UNDERSTANDING SECOND LANGUAGE ACQUISITION AS A MEANS TO ADDRESS THE LATINX ELL STUDENT OPPORTUNITY GAP

by
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Abstract

The Latinx English language learner (ELL) student opportunity gap is a persistent problem in the United States public school system that has spanned decades. Latinx ELL students graduate high school at lower rates than their English-proficient peers and their ELL peers from other ethno-linguistic backgrounds. Research indicates factors such as the dominant culture in the school setting, government policies, cultural mismatches, and teacher preparedness all impact mainstream teachers’ abilities to educate the Latinx ELL students in their classrooms. Metro High School is an English-Spanish bilingual public high school on the east coast of the United States. It is an AP for all, language and culture specialized, high school comprised of about 1,000 students, 38% of whom are designated as ELL students. A mixed methods needs assessment was conducted at Metro High School and found mainstream teachers were unprepared to meet the language needs of the ELL students in their classes. A partially mixed concurrent equal status design was used to conduct an intervention at Metro High School for 12 teachers in the English department who taught mixed classes of English-proficient and ELL students. The intervention was a 12-week professional development series rooted in second language acquisition (SLA) theory and the application of SLA in participants’ lesson plans. Using various comparative tests through SPSS, a priori coding, and emergent coding, the researcher found participants’ knowledge of SLA increased over the course of the professional development series, which led to an increase in SLA-based scaffolding in their lesson plans and an overall shift in teachers’ mindsets towards using scaffolding in their curriculum.

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Dedication

This dissertation is dedicated to the boys from the class of 2020 who never received their high school diplomas and all the other Latinx English language learners who were not given the opportunity to succeed.
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Executive Summary

This study focused on supporting mainstream, high school teachers working with English language learners (ELL). Currently, research on practitioner led, school and district level interventions for in-service mainstream teachers that focuses on instructional strategies for ELL students rooted in second language acquisition (SLA) is in its infancy (August et al., 2010; Bunch, 2013; Lucas, 2011). The majority of research on this problem of practice has focused on partnerships between universities and teachers earning master’s degrees or extra teaching credentials (Gebhard et al., 2011). This study, however, focused on the use of a professional development series to address the problem of practice facilitated by an insider-researcher with dual positionality as a scholar and practitioner. The study aimed to increase teacher knowledge of SLA and the application of SLA-based scaffolding into lesson plans in order to address the Latinx ELL student opportunity gap in a specific context.

Problem of Practice

The Latinx ELL student opportunity gap has existed in the United States for decades, but very little progress has been made in closing that gap (Brown & Chu, 2012; Clair 1995; Penfield, 1987). In comparison to their English-proficient peers and their ELL peers from other ethno-linguistic backgrounds, Latinx ELL students have lower standardized test scores (Ross et al., 2010), higher dropout rates (Menken, 2010), lower graduation rates (Chun & Dickson, 2011; Stamps & Bohon, 2006), lower post-secondary enrollment (Benner & Graham, 2011), and overall lower grade point averages (Niehaus & Adelson, 2014). Nationally, there is a 20% difference in graduation rates between ELL students and their English-proficient counterparts (Henry et al., 2008; U.S. Department of Education, 2018a). Some of the factors associated with the Latinx ELL student opportunity gap are the English-monolingualism movement and teacher
demographics (Marschall et al., 2011; Ogbu 1982), cultural mismatches (Delgado-Gaitan, 1994; Good et al., 2010), teacher disposition and expectations (Penfield, 1987; Reeves, 2006; Yoon, 2008), and mainstream teachers’ understanding of second language acquisition (Reeves 2006; Pappamihiel, 2002).

Factors Contributing to the Problem of Practice

After reviewing literature on the Latinx ELL student opportunity gap at the high school level, four major contributing factors were identified.

Dominant Culture

In the United States, the dominant culture mirrors the beliefs, values, and perspectives of the White, middle-class, patriarchal, English-monolingual culture (Ogbu, 1982; Tyack & Cuban, 1995). Given that most teachers and principals in the United States public school system are White, their own beliefs and perspectives generally align with the dominant culture (Pappamihiel, 2002). Some people do better in school than others because their culture is compatible with school culture (Lareau, 2011; Ogbu 1982), but this is not the case for the typical Latinx student.

English-only policies in various states and English-only education programs, which prohibit instruction in a child’s native language, are manifestations of the government’s and society’s endorsement of the dominant culture’s values (Good et al., 2011; Marschall et al., 2011). Additionally, legislation such as requiring proof of citizenship status for school enrollment demonstrates the resurgence of the anti-immigrant movement, rooted in protecting the dominant culture (Welch & Payne, 2018). Watson and Shapiro (2018) assert teachers struggle to divorce themselves from their English-monolingual ideologies. They argue some teachers are so indoctrinated in the dominant culture that they may not be able to recognize their own biases.
towards students whose cultures differ from that of the White, middle-class, patriarchal, English-monolinguial, US society.

**Government Policies**

With the shift towards outcomes and accountability under the No Child Left Behind Act (NCLB), the government and schools began using high stakes testing (Menken, 2010). Since the standardized tests were normed on native English speakers (Abedi & Dietel, 2004) and divorcing English language proficiency from academic knowledge on those tests is impossible (Giambo, 2010), schools with higher levels of ELL students are disproportionately labeled as failing and, subsequently, subject to punitive budget cuts (Menken, 2010).

Exacerbating the budget cuts at these schools is the high dropout rate among the Latinx ELL student population (Giambo, 2010). In an attempt to increase test scores and motivation, some states made a passing score on the standardized exam a graduation requirement (Menken, 2010). If a student did not pass the standardized exam by the time they graduated, they would receive a certificate of completion instead of a high school diploma (Jimerson et al., 2016). The result in these states was an increase in Latinx ELL students dropping out of high school or leaving the school to transfer to a GED program (Jimerson et al., 2010).

**Cultural Mismatches**

The dominant culture in the United States public school system places an emphasis on individualism, which counters the typical Latinx cultural belief in collectivism (Delgado-Gaitan, 1994; Good et al., 2010). *Familismo* is the term for the Latinx cultural practice that highlights the importance of unity, collaboration, and harmony. The cultural practices of familismo are in stark contrast to those of the United States public school system, which thrives on self-reliance and competition (Walker de Felix et al., 1993). Thus, Latinx ELL students are caught between the
dominant culture’s values and perceived path to success, and their Latinx values and perceived path to success (Delgado-Gaitan, 1994; Valdez, 2008). While ELL students perform higher when they sense their teacher values diversity and their culture (Brown & Chu, 2012), the predominantly White workforce and lack of multicultural training suggest these cultural mismatches will continue to obstruct Latinx ELL student performance.

**Teacher Preparedness**

Despite the increase in the ELL student population in the United States public schools, as of 2017, 31 states still had no required ELL-related courses for teacher licensure (Quintero & Hansen, 2017). Without the coursework on multiculturalism, cultural and linguistic responsiveness, instructional strategies for ELL students, or SLA, teachers are receiving their licensure regardless of their abilities to adequately educate the Latinx ELL students in their mainstream classrooms (Good et al., 2010). When teachers are not trained in SLA, they resort to focusing on grammar or watering down curriculum (Yoon, 2008) and are more likely to confuse a language barrier with a learning disability (Fernandez & Inserra, 2013).

