facilitators

I'd like to thank you once again for being willing to participate in the interview aspect of my study. As I have mentioned to you before, your responses will provide valuable insight and are helpful to me as the purpose of my study is to understand how teachers learn about Sheltered English Instruction from the district professional development sessions, and how that knowledge plays out in the teachers' classrooms. This interview today will last approximately 30 to 45 minutes during which I will be asking you to reflect on your experience facilitating the three PD sessions, and your overall impression on how the PD went for you and the teachers.

I will audio record this interview session and take notes. I intend to use the information you provide in my research and writing. However, your name and all identifying information will be kept anonymous. What you tell me will remain confidential. I hope you will feel free to be candid in your responses. If you say anything during this session that you would like me to erase, just let me know and I will do so. Are you still ok with me recording (or not) our conversation today? ___Yes ___No

Before we begin the interview, do you have any questions? Are you comfortable beginning the interview now?

- 1. Describe what you found successful in organizing and facilitating the PD sessions.
- 2. Describe any challenges you might have encountered in organizing and facilitating the PD sessions.
- 3. What would be your ideal, if you had to do this again in the future how would you like to prepare for a PD session?
 - a. Follow-up...You prepared for the PD sessions in different ways. In reflecting back on how you prepared for PD sessions, did you have a preference in the preparation process?
- 4. Please identify any factors that may have facilitated teacher learning of SEI strategies.
- 5. Please identify any factors that may have limited teacher learning of SEI strategies.
- 6. What is the district's commitment to continuing the SEI professional development for the remainder of the year and/or for next school year?
- 7. What is your sense of commitment from the middle school principals to support the teachers who attended the three PD sessions?

Appendix C

Interview Protocol—Bilingual/ESL Supervisor

Thank you for meeting with me and agreeing to participate in this study. As we discussed in reviewing the consent documents, this study is for my doctoral dissertation at Montclair State University. The purpose of this interview is to learn about your experiences as an educator, background experience (e.g., professional, work with ELLs, familiarity with SEI strategies), district bilingual/ESL practices, and your vision and expected outcomes for the district's SEI professional development. Your responses will provide valuable insight and are helpful to me as the purpose of my study is to understand how teachers learn about Sheltered English Instruction from the district professional development sessions, and how that knowledge plays out in the teachers' classrooms.

I will audio record this interview session and take notes. I intend to use the information you provide in my research and writing. However, your name and all identifying information will be kept anonymous. What you tell me will remain confidential. I hope you will feel free to be candid in your responses. If you say anything during this session that you would like me to erase, just let me know and I will do so. Are you comfortable beginning the interview now?

BACKGROUND EXPERIENCES:

- 1. Tell me about yourself and your professional background.
- 2. Tell me about your experiences working with English Language Learners, previously as a teacher and now in this role.
- 3. Tell me about any prior preparation (can include pre-service) or pd you have received regarding SEI through the district or your own.

SEI INITIATIVE:

- 1. What prompted you to participate in the state's training-of-trainers SEI professional development initiative?
- 2. What prompted you to select the two ESL teachers to facilitate the district SEI training?
- 3. What are the district's goals and objectives in providing this SEI pd to teachers?
- 4. Please describe any previous district PD that were similar to the goals of the SEI pd?
- 5. Please describe the connection of the SEI PD initiative to any other district initiatives.
- 6. Please describe how teachers were/will be selected to participate in the district's SEI PD.
 - a. Follow up question...Why focus on the middle school teachers, specifically the Social Studies and Science content areas?
- 7. Please describe any follow-up support teachers may receive as it relates to the district's SEI PD initiative.
- 8. As you see it, what is the district's commitment to improving the education for English
- 9. Language Learners?

Appendix D

First Interview Protocol—Teachers

Thank you for meeting with me and agreeing to participate in this study. As we discussed in reviewing the consent documents, this study is for my doctoral dissertation at Montclair State University. The purpose of this interview is to learn about your experiences as an educator, your preparation and experience working with ELLs, and about the class I will observe. Your responses will provide valuable insight and are helpful to me as the purpose of my study is to understand how teachers learn about Sheltered English Instruction from the district professional development sessions, and how that knowledge plays out in the teachers' classrooms.

I will be audio recording this interview session and taking notes. I intend to use the information you provide in my research and writing. However, your name and all identifying information will be kept anonymous. What you tell me will remain confidential. I hope you will feel free to be candid in your responses. If you say anything during this session that you would like me to erase, just let me know and I will do so. Are you comfortable beginning the interview now?