Without adequate training on how to integrate SLA into mainstream classrooms, many institutions engage in track placement for ELL students, or the practice of placing students in different classes based on their abilities (Callahan, 2005; Kanno & Kangas, 2014). ELL students are disproportionately placed in low-tracked classes, often preventing them from taking AP courses or the courses needed for four-year colleges (Callahan, 2005). In addition, instructional practices like lecture-style delivery and homogenous small groups based on linguistic abilities, severely hinder an ELL student’s interactions and discourse with English-proficient peers, stripping the ELL student of the dialogical practice with the English language needed to learn (Brooks & Thurston, 2010; Vygotsky, 1978).
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Context and Background for the Intervention Study

Metro High School, a pseudonym, was in a mid-sized city on the east coast of the United States. This public school specialized in English-Spanish dual immersion and multicultural curriculum. Metro High School had about 1,000 students: 68% were Latinx and 38% were ELL students. Metro High School was an AP for all school, meaning all students, regardless of English proficiency levels, took at least two AP English classes before they graduated. In addition, the school also had a full-time English-Spanish bilingual family liaison. Despite these concerted efforts to counter factors associated with the Latinx ELL student opportunity gap, the ELL students at Metro High School graduated at a rate about 24% below their English-proficient peers.

To determine the contributing factors on which to focus the intervention study, a needs assessment was conducted. A mixed-methods survey was administered to 16 mainstream teachers at Metro High School. These teachers all taught English, history, math, or science, to classes comprised of English-proficient students and ELL students. In addition, three focus groups were held; two of the focus groups were with mainstream teachers and one was with ESL teachers. The findings from this needs assessment indicated teachers’ knowledge of SLA and their application of SLA to their instructional practices were the most salient and actionable contributing factors to the problem of the Latinx ELL student opportunity gap at Metro High School.

Prior to the start of the intervention study, the COVID-19 pandemic caused Metro High School to switch to virtual teaching. Metro High School did not re-open the building during the implementation of the intervention study, thus the intervention study took place entirely virtually instead of in-person, as originally planned.
Theoretical Framework

Vygotsky’s (1978) seminal work on language and cognitive development was the foundational theory that framed this intervention. Vygotsky (1978) posited that language is at the heart of learning and, therefore, humans learn through linguistic interactions with others. His theories assert that learning occurs in the learner’s zone of proximal development (ZPD), the metaphorical distance between a student’s potential developmental level and their actual developmental level. The ZPD is determined through a diagnostic assessment of an individual’s current level of learning and observation of that which can be accomplished with the help of a more knowledgeable peer. As the level of learning advances, the learner accomplishes independently what was previously accomplished with support or scaffolding. Continued learning is gauged through ongoing formative assessments.

In addition, five characteristics of successful professional development were used as the foundation for the organizational structure that framed this intervention. The works of Darling-Hammond, et al. (2015), Desimone and Garet (2017), Guskey (2002), and Clarke and Hollingsworth (2002) provided empirical data demonstrating effective professional development necessitates that it be contextualized, interactive, collaborative, reflective, and sustained.

Research Design and Methodology

This intervention was a professional development series delivered to 12 mainstream English teachers at Metro High School over the course of 12 weeks. There were six AP English teachers and six English I/II teachers. The professional development series consisted of an introduction session, five modules, and a concluding session. All the sessions were an hour long in a virtual meeting space. Each module was two weeks long. In the first week, participants learned about a specific topic of SLA. In between the first week and the second week,
participants would implement a lesson utilizing the new information they learned about SLA. When participants returned for week two of the module, they reflected independently in their reflective journals on their experiences implementing the SLA concept in a lesson, then shared in a whole group debrief conversation.

**Research Questions**

The following outcome evaluation research questions guided this intervention:

RQ1: To what extent, if any, does mainstream high school teachers’ knowledge of SLA increase after participation in a professional development series focused on SLA theory?

RQ2: In what ways, if any, did levels of SLA-based scaffolding in mainstream high school teachers’ lesson plans change after participation in reflective cycles on lesson design grounded in SLA theory?

The following process evaluation research questions were used to assess the intervention:

RQ1: To what extent was the professional development series implemented as planned?

RQ2: In what way, if any, did the grade level taught by participants affect their use of instructional strategies?

RQ3: To what extent, if any, were participants engaged in the professional development activities?

**Data Collection and Analysis**

This intervention was a partially mixed, concurrent, equal status design (Leech & Onwuegujuie, 2007). In accordance with Creswell and Plano-Clark’s (2018) four-step framework for conducting this type of mixed-methods intervention, the quantitative and qualitative data were collected and analyzed separately. The findings from those separate analyses were then compared to draw conclusions about the study.
The intervention utilized a pre- and post-SLA test and exit tickets to collect quantitative data. The pre- and post-SLA test consisted of 15 multiple choice questions and 10 true/false questions. It was administered during the introductory session and the concluding session. The exit tickets were Likert scale questions that participants answered at the end of every session. The pre- and post-SLA test was analyzed using a paired t-test and the exit tickets were analyzed by separating the data by subgroups: AP participants and English I/II. Then the Likert scale items were quantified and a t-test was run.

The intervention also used pre- and post-lesson plans, the researcher’s field notes, and reflective journals to collect qualitative data. The pre- and post-lesson plans were collected in the introduction session and the concluding session. These were analyzed using a priori coding, derived from Echevarría et al.’s (2008) SIOP® lesson plan model. The researcher’s field notes were typed at the end of each session. These field notes included the researcher’s own reflections as well as key transcriptions from the audio recording of the session. The reflective journals were completed during the second week of each module. The researcher’s field notes and the reflective journals were analyzed using emergent coding.

**Findings and Discussion**

The data showed an overall increase in mainstream high school teachers’ knowledge of SLA, with the highest gains in the understanding of the timeline of second language acquisition and identifying appropriate scaffolds to use with students at different levels of English-proficiency. There was also an increase in teachers’ use of SLA-based scaffolding in lesson plans. Teachers integrated new strategies such as different groupings and using students’ life experiences. After implementing these strategies, teachers self-reported an increase in engagement and work completion from their ELL students.
The process evaluation questions aimed to measure the fidelity of implementation, participant responsiveness, and initial use. Due to the COVID-19 pandemic and the multitude of unforeseen changes to schedules, curriculum, and day-to-day activities, there were significant changes to the implementation of the professional development series. These changes were in response to needs teachers expressed through conversation and exit ticket feedback, including a need for more time to process the information and more practice with the new content. Based on the data, there was no statistically significant difference in the attendance rates of AP participants and English I/II participants for the professional development sessions, but AP teachers perceived the content of the professional development series to be more useful than English I/II teachers.

Ultimately, the findings from the outcome evaluation are congruent with He et al.’s (2011) study, which found when teachers’ knowledge of SLA increases, so does the application of SLA theory to their teaching practices. Kanno and Kangas (2014) and Callahan (2005) found teachers were more likely to focus on grammar or give ELL students different assignments than their English-proficient peers in the same class, limiting their opportunities to learn. The increase in SLA knowledge, however, decreased the likelihood of alternative assignments, of which there was no evidence of in the present intervention study’s data. Reeves (2006) found when participants deem professional development ineffective, they stop attending. Thus, despite the difference between the AP participants’ perceived levels of usefulness and those of the English I/II participants, the statistically insignificant difference in attendance between these two groups demonstrates the participants felt the professional development series was effective and a good use of their time.
Conclusion and Implications

Metro High School was an English-Spanish bilingual public high school with a dual-immersion program, an AP-for-all policy, and a curriculum school-wide curriculum focused on multiculturalism. The school employed a full-time English-Spanish bilingual family liaison, used bilingual signage to celebrate the Latinx culture, and made translation services readily available for those who needed them. All these policies and practices work towards countering some of the contributing factors to the Latinx ELL student opportunity gap. Yet, this gap still existed there.

Participants in this study received licensure through a variety of ways, such as undergraduate work, alternative routes such as Teach for America, and master’s degree programs with local universities. Regardless of how they were prepared, all made an active decision to work at a school known for its high ELL student population. Despite the differences in preparation and their willingness to work at this specialized school, the findings from this study, such as the consistent attendance and growth in SLA knowledge, indicate a need for more professional development offerings centered on SLA. The participants were eager to learn and implement SLA-based teaching strategies, they simply needed the opportunity to learn how to do this.

As the numbers of Latinx immigrants coming into the United States increases, it is crucial that administrators and policy makers both help mainstream teachers better prepare themselves to provide ELL students with equal opportunities to learn. Providing in-service teachers with more effective SLA-based professional development and changing licensure requirements to include knowledge of SLA needs to be a priority in the United States public education system. Without this universal knowledge of SLA in mainstream classrooms, we are limiting the educational trajectory for a population that is growing exponentially.
Chapter 1

Understanding Second Language Acquisition as a Means to Address the Latinx ELL Student Opportunity Gap

The English language learner (ELL)\(^1\) student population is the fastest growing population in the United States K-12 public school system (Jiménez-Castellanos & García, 2017; Kanno & Kangas, 2014; Shin, 2018). According to the United States Department of Education (2018a), students classified as ELL students have difficulty speaking, reading, writing, and listening in the English language due to being born outside of the United States in a country with a native language other than English, or they come from environments where a language other than English is dominant.

An estimated one in four children in the United States public schools now comes from an immigrant family, most frequently from Mexico or Latin America (Brown & Chu, 2012). Latinx students, also referred to as Hispanic or Latino students by many districts and government agencies, comprise 77% of all ELL students and ELL students comprise 10% of the United States public school population (U.S. Department of Education, 2018a). Since the ELL student population is predominately composed of Latinx students, data about ELL students in general will be used and applied to the Latinx ELL student subgroup in this dissertation. In the 1990s the ELL student enrollment in United States public schools grew by 104%, while the overall student enrollment only grew by 13% (Callahan, 2005). Between fall 2000 and fall 2015 the Latinx

\(^1\) Other terms such as limited English proficient (LEP) and English learner (EL) have been used to describe students learning the English language as a second or additional language in policy and literature. Most recently, the term multilingual learner (ML) has emerged to describe English language learners. The term ML de-emphasizes the acquisition of the English language as a priority that other terms imply and highlights a student’s simultaneous acquisition of multiple languages. ELL is the term used in Union School District, a pseudonym, to identify English language learners and, for over a decade, was used by the federal government to identify this subgroup of students. In addition to being used in local and federal policy, the term ELL is also used in the majority of research referenced throughout this dissertation. Therefore, the term ELL will be used in this dissertation to identify students in the process of learning the English language.
population in the United States public school system grew by over one million students (Ross, Rouse, & Bratton, 2010; Sox, 2009; U.S. Department of Education, 2018a), but the number of English as a second language (ESL) teachers has not increased proportionately (Clair, 1995; George Washington University, 2013). According to a study conducted at George Washington University in 2013, less than 1% of teachers in the United States were certified to teach ESL, creating a ratio of one ESL certified teacher for every 150 ELL students. At the same time, efforts to expose ELL students to standards-based academic content and English-only policies have resulted in ELL students being pushed into mainstream classes before they may be linguistically or culturally ready (Pappamihiel, 2002; Reeves, 2006; Valadez, 2008).

For decades, the term achievement gap has been most frequently used when referring to the differences in academic performance between different subgroups of students (Ladson-Billings, 2007). The term achievement gap necessitates a comparison of standardized test scores, which focuses conversations on scholastic disparities (Ladson-Billings, 2007). Ladson-Billings (2007) argues the focus on scholastic disparities places blame on the lower-performing subgroup of students and frames the conversation with deficit language. The conversation on the achievement gap does not include the students’ cultural backgrounds, experiences, and the impact societal structures have had on the students’ affordances, effectivities, and overall opportunity to learn (Gee, 2008; McKnight, 2015). Therefore, in this dissertation the term opportunity gap will be used to describe the academic disparities, cultural mismatches, and society’s structural prejudices Latinx ELL students face within the United States school system and American school culture.

While the opportunity gap between Latinx ELL students and their English-proficient counterparts has been existent at all grade levels for decades, it widens longitudinally, making it
largest at the high school level (Brown & Chu, 2012; Fuligni, 1997). High school Latinx ELL students have lower standardized test scores (Niehaus & Adelson, 2014; Ross et al., 2010; Stamps & Bohon, 2006), higher dropout rates (Benner & Graham, 2011; Hill & Hawes, 2011; Jimerson, Patterson, Stein, & Babcock, 2016; Menken, 2010; Ross et al., 2010), lower graduation rates (Chun & Dickson, 2011; Stamps & Bohon, 2006), lower post-secondary enrollment (Benner & Graham, 2011), and overall lower grade point averages (Niehaus & Adelson, 2014) in comparison to both English-proficient students and ELL students from other ethno-linguistic backgrounds.

The low academic performance of Latinx ELL students at the high school level, and the subsequent high dropout rate have implications for individual districts and society at large (Chun & Dickson, 2011; Henry, Merten, Plunkett, & Sands, 2008; Jiménez-Castellanos & García, 2017). Jimerson et al. (2016) assert the low performance of the Latinx ELL student population in school means a loss of productivity for the economy. They found Latinx students who drop out of high school are more likely to have health issues, collect welfare, be on food stamps, and be involved in crime. Jimerson and colleagues (2016) also found each cohort of high school dropouts costs the state of California $6.3 billion in fiscal losses between the state and federal governments. From both an economic perspective and a social justice perspective, the Latinx ELL opportunity gap at the high school level is something that needs closer examination.

**Problem of Practice**

The high school Latinx ELL student opportunity gap is a persistent problem in the United States education system spanning decades with little improvement (Abramson, Pritchard, & Garcia, 1993; Brown & Chu, 2012; Callahan, 2005; Clair 1995; Office of Elementary and Secondary Education, 2016; Penfield, 1987; Wang & Goldschmidt, 1999). Nationally, there is a
20% difference between the graduation rates of ELL students and their English-proficient counterparts (Henry et al., 2008; U.S. Department of Education, 2018a). In 2017, the overall national graduation rate was 84% but the national graduation rate for ELL students was only 66% (U.S. Department of Education, 2018a). This trend is reflected in the graduation rates at Metro High School, a pseudonym, which was the context of this study. Common factors associated with the Latinx ELL student opportunity gap are the English-monolingualism movement and teacher demographics (Brown & Chu, 2012; Marschall, Rigby, & Jenkins, 2011; Ogbu 1982), cultural mismatches (Delgado-Gaitan, 1994; Good, Masewicz, & Vogel, 2010), teacher disposition and expectations (Cheatham, Jimenez-Silvia, Wodrich, & Kasai, 2014; Penfield, 1987; Reeves, 2006; Yoon, 2008), and mainstream teachers’ understanding of second language acquisition (Fernandez & Inserra, 2013; Reeves 2006; Pappamihiel, 2002).

**Theoretical Framework**

Bronfenbrenner’s (1979) ecological systems theory (EST) holds that different types of layered ecological environments influence human development. Bronfenbrenner (1979) defines ecological environments as “a nested arrangement of structures, each contained within the next” (p. 22). He identified four structures or systems: the microsystem, mesosystem, exosystem, and macrosystem (Bronfenbrenner, 1979). These four systems are represented as concentric circles around a focal individual, similar to a set of Russian or Matryoshka dolls. The Latinx ELL student opportunity gap has a vast array of contributing factors and a nested EST framework helps isolate those factors for deeper understanding.

The microsystem is the level of the nested EST where the focal individual plays a direct role through experiences and interactions with others (Bronfenbrenner, 1979). For example, a child studying with a parent would be an interaction that occurs in the child-family microsystem.
A child studying with peers would be another microsystem. A child interacting with the teacher at school also constitutes a microsystem. Together, these three microsystems form a school related mesosystem. The mesosystem is constituted by different microsystems that include the focal individual (Bronfenbrenner, 1979). The interaction and influence of two or more microsystems from the focal individual’s life adds a layer of complexity to the ecological environment (Bronfenbrenner, 1979). In a child’s life, a parent-teacher conference would be one example of a mesosystem interaction. This mesosystem would include the child-parent microsystem, child-teacher microsystem, and a parent-teacher dynamic, all of which are organized around the focal individual: the child.