TEACHERS' BACKGROUND EXPERIENCES

- 1. Tell me about your language background.
 - a. Do you speak a language other than English?
 - b. Where did you learn this language?
 - c. How fluent are you in this language?
 - d. To what extent do you use it?
 - e. Possible follow-up question...Tell me about your experience as an English Language Learner.
- 2. Have you traveled to a country where a language you don't understand was spoken? If so, what was this experience like for you?
- 3. Tell me about your teaching experiences in general?
 - a. How long have you been teaching?
 - b. How long have you been teaching at the middle school level?
 - c. Have you taught in other school districts?
- 4. Tell me about your teaching experience with English language learners?

TEACHERS KNOWLEDGE AND SKILLS FOR WORKING WITH ENGLISH LANGUAGE LEARNERS

1. Please describe any prior preparation (e.g., pre-service teacher education program, graduate courses, professional development) you've had to teach English language learners?

- 2. Tell me about your prior preparation (e.g., pre-service teacher education program, graduate courses, professional development) that was specifically focused on sheltered English instruction, if any.
 - a. Possible follow-up question...Describe your experience using sheltered English instructional strategies.

DISTRICT'S SEI PROFESSIONAL DEVELOPMENT INITIATIVE AND PERCEIVED PREPARATION FOR TEACHING ENGLISH LANGUAGE LEARNERS

- 1. How did you hear about the district's SEI PD initiative?
- 2. What prompted you to participate in it?
- 3. What do you want to get from your participation in the professional development session?
- 4. When you think about the English language learners in your classroom, how confident do you feel about teaching them?
- 5. What strengths do you feel you currently have for teaching English language learners?
- 6. Are there specific areas where you feel you need more support for working with English language learners? What are they?

CLASSROOM INFORMATION

- 1. How many English language learners do you currently teach?
 - a. Are they all in one class or are they placed across your different class sections?
 - b. Which class has the most English language learners?
- 2. Tell me about the class that we are scheduling for my visit
 - a. What is the class size?
 - b. How many ELLs are enrolled in the class?
 - c. What are the needs of these students?
 - d. What are their strengths?
- 3. What will you be teaching in this class when I visit it? If this is part of a larger unit, when did this unit begin? What have you addressed as part of this unit so far?

Thank you. I appreciate your willingness to spend time talking with me today.

Appendix E

Second Interview Protocol—Teachers

I'd like to thank you once again for being willing to participate in the interview aspect of my study. As I have mentioned to you before, your responses will provide valuable insight and are helpful to me as the purpose of my study is to understand how teachers learn about Sheltered English Instruction from the district professional development sessions, and how that knowledge plays out in the teachers' classrooms. The purpose of this second interview is to focus on your experience with the district's SEI professional development program (what was most helpful, most challenging), possible use of SEI strategies in your teaching (strategies that have worked well, strategies that have not worked well), and possible factors that may have facilitated and/or constrained your use of those strategies.

I will be audio recording this interview session and taking notes. I intend to use the information you provide in my research and writing. However, your name and all identifying information will be kept anonymous. What you tell me will remain confidential. I hope you will feel free to be candid in your responses. If you say anything during this session that you would like me to erase, just let me know and I will do so. Are you comfortable beginning the interview now?

Experience with District SEI Professional Development

- 1. Did the SEI PD sessions meet your needs as a learner (e.g., active engagement, use of prior knowledge, collaboration, relevance to classroom, and choice and type of activities)? How so?
 - a. Follow up...What activities did you find most helpful to your learning and teaching of ELL students?
- 2. What did you learn about ELLs and their experiences that you didn't already know before participating in the SEI PD sessions?
- 3. What did you learn or take away from the Day 1 SEI PD session, which focused on foundational skills and culture?
- 4. What did you learn or take away from the Day 2 SEI PD session, which focused on background knowledge and academic discussions?
- 5. What did you learn or take away from the Day 3 SEI PD session, which focused on resources and individualized assessment?