Two additional layers of influential social interactions that impact the focal individual, but in which the focal individual cannot participate directly, are the exosystem and the macrosystem (Bronfenbrenner, 1979). School policy that affects the child is in the exosystem. While the focal individual, in this case a student, does not have any role in creating policy, policies influence the school and classroom in which the student learns. Similarly, societal cultural beliefs and ideologies that have an influence on the focal individual constitute the macrosystem. For example, cultural views on religion may influence access to science and sex education courses for a student.

Later in the development of the EST, Bronfenbrenner and Morris (2006) discussed a fifth system: the chronosystem. They define the chronosystem as any long-term changes that occur over the course of the focal individual’s lifetime at any level in the bioecological system. The chronosystem for a bioecological system with a child as the focal individual may include political movements, such as the Civil Rights Movement, or transience, such as physical family moves between different locations.
Literature Review

The following review of literature on the Latinx ELL student opportunity gap at the high school level explores contributing factors and their relationship to mainstream teachers. The theoretical framework for this literature review is the nested EST model with the mainstream teacher of ELL students as the focal individual. This literature review uses the term mainstream teachers to refer to teachers who instruct core-content courses (i.e., math, history, science and English) in English to classes containing both ELL students and English-proficient students (Penfield, 1987; Reeves, 2006). While the opportunity gap as a problem of educational practice focuses on the Latinx ELL student, the majority of the contributing factors discussed here are associated with mainstream teachers with whom the students interact directly in school, rather than the students themselves (Callahan, 2005; Fernandez & Inserra, 2013; Penfield, 1987; Reeves, 2006; Rizzuto, 2017; Yoon, 2008).

Culture of American Schools

Bronfenbrenner (1979) defined the macrosystem as the level of the EST where cultural beliefs and ideologies interact to influence the focal individual. Culture is comprised of the intangible, symbolic aspects of a group that distinguishes it from another group (Banks, 2016). These intangible ideas are the rules, values, and perspectives one group of people holds, differentiating them from other groups of people (Banks, 2016). For the focal individual of this literature review, the mainstream teacher, the macrosystem includes the culture of the institution of public schools in the United States as well as societal beliefs about race, language, and immigration status. In the latter part of the 19th century, the school system in the United States was founded on the principles of the White, middle-class, patriarchal, English-monolingual culture which was dominant at that time (Tyack & Cuban, 1995). During that time period, this
culture was identified as American. Since the culture of schools in the United States is still consistent with the White, middle-class, patriarchal, English-monolingual dominant culture that created the school system, it is referred to as American school culture in this dissertation (Ogbu, 1982; Tyack & Cuban, 1995).

**English-monolingualism bias and traditional teacher roles.** In the early 1900s, the United States declared English proficiency a requirement for citizenship, a federal policy to promote English-monolingualism (Marschall et al., 2011). While that legislation has since changed, the English-monolingual sentiment has not (Marschall et al., 2011). Current English-only laws in various states (Marschall et al., 2011) and English-only education programs prohibiting instruction in an ELL student’s native language (Good et al., 2010) have been manifestations of the government and society’s endorsement of an English-monolingual society. In her study on mainstream teachers’ dispositions towards ELL students, Reeves (2006) found that over 82% of the teachers would support legislation to make English the national language in the United States, exemplifying the English-monolingual influence on mainstream teachers.

In addition, Reeves (2006) also found 75% of teachers agree that students should not be allowed to join mainstream classrooms until they have a particular level of English proficiency. Yoon (2008) attributes this reluctance to work with ELL students in mainstream classrooms to the traditional roles in which society has placed teachers. Traditionally, mainstream teachers have been defined as teachers of mainstream, English-proficient students or content-specific teachers, whereas ESL teachers have been defined as the teachers solely responsible for instructing the ELL students (Clair, 1995; Good et al., 2010; Yoon, 2008). Despite growing linguistic diversity in the mainstream classroom, society’s definition of a mainstream teacher has yet to catch up (Walker & Stone, 2011; Walker de Felix, Waxman, Paige, & Huang, 1993). One reason for this
may be due to American school culture being perceived as static and unchanging as well as resistant to reform (Banks, 2016; Tyack & Cuban, 1995). Another reason may be persistent demographics or backgrounds of mainstream teachers, which remain 77% women and 80% White (U.S. Department of Education, 2017).

**Dominant culture and teacher demographics.** In addition to learning the English language and academic content in American schools, Latinx ELL students must learn the American school culture (Jiménez-Castellanos & Garcia, 2017). The culture within American schools mirrors that of the White, middle-class, English-monolingual American culture (Ogbu, 1982; Tyack & Cuban, 1995). In the 2015-2016 school year, 80% of all teachers and about 78% of school principals were White (U.S. Department of Education, 2017). The culture of American schools mirrors that of its majority teachers and administrators because most of those teachers grew up within this culture themselves (Pappamihiel, 2002). Some people do better than others in school because their culture is compatible with school culture (Lareau, 2011; Ogbu, 1982). While this is fortunate for mainstream teachers and some mainstream students because it reinforces their cultural norms, that is not the case for the typical Latinx ELL student in the United States public school system.

American school culture places great value on self-reliance and individualism, which contrasts starkly with the typical Latinx cultural beliefs of collectivism and *familismo* (Chun & Dickson, 2011; Delgado-Gaitan, 1994; Good et al., 2010; Henry et al., 2008; Penfield, 1987). *Familismo* is a Latinx cultural practice that emphasizes the importance of unity, collaboration, harmony and working towards the good of the whole family (Delgado-Gaitan, 1994; Henry et al., 2008). Mainstream teachers who embody the cultural values of the American schools, often
voice concern about familismo and believe parents to be coddling their children, stifling their child’s growth as an individual and as a student (Penfield, 1987).

American school culture prioritizes education, focusing on individual gain through competitive means, which contrasts with the typical Latinx cultural practice of working for the good of the whole (Chun & Dickson, 2011; Good et al., 2010; Walker de Felix et al., 1993). Over 48% of teachers and 97% of administrators held a master’s degree or higher in the 2014-2015 school year (U.S. Department of Education, 2017). These advanced degrees are indicative of the priority most teachers and administrators place on individual educational achievement. Since the demographics of teachers reflect the ideology of the dominant American culture, these advanced degrees also indicate the importance of education in the eyes of American school culture as a whole. College acceptance and enrollment requires a rigorous application process that emphasizes individual achievement in high school (Valadez, 2008). This emphasis on the individual nature of achievement and, in turn, individual success, contrasts with the typical Latinx cultural practice of familismo.

The mainstream teacher’s belief in the value of education and the typical Latinx value of familismo also compete when students miss school in order to work (Good et al., 2010). If a Latinx student is absent because they are working or caring for siblings while parents work, mainstream teachers often assume Latinx parents are ignorant of the importance of education and prioritize work and money over academics (Valadez, 2008). In many instances, however, it is a manifestation of a hierarchy of needs (Maslow, 1958). The family needs money in that moment, so the student goes to work for the good of the family (Valadez, 2008). Good et al. (2010) conducted a focus group with English-Spanish bilingual teachers from a district where 65% of the students were Hispanic and 36% were ELL students. Four of those participants identified as
Hispanic and one identified as Caucasian. One of Good et al.’s (2010) teacher participant’s description of the financial situation echoed the assertion above: “The main priority for immigrant parents is to find work; it is not education. That is not to suggest they don’t place a high value on education, but when it comes to survival, education might have to wait. Education is not urgent; eating is” (p. 333). Since American culture places so much value on education and the typical Latinx cultural practices tend to prioritize the family, teachers have assumed parents to be unsupportive of students’ academic careers claiming the parents do not understand the value of education (Valadez, 2008). The assumptions made about Latinx parents based on this cultural mismatch influence relationships between mainstream teachers and the parents of ELL students and demonstrates teachers’ level of training in cultural responsiveness (Delgado-Gaitan, 1994; Good et al., 2010; Henry et al., 2008).

An emphasis on competition within American schools also highlights the cultural mismatch between American school culture and the typical cultural practices of Latinx families. American schools foster a succeed or fail disposition, which leaves many Latinx students caught between American school culture and their own home culture (Walker de Felix et al., 1993). Walker de Felix et al. (1993) assert this cultural mismatch to be disempowering for Latinx students yet telling of the culture in power. Delgado-Gaitan (1994) states our educational system is governed by “rules, language, and values that privilege some people and exclude others” (p. 299). She goes on to say this systematic exclusion of some cultures is due to the decisions of those in power, those with the cultural capital to influence others. As the authority figure in the classroom, those in power include mainstream teachers.

In 2012, Brown and Chu conducted a study of 204 students from 19 schools in a city in the upper southeast United States with a rapidly growing Latinx population. They measured
student levels of ethnic identity, perceptions of discrimination, sense of belonging, and academic performance. In addition, they used a survey to measure teachers’ value of diversity and the value the school places on multiculturalism. Brown and Chu (2012) found that school and teacher characteristics, such as various aspects of school culture and teacher demographics, are strong predictors of Latinx students’ perceptions of discrimination and the strength of the students’ ethnic identities, which indirectly impact student performance. For example, using the Pluralism and Diversity Attitude Assessment, Brown and Chu (2012) found the more a teacher valued diversity, the lower the Latinx students’ perceptions of peer discrimination. Additionally, perceptions of teacher discrimination had a negative association with the sense of school belonging and ethnic identity of Latinx students at predominately White and moderately diverse schools (Brown & Chu, 2012).

In a study of Latinx students and school diversity, Benner and Graham (2011) found the less diversity among teachers, the higher the student reports of discrimination and feelings of isolation, which negatively impact student grade point averages. To determine this, Benner and Graham (2011) studied 668 Latinx students in Los Angeles, California over the course of their 8th, 9th, and 10th grade years of school. They used a combination of questionnaires, GPA, and attendance rates, as well as school characteristic data provided by the California Department of Education.

Similarly, when Ross and colleagues (2010) used pre-existing demographic data on students from 1,040 schools and standardized state exams to study representation and school belonging, they found when Latinx students attended schools with teachers who shared their cultural beliefs, there were lower dropout rates and higher graduation rates among the Latinx students. Since most teachers do not share the same ethnicity or cultural background of Latinx
ELL students (U.S. Department of Education, 2017), these findings support Delgado-Gaitán’s (1994) conclusions about the negative impact of cultural mismatches between White teachers and Latinx ELL students in the United States. Furthermore, the lack of diversity among teachers and administration also increases the likelihood of a school to adhere to local and state English-only laws (Marschall et al., 2011).

**Assimilationism.** English-only laws are a manifestation of a resurgent and growing anti-immigrant movement in the United States (Clarkson, 2008; Marschall et al., 2011). In 2018, Welch and Payne analyzed data from 3,500 public schools using the School Survey on Crime and Safety, Common Core database, and the U.S. Department of Education’s National Center for Education statistics. They found punitive social control policies occur more often in communities where larger percentages of Latinx and African American populations reside in order to manage the perceived threat to White economic and racial dominance as well as safety. In 1987, Penfield (in Welch & Payne, 2018) found mainstream teachers answered negatively on all survey questions referring to Latinx students. She concluded that teachers found Latinx students more dangerous and harder to discipline than any other group of students. In the decades since, this sentiment has only grown stronger (Welch & Payne, 2018). The Trump administration’s renewed focus on the dangers of the Latinx immigrants to American society (Welch & Payne, 2018) and the continued negative portrayal of the Latinx population in the media has created an implicit association between delinquency and the Latinx population (Cheatham et al., 2014; Welch & Payne, 2018). Cheatham and colleagues (2014) gathered data on this topic by conducting an experiment with college students majoring in education. Two hundred and fourteen pre-service teachers received folders with varying information on a hypothetical Latinx student and were asked to identify the cause of the student’s reading difficulties. Rather than identifying the
language barrier as the root cause of reading difficulty, the majority of the pre-service teacher participants attributed the problem to lack of motivation, learning disabilities, or overall low academic skills (Cheatham et al., 2014). They also found that mainstream teachers’ negative attitudes towards Latinx ELL students had become more prevalent than in decades past, especially in states with well-known anti-immigration sentiment or legislation (Cheatham et al., 2014).

Some states have been more active in the anti-immigrant movement than others, holding protests and creating legislation to undermine the rights of immigrants. For example, in May 2010, Arizona passed a law that allows police to ask about citizenship if there is reasonable suspicion the person is in the country illegally (Hill & Hawes, 2011). Also in 2010, Oklahoma passed state legislation requiring schools to collect proof of citizenship status from students, despite the 1975 Supreme Court ruling in Plyer v. Doe that education is a right regardless of documentation (Hill & Hawes, 2011). Many states have also barred undocumented students from receiving scholarships or in-state tuition to state universities due to their immigration status (Hill & Hawes, 2011; Sox, 2009). This type of legislation sends implicit messages to teachers about the value of English and significance of documentation that, in combination with legislation about accountability and the pressure of testing, make teachers more reluctant to work with Latinx ELL students (Menken, 2010; Reeves, 2006).

**Culture of testing.** With the passing of No Child Left Behind (NCLB) legislation, the United States education system shifted its focus from structure and programs helping struggling students to accountability and outcomes (Menken, 2010). To demonstrate accountability, schools are required to administer standardized tests and report the performance levels of students (Good et al., 2010). This single test score dictates the performance evaluations of individual students,
teachers, schools, districts, and entire states, which is why many critics refer to these tests as high-stakes tests (Menken, 2010). In order to meet federal accountability measures, states have tied test performance to funding, financially rewarding schools that do well and punishing schools that do not (Abedi & Dietel, 2004).

Since these high-stakes tests are normed on native English speakers (Abedi & Dietel, 2004), schools with higher levels of ELL students are disproportionately labeled failing and, thus, have funding revoked more often (Menken, 2010). The culture of testing has created a disincentive for schools to teach ELL students, which has influenced the dispositions of teachers and administrators (Menken, 2010). In an interview with a principal about high-stakes testing, Menken was told “It’s better not to admit ELLs. Then I don’t have to worry about student graduation rates” (p. 126). In a survey of 279 mainstream teachers, Reeves (2006) found the same sentiments inside the mainstream classroom. This demonstrates the effects of the culture of testing, as well as the influence of American culture from the macrosystem in general, has an impact on the dispositions and beliefs of mainstream teachers, which go on to contribute to the Latinx ELL student opportunity gap.

**Government Policies**

The exosystem in the nested EST model contains environmental factors that have a significant impact on the focal individual, even though the focal individual is not directly involved with those factors (Bronfenbrenner, 1979). For mainstream teachers, most of the exosystem elements that impact them are government policies at the federal and state levels and policies enacted within their districts and schools.

**Licensure requirements and teacher preparation programs.** Since less than 1% of all teachers are certified in ESL, mainstream teachers face educating ELL students without the
training or preparation that would best support this unique population (Diaz, Cochran, & Karlin, 2016; Fernandez & Inserra, 2013; George Washington University, 2013; Reeves, 2006; U.S. Department of Education, 2018b; Yoon, 2008). In 2009, only three states required mainstream teachers to demonstrate competence in ELL instruction despite the influx of ELL students into mainstream classrooms in all states (U.S. Department of Education, 2018b). It has been widely reported that mainstream teachers feel inadequately trained and unprepared to teach the ELL students in their classrooms, despite being fully licensed per state credentials (Cheatham et al., 2014; Jiménez-Castellanos & García, 2017; Pappamihiel, 2002; Penfield, 1987; Reeves, 2006; Sox, 2009). For example, in a survey given to 279 mainstream teachers in grades 4-12 who had ELL students in their classrooms, Reeves (2006) found about 82% of teachers disagreed with the statement “I have adequate training to work with ESL students” (p. 136). In 2009, Sox found that no universities or colleges in the southern United States offered bilingual licensure, nor did any of those states require courses that specifically addressed the cultural or linguistic needs of ELL students in mainstream classrooms. As of 2008, only twenty states required that all teachers have training in working with ELL students, but the requirements for that training varied considerably (National Clearing House for English Language Acquisition, 2008). More recently, some states now peripherally mention working with ELL students in their standards for pre-service teachers, while others require specific coursework or certification (Quintero & Hansen, 2017). Still others do not have any requirements. As of 2017, 31 states had no ELL course requirements for mainstream teacher licensure (Quintero & Hansen, 2017).