Use of Strategies from SEI Professional Development

- 1. Have you used any of the ideas from the Day 1 SEI PD session in your teaching?
 - a. If yes, please give an example.
 - b. Did that strategy, concept, or activity (e.g., factors affecting second language acquisition, lowering the affective filter, four domains of language, English language proficiency levels, content objectives and language objectives) enhance the participation or engagement of ELL students in your class? If so, please explain how.
 - c. If not, are you planning to use the SEI PD ideas shared from Day 1 in your future teaching? If yes, how so? If not, why not?
- 2. Have you used any of the ideas from the Day 2 SEI PD session in your teaching?
 - a. If yes, please give an example.
 - b. Did that strategy, concept, or activity (e.g., activating prior knowledge, building background knowledge, leveraging ELLs' native language, developing academic language and vocabulary, BICS, CALPS, grouping strategies) enhance the participation or engagement of ELL students in your class? If so, please explain how.
 - c. If not, are you planning to use the SEI PD ideas shared from Day 2 in your future teaching? If yes, how so? If not, why not?
- 3. Have you used any of the ideas from the Day 3 SEI PD session in your teaching?
 - a. If yes, please give an example.
 - b. Did that strategy, concept, or activity (e.g., scaffolds that provide sensory, graphic or interactive support; strategies, comprehensible input, el perrito bombero reading activity, assessing students in native language, assessment accommodations or modifications) enhance the participation or engagement of ELL students in your class? If so, please explain how.
 - c. If not, are you planning to use the SEI PD ideas shared from Day 3 in your future teaching? If yes, how so? If not, why not?
- 4. What else, if anything, would you have liked to see the SEI PD sessions address?
 - a. Why do you think these topics would be useful?

5. Do you think other teachers in your school would benefit from participating in similar SEI PD sessions? If so, how?

Factors Supporting or Hindering Use of SEI Strategies

- 1. Think from the initial SEI PD session up until today, have you received any kind of continued support or follow-up to help you use the ideas addressed from the SEI PD sessions in your teaching?
 - a. If so, please describe the support or follow-up.
 - b. How was this helpful to you, if at all?
- 2. What factors, if any, may hinder the use of sheltered instruction strategies in your teaching? How so?
 - a. Personal factors (e.g., teacher beliefs, teacher experiences, prior exposure to ELLs)
 - b. School related factors (e.g., school climate, school orientation to learning, administrative support)
 - c. Classroom/student related (e.g., classroom student behaviors, resources, class size, varied student academic levels, resources)
 - d. District related (e.g., curriculum, resources, policy, practices)
- 3. What factors, if any, may facilitate the use of sheltered instruction strategies in your teaching? How so?
 - a. Personal factors (e.g., teacher beliefs, teacher experiences, prior exposure to ELLs)
 - b. School related factors (e.g., school climate, school orientation to learning, administrative support)
 - c. Classroom/student related (e.g., classroom student behaviors, resources, class size, varied student academic levels, resources)
 - d. District related (e.g., curriculum, resources, policy, practices)
- 4. Overall, has participation in the SEI PD sessions changed your teaching practice? If so, how? If not, why not?
- 5. How and to what extent has the district supported your efforts to work with ELLs?
- 6. How and to what extent has the school supported your efforts to work with ELLs?

Appendix F

Third Interview Protocol—Teachers

I'd like to thank you once again for being willing to participate in the interview aspect of my study. As I have mentioned to you before, your responses will provide valuable insight and are helpful to me as the purpose of my study is to understand how teachers learn about Sheltered English Instruction from the district professional development sessions, and how that knowledge plays out in the teachers' classrooms. The purpose of this final interview is to discuss your preparedness for teaching ELLs, your lesson planning process, and the use of SEI strategies.

I will be audio recording this interview session and taking notes. I intend to use the information you provide in my research and writing. However, your name and all identifying information will be kept anonymous. What you tell me will remain confidential. I hope you will feel free to be candid in your responses. If you say anything during this session that you would like me to erase, just let me know and I will do so. Are you comfortable beginning the interview now?

Personal profile:

- 1. How do you identify yourself racially and ethnically?
- 2. How old are you?
- 3. Walk me through a typical day in your life?
 - a. Follow-up if needed...during our second interview you mentioned that you had another job. Can you tell me a little more about that?
- 4. (James only) Please clarify your years of teaching experience. You mentioned that you have taught 9.5 years, 7 of which has been in this district. So, am I correct in understanding that you worked one year at the high school level, one year at the middle school level, and those two years were in the same district in another state?

Teaching preparation:

- 1. What teaching certification do you have and when did you receive that certification?
- 2. How confident do you feel about teaching (history or science) to middle school students?
- 3. (Linda only) You mentioned during our first interview that you were a Teach for America teacher. Can you tell me more about your involvement with the organization?
 - a. Follow-up if needed...why did you choose to join Teach for America if you had completed a traditional university teacher preparation program.
- 4. Before you started the District SEI PD sessions, how confident were you about teaching ELLs?

- a. Follow-up...After completing the District SEI PD sessions, has your confidence for teaching ELLs the same or higher? If higher, what did you gain from those sessions that might account for the difference?
- 5. What type of preparation (preservice or in-service) have you had, if any, for teaching students with disabilities?
- 6. How confident do you feel about teaching students with disabilities who are placed in your class?
 - a. (Linda and Kathy only) Follow-up...is the additional person in your room a special education teacher or a paraprofessional?
- 7. Do you see some similarities between teaching students with disabilities and ELLs?