From 1991-2001, the number of teachers working with ELL students went from 15% to 43% and, given the continued growth of this population, one can assume the majority of American teachers now have at least one ELL student in their classes (National Clearing House
for English Language Acquisition, 2008). Without requirements for coursework on multiculturalism, ELL instructional strategies, cultural and linguistic responsiveness, or, most importantly, second language acquisition, mainstream teachers are being licensed regardless of preparedness to work with ELL students (Good et al., 2010). The policies set forth by federal and state governments pertaining to licensure, affect the performance and impact of mainstream teachers serving ELL students (Sox, 2009). Lack of preparation causes teachers to focus on pronunciation, grammar, spelling, and vocabulary rather than academic content with their mainstreamed ELL students, watering down curriculum and stifling language acquisition (Yoon, 2008). Additionally, without training in second language acquisition, it is difficult for teachers to tell the difference between academic challenges due to a language barrier and academic challenges due to a learning disability (Cheatham et al., 2014; Fernandez & Inserra, 2013). The frustration caused by the confusion between a learning disability and a language barrier were highlighted by the responses of three mainstream high school teachers questioned separately in semi-structured, open-ended interviews that researchers coded to find themes, patterns, and discrepancies (Fernandez & Inserra, 2013). They found teachers were not adequately trained on the second language acquisition process, the behaviors associated with learning a second language, and cultural and linguistic responsiveness. These feelings of frustration and inadequacy held by mainstream teachers are further exacerbated by the testing and graduation policies state and local governments put into practice.

**Testing and graduation policies.** When NCLB was passed into law and the educational field shifted its focus to accountability, states fell under immense pressure to demonstrate schools were making adequate progress (Giambo, 2010; Menken, 2010). States began to make a passing score on the state standardized exam a requirement to graduate (Giambo, 2010; Jimerson et al.,
2016; Menken, 2010). This state policy re-named the standardized exams exit exams (Giambo, 2010; Jimerson et al., 2016; Menken, 2010). In 2009, 36 states required exit exams, yet there had been no substantial findings that passing the exit exams led to more job opportunities or higher academic performance for the students (Giambo, 2010).

In states that require exit exams for graduation, students who do not receive a passing score on the exam, will receive a certificate of completion rather than a high school diploma (Giambo, 2010; Jimerson et al., 2016; Menken, 2010). When New York introduced its exit exam policy, the ELL student dropout rate rose from 21% to 29% while the English-proficient student dropout rate only rose from 16% to 17% (Menken, 2010). Similarly, Giambo (2010) found that shortly after Florida instituted exit exams, the number of students transferring to general equivalence diploma (GED) programs grew by 32%. After selecting 35 ELL students at random from a district with a large Latinx population and observing them multiple times throughout the school year using the Classroom Observation Schedule tool, Giambo (2010) found the pressure of testing policies and evaluations caused teachers to steer students towards a GED track once it became clear these students would not meet the state’s accountability measures.

In 2014, California required an exit exam and the overall pass rate for that assessment was 68%, but the pass rate for ELL students was only 21% (Jimerson et al., 2016). Jimerson et al. (2016) randomly sampled 115 students who did not pass the state exam by the start of their senior year and found 87% of those students were Latinx and 79% of them were ELL students. This, in turn, may negatively influence the mainstream teacher’s expectations for Latinx ELL students.

Some states have a policy to exempt ELL students from standardized tests if they have been in the country less than a year (Giambo, 2010), but research shows it takes five to seven
years to become English proficient (Pappamihiel, 2002; Reeves, 2006). Thus, high stakes exams administered in English are being used to evaluate the academic progress of ELL students, despite the known language barrier (Hill & Hawes, 2011). In this circumstance, it is impossible to divorce English language proficiency from academic knowledge, making the test an inaccurate assessment of growth and raising questions about the reliability of its results for funding, class placement, graduation, and teacher evaluations (Abedi & Dietel, 2004; Giambo, 2010; Menken, 2010).

In 2010, Menken analyzed the 2009 New York state’s Regents exam. Menken (2010) measured the word frequencies and text complexities of the English and Math exams. She found the state’s decision to use the Regents exam more favorable towards English-proficient students and an invalid assessment of ELL students’ actual academic abilities. For example, on the math portion of the Regents exam, Menken (2010) found all 39 questions were word problems, meaning English proficiency was needed to comprehend each question prior to answering it. Thus, the test first measured English proficiency and then the content skill. Further, one of the word problems asked students to calculate the amount of “pop” needed for a birthday party (Menken, 2010). Menken highlights the use of the word “pop” because it is an American English term used primarily in the Northwest, Great Plains, and Midwest for the term soda, making it an unusual word to encounter on the New York Regents exam with questionable purpose. Given the importance of the exam results to teachers’ job security and salary, school funding, and graduation rates, Menken (2010) asserts that curriculum has changed in more recent years and teachers have begun teaching to the test in order to gain higher scores, limiting supportive measures to help Latinx ELL students.
Federal education policy. The Elementary and Secondary Education Act (ESEA) was passed in 1965 as the main federal law of K-12 education in hopes of better funding, more opportunities to learn, and overall support of America’s most needy students (Menken, 2010). In 1967, Senator Ralph Yarborough of Texas introduced the Bilingual Education Act (BEA), an amendment to ESEA designed to meet “the special educational needs of the large numbers of students in the United States whose mother tongue is Spanish and to whom English is a foreign language” (Lyons, 1990, p. 67). In order to lessen the inequities caused by the differing levels of language proficiency in the classroom, the BEA required schools to provide English language support to all ELL students in accessing curriculum (Lyons, 1990; Menken, 2010). The BEA went through multiple changes and, under the Reagan administration, deviated from the promotion of bilingual education to eliminating it (Lyons, 1990). Reagan’s administration significantly cut funding and rationalized this decision by saying, “Our schools should concentrate on teaching English to these children. They are going to have to learn English soon or later—so why not sooner?” (Lyons, 1990, p. 74).

The reauthorization of ESEA in 2001, shifted from a focus on language programs and structure to outcomes and accountability under NCLB (Menken, 2010). Schools were required to demonstrate adequate yearly progress (AYP) and sanctions, such as loss of funding or closure, were set in place for schools that did not meet their projected AYP (Menken, 2010). Many educators and parents criticized NCLB for its all-or-nothing stance on learning and over-reliance on standardized testing (Ferguson, 2016). Educators questioned the validity of giving high stakes tests to ELL students in a language in which they were not yet proficient (Hill & Hawes, 2011). Mainstream teachers, especially, believe this is an inaccurate measure of academic growth.
(Abedi & Dietel, 2004; Menken, 2010) and an unfair evaluation tool for schools with disproportionately higher ELL student populations (Menken, 2010; Sox, 2009).

NCLB was reauthorized in 2015 as the Every Student Succeeds Act (ESSA). Contrary to NCLB, ESSA put most of the power back into individual states’ hands (Ferguson, 2016). ESSA allows states to determine their own measurements of accountability through a proposed plan where they define their standards, tests and other measures such as attendance, graduation rates or career and college readiness (Ferguson, 2016; U.S. Department of Education, 2018b). The largest difference, however, between NCLB and ESSA is that accountability for ELL students, previously under Title III, was moved to Title I, accountability for all students (Ferguson, 2016). This drastic change was indicative of the growing role ELL students have in the public education setting (Ferguson, 2016). While this change finally acknowledged the ELL student population as a part of the mainstream classrooms, instead of overlooking them, it also forced schools to hold ELL students to the same academic and linguistic standards as students who have been in the United States since kindergarten (Menken, 2010). While policy about ELL students continues to change, the impact of Reagan era English-monolingualism movement has had lasting effects.

**State and local policy.** In 1981, under the Reagan administration, Virginia became the first state to adopt English as its official language, and in the decades since, 30 additional states have done the same thing (Marschall et al., 2011). English-only legislation, the child of anti-immigrant sentiment and English-monolingual bias, is comprised of state laws that place restrictions on foreign languages and endorse English-monolingualism (Marschall et al., 2011; Sox, 2009). In some states, English-only legislation pertains to little more than only printing forms in English but, in other states, it goes as far as to completely ban instruction in languages other than English in the K-12 setting (Marschall et al., 2011).
Individual districts and schools have the choice to use home languages like Spanish in instructional programs, but symbolic messaging from the state through English-only laws signals which programs are most favored (Marschall et al., 2011). Schools can choose to give ELL students little to no instruction in their native language through ESL and English immersion programs, or they can choose to allow the student’s native language into the classroom through dual immersion or bilingual education programs (Good et al., 2010; Marschall et al., 2011; Sox, 2009). Despite the influx of ELL students into the school system, in states with English-only laws native language instruction has dropped over time (Marschall et al., 2011) and, in 2009, seven states had banned it entirely (U.S. Department of Education, 2018b). A state’s stance on English-only legislation and its subsequent effect on the language programs offered in schools send a strong message to teachers about the position of the English language in their classroom and the value of English proficiency among their students. This English-only bias impacts their interactions and instructional practices with ELL students (Marschall et al., 2011; Yoon, 2008).

**Cultural Mismatch**

Bronfenbrenner (1979) defines the mesosystem as a setting where different microsystems interact. Using an ecological systems model with a mainstream teacher as the focal individual, the mesosystem includes interactions between the Latinx ELL students and the mainstream teachers’ ESL colleagues. It also includes the more prevalent interactions between Latinx ELL parents, the mainstream teacher, and their children/students.

**Conflict with Latinx ELL students and their parents.** In her seminal ethnographic work, Delgado-Gaitan (1994) found one of the common beliefs within the Latinx culture is the authoritative roles teachers have in school and parents have at home. Due to that, many Latinx parents listen to their children complain about perceived injustices in the classroom but support
the teachers’ actions because the teacher is the authority figure at school (Delgado-Gaitan, 1994). However, going to school and questioning the teacher on his or her disciplinary decisions is not uncommon within the American school culture (Lareau, 2011). So, Latinx ELL students see their peers’ parents from other ethno-linguistic backgrounds come into school to discuss classroom matters, which causes tension between them and their own parents (Delgado-Gaitan, 1994; Lareau, 2011). This tension at home is caused by the typical Latinx cultural value that the teacher is in charge in the classroom, which puts some Latinx parents at odds with mainstream teachers’ cultural beliefs (Good et al., 2010; Henry et al., 2008). The dominant culture expects parents to visibly participate in their child’s education, but typical Latinx parents participate symbolically, or at home rather than at school (Henry et al., 2008). Valadez (2008) found Latinx students are heavily influenced by their teachers. Thus, a teacher’s frustration with Latinx ELL students’ parents influences the students’ relationships with the parents.

This conflict between Latinx ELL students and their parents highlights the mismatch between American school culture and typical Latinx culture (Delgado-Gaitan, 1994). It also demonstrates the consequences for the ELL students caught between both worlds (Delgado-Gaitan, 1994). Through two focus groups with eight Mexican mothers who immigrated less than five years before, and seven English-Spanish bilingual mainstream teachers, Good et al. (2010) found Latinx parents have reported behavior issues with their children at home stemming from the need to fit into a new culture. The mothers reported this has caused their households and familial relationships to become chaotic (Good et al., 2010). Listening and watching their children’s behavior and self-esteem devolve causes parents to feel guilty and long for better ways to communicate with the school in order to create a strong network of support together, rather than as two separate entities (Good et al., 2010). Growing resentments stemming from the
teachers’ assumptions about Latinx parental involvement make communication difficult (Delgado-Gaitan, 1994).

**Deeper connections between ESL teachers and ELL students’ parents.** In schools that have ESL teachers, they are often called upon to be cultural brokers and translators (McCloud, 2015). Latinx ELL students’ parents are often Spanish-monolingual, while American school culture is English-monolingual, leaving a communication barrier between parents and mainstream teachers (Good et al., 2010; McCloud, 2015). In her ethnography, Delgado-Gaitan (1994) found that the parents of Latinx ELL students seek out ESL teachers in a school because they are usually English-Spanish bilingual and parents feel they can have more authentic conversations about their child’s academic progress. The language barrier aside, she also found that the parents of Latinx ELL students felt more comfortable with ESL teachers because those teachers understood the typical cultural values of the Latinx community. Indeed, Good et al. (2010) found even when the ESL teachers were not fluent in their ELL students’ native languages, they tended to make more efforts to understand the communities and cultural practices of all their ELL students. ESL teachers help parents understand the American school culture and navigate difficult situations they do not understand (Delgado-Gaitan, 1994). This, in turn, creates more trust between ESL teachers and the Latinx ELL students’ parents (Good et al., 2010), placing ESL teachers in a higher position of power than mainstream teachers in their Latinx ELL students’ homes (McCloud, 2015). This power dynamic can contribute to trouble in the microsystems between ELL students’ parents and mainstream teachers as well as ESL teachers and mainstream teachers.
Mainstream Teachers’ Direct Interactions

The most embedded ecological environment in Bronfenbrenner’s (1979) nested EST model is the microsystem. The microsystem is composed of social interactions in the focal individual’s immediate surroundings in which the individual has direct contact (Bronfenbrenner, 1979). For a child, this may include interactions with teachers, parents, and friends. For a mainstream teacher this includes relationships with the ELL students in their classes, the parents of those ELL students, their ESL colleagues, and the administrators of the schools where they work.

**Interactions with administration.** Feeling unprepared to help ELL students in mainstream classrooms, teachers have asked administration for help but have been disappointed in the results (Reeves, 2006). Some teachers have requested professional development opportunities but have continually been disappointed in the quality and experience (Reeves, 2006). Reeves (2006) also found teachers have become reluctant to attend professional development after repeated disappointing trainings that made them feel as if they wasted their time. In her 1995 study, Claire found teachers became resentful at the money being spent on unhelpful professional development and wished for funding to be funneled towards resources for the classroom instead.

Mainstream teachers have voiced feelings of frustration and hurt because they do not feel they are being heard by the administration in their buildings (Good et al., 2010). Jiménez-Castellanos and Garcia (2017) found teachers did not feel supported by administration. In a study analyzing the relationship between school expenditures and student performance on standardized exams, Jiménez-Castellanos and García (2017) looked at all public secondary schools in Texas. Through their analysis, Jiménez-Castellanos and García (2017) found most schools spent little to
no money for professional development on ELL teaching strategies for mainstream teachers. This resulted in mainstream teachers feeling administration passed the responsibility of understanding second language acquisition and knowing best practices for ELL students in the classroom to them. As previously explained, however, mainstream teachers remain unprepared to meet their ELL students’ cultural and linguistic needs due to state licensure requirements (U.S. Department of Education, 2018b).