Needed supports:

- 1. (James only) In the second interview you mentioned that teachers "have to go above and beyond" to make sure the needs of individual students, such as ELLs, are addressed in your teaching, and that "sometimes we get so bogged down with everything else we have to do". Can you elaborate on this?
 - a. (James only) Follow-up...Is there anything that the school could do to remedy this situation?
- 2. (Linda and Kathy only) In our second interview you mentioned that finding time to explore instructional resources provided during the PD sessions and then incorporating those ideas in your own teaching was a challenge. Is there anything that the school could do to remedy this situation?
- 3. Are there opportunities to discuss the needs of ELL students in your classes with other teachers in the school?
 - a. (James and Linda only)...is Dwede (pseudonym) the student that is shared between the two of you?
- 4. Are there opportunities for you to meet and discuss the information learned from the District's SEI PD session with the teachers who attended the district's SEI PD session?
- 5. (James and Kathy only) Have you had an opportunity to reach out to the ESL teacher about your students?

6. Have you had an opportunity to review the Google shared resource folder developed by the Bilingual/ESL supervisor for participants who attended the District SEI PD session?

Impact of PD Sessions on teacher practice:

(James only) In the second interview you mentioned that your participation in the district's SEI PD sessions has changed your teaching. One example you gave is that you "think internally how I'm approaching this particular issue right now, not just for my ELL students but for all of my students." Could you give me an example of using the SEI PD ideas to think about the teaching of all your students, not just ELLs? (Remember the freedom of speech activity and the graffiti activity.)

Follow-up Questions for Observation 1:

- 1. What is the number of students you have in the class if everyone is present?
- 2. When you are planning a lesson, what are some factors that might influence how you structure a lesson? (e.g., pacing guide, curriculum, common planning lessons, information from PD sessions)
 - a. Follow-up...Do your students or class make-up influence your lesson planning?
 - b. Follow-up...Did participating in the SEI PD sessions influence how you plan your lessons? If so, please explain. If not, please explain.
- 3. (James only) During my first visit to your class, Lindaly (pseudonym) did not have her previously identified partner to carry out the activity (requiring pairs of students to answer a set of questions for each of four primary source documents). On the spot you assigned her to work with one of the other students who had no partners that day.
 - a. What were you thinking about when you paired these two students to work together? Had they previously worked together on other activities?
 - b. Who had you originally assigned Lindaly (pseudonym) to work with? What were you thinking about when you paired those two students to work together? Had they previously worked together on other activities?
 - c. Do you have Lindaly (pseudonym) sitting near your desk regularly? If so, why? Why did you have her and her partner work near your desk during that lesson?

- d. Who did Andriy (pseudonym) work with on that day? What was the basis for pairing him with her for the day's activity? Had they previously worked together on other activities?
- 4. What instructional differentiation, if any, did you do in this lesson for (insert ESL student's name)? Did you take anything special into consideration relative to (insert ESL student's name) when planning this lesson? How did (insert ESL student's name) do in this lesson?
- 5. Did you use any ideas addressed in the SEI PD sessions in today's lesson with the (insert ESL student's name) in this class? With the class as a whole?

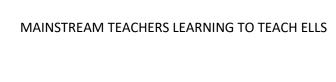
Follow-up Questions for Observation 2:

- 1. (James only) The young female who worked with Lindaly during my first observation was absent during my second observation and you had two other female students work with Lindaly on that day. What was the basis for this grouping?
- 2. What instructional differentiation, if any, did you do in this lesson for (insert ESL student's name)? Did you take anything special into consideration relative to (insert ESL student's name) when planning this lesson? How did (insert ESL student's name) do in this lesson?
- 3. Did you use any ideas addressed in the SEI PD sessions in today's lesson with the (insert ESL student's name) in this class? With the class as a whole?

Follow-up Questions for Observation 3:

- 1. (James only) I noticed that you had some students in your classroom working on their essays before class started. Can you tell me more about how that came about?
- 2. (James only) Please clarify for me what was the purpose of the third lesson I observed. From what you had written on the smartboard the students were being given time to write their essay. However, much of the time focused on a discussion on the similarities of discrimination in Europe in the 1930s and 1940s and the U.S. today, which seemed prompted by the email one of your students sent you about learning of the holocaust in her ELAs class.

- 3. What instructional differentiation, if any, did you do in this lesson for (insert ESL student's name)? Did you take anything special into consideration relative to (insert ESL student's name) when planning this lesson? How did (insert ESL student's name) do in this lesson?
- 4. Did you use any ideas addressed in the SEI PD sessions in today's lesson with the (insert ESL student's name) in this class? With the class as a whole?



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