Teachers feel disempowered by administrations that make decisions without considering the needs of special populations or those serving these populations in the classroom (Walker de Felix et al., 1993). Testing policies cause administrators to put immense pressure on teachers to increase student performance (McCloud, 2015; Menken, 2010). One teacher speaks to this pressure in Menken’s 2010 study when she states, “It was because of testing pressure. My school administration was really pushing us hard to do more to get the students better prepared for the English Regents” (p. 126). This additional pressure strains the relationship between mainstream teachers and ESL teachers and intensifies the reluctance teachers have to work with ELL students (Cheatham et al., 2014; Reeves, 2006).

**Expectations of ESL colleagues.** While more and more ELL students enter mainstream classrooms, mainstream teachers continue to place responsibility for teaching ELL students on the shoulders of ESL teachers (Penfield, 1987; Reeves, 2006; Yoon, 2008). Some mainstream teachers have become disinterested in professional development focused on working with ELL students, expecting ESL teachers to do that instead (Rizzuto, 2017). Yoon (2008) posits mainstream teachers have internalized that most states do not require extensive knowledge of cultural or linguistic responsiveness for ELL students for licensure and, as a consequence, mainstream teachers charge ESL teachers with the task. In 1987, Penfield found mainstream
teachers expected ESL teachers to make modified work for ELL students, spend extra time with those students, be cultural brokers, and translate for those students. In a study of nine ELL students and their ESL teacher at a public high school in Virginia, McCloud (2015) spent 44 days in their classroom taking field notes, collecting student work, conducting interviews, recording conversations, and looking at school records. McCloud (2015) found Penfield’s (1987) mainstream teachers’ expectations still held true, especially the belief that ESL teachers should be cultural brokers and translators.

Due to fixed expectations about the role of the ESL teacher and a general inability to communicate clearly with ELL students in their classrooms, mainstream teachers often send ELL students to the ESL teacher’s classroom for help during class time (McCloud, 2015; Pappamihiel, 2002). While this helps students build positive relationships with the ESL teacher, it causes the ELL students to miss direct instruction in the mainstream classrooms and, consequently, the content material needed to complete the coursework. The practice of seeking out the ESL teacher, however, permits the ESL teachers to have better relationships not only with ELL students but their parents as well (McCloud, 2015). As noted above, this can cause more tension between mainstream teachers and their ESL colleagues (McCloud, 2015; Pappamihiel, 2002; Penfield, 1987).

**Rapport with the parents of ELL students.** Parental involvement positively influences student grades and increases student achievement (Chun & Dickson, 2011; Henry et al., 2008). But mainstream teachers and Latinx parents have different ideas of what involvement looks like (Henry et al., 2008). Mainstream teachers have internalized the American school culture’s idea of explicit parent involvement, often on school grounds (Henry et al., 2008). In the Latinx culture, however, parents consider themselves involved in their child’s education, but that does
not necessarily manifest by being physically visible to teachers (Henry et al., 2008). Instead, Latinx parents view the home and school as separate spheres: the teacher is responsible for the learning that occurs within the classroom and the family is responsible for the learning that occurs at home (Delgado-Gaitan, 1994). As previously stated, the invisibility of parental support and involvement within the school building can cause tension between Latinx parents and mainstream teachers (Henry et al., 2008). This symbolic involvement rather than explicit involvement causes teachers to assume parents do not care about their child’s education and regard the students as being parentless and unsupported (Henry et al., 2008; Penfield, 1987; Shim & Shur, 2017). Shim and Shur (2017) conducted 12 individual interviews with each of their four student participants throughout the 2012-2013 school year. In addition, they conducted 10 individual interviews with the three teacher participants during this same year. During the teacher interviews, all three teachers voiced concern over the priority of education in the households of Latinx students (Shim & Shur, 2017). The teachers cited the infrequency of parents coming to school as an indicator that parents do not care about their child’s education (Shim & Shur, 2017). Based on background literature explaining typical Latinx parents’ beliefs about allowing school authority to outweigh parental authority in terms of academics, Shim and Shur (2017) found a mismatch of expectations for parental involvement. They asserted the definition of parental involvement differed between Latinx families and mainstream teachers.

As a result of a mismatch of parental involvement expectations, mainstream teachers have expressed annoyance at the lack of support and communication from their Latinx ELL students’ parents (Good et al., 2010; Niehaus & Adelson, 2014). They have also expressed frustration at the language barriers that exist between themselves and their students’ parents but state it is more relationship-based frustration rather than language-based (Good et al., 2010).
That sentiment is shared by ELL students’ parents (Good et al., 2010) who express a lack of trust and loss of hope in forming positive relationships with mainstream teachers (Good et al., 2010; Stamps & Bohon, 2006). This tumultuous relationship between mainstream teachers and Latinx ELL students’ parents places ELL students in the middle of a cultural mismatch (Good et al., 2010). As a result, ELL students may begin to act out negatively in class (Delgado-Gaitan, 1994). This reinforces mainstream teachers’ feelings of frustration and negative perceptions of ELL students in mainstream classrooms, lowering student academic performance and perpetuating contributing factors to the Latinx ELL student opportunity gap (Delgado-Gaitan, 1994; Good et al., 2010; Pappamihiel, 2002).

**Relationships with Latinx ELL students.** Teacher expectations are better predictors of student achievement than English proficiency and mainstream teachers have repeatedly been found to hold low expectations for their ELL students (Benner & Graham, 2011; Brown & Chu, 2012; Callahan, 2005; Cheatham et al., 2014; Chun & Dickson, 2011; Kanno & Kangas, 2014; Shin, 2018). The low expectations mainstream teachers hold for their ELL students are partially from influences of the macrosystem and exosystem pertaining to second language acquisition (Cheatham et al., 2014; Fernandez & Inserra, 2013; Pappamihiel, 2002). These influences in the macrosystem and exosystem were explained earlier when discussing state and local government policies, assimilationism, and licensure and teacher preparedness.

To a teacher who has not been trained in second language acquisition or cultural and linguistic responsiveness, a student’s inability to access curriculum due to a language barrier looks similar to a learning disability (Cheatham et al., 2014; Fernandez & Inserra, 2013). It can take five to seven years to reach proficiency in English but, due to a common misconception that language proficiency takes two years (Pappamihiel, 2002; Reeves, 2006), mainstream teachers
often refer ELL students to special education when they have not gained English proficiency within two years (Cheatham et al., 2014; Fernandez & Inserra, 2013; Sox, 2009). This misdiagnosis indicates mainstream teachers confuse a lack of English proficiency with a deficiency in other abilities (Penfield, 1987). Teachers question their ELL students’ ability to learn (Rizzuto, 2017), causing them to classify students as needing special education (Cheatham et al., 2014; Fernandez & Inserra, 2013) and place them in low track classes (Benner & Graham, 2011; Callahan, 2005; Kanno & Kangas, 2014; Shin, 2018; Sox, 2009; Wang & Goldschmidt, 1999).

Track placement is the practice of placing students in different classes based on ability and is often used when scheduling high school ELL students (Kanno & Kangas, 2014). Tracking students, however, has been found to be detrimental to a students’ academic performance (Benner & Graham, 2011; Callahan, 2005; Kanno & Kangas, 2014; Shin, 2018; Sox, 2009; Wang & Goldschmidt, 1999). Over the course of two years, Kanno and Kangas (2014) interviewed 46 ELL students who aspired to go to college. Kanno and Kangas (2014) followed the ELL students’ high school schedule from 11th to 12th grade. They also interviewed several mainstream teachers, guidance counselors, the college counselor, the district ELL specialist, and the school principal. Kanno and Kangas (2014) found that teachers were placing ELL students in lower-level courses out of, what the teachers considered, protection. Based on their interactions with ELL students in their mainstream classrooms, teachers feared the high reading and writing demands of higher-level courses would be inaccessible to ELL students (Kanno & Kangas, 2014). This evidenced the low expectations many mainstream teachers hold for ELL students and the belief that academic success with conceptual knowledge is contingent upon English proficiency instead of native language proficiency.
When teachers base course selection on a student’s ELL status, they are limiting that student’s academics to developing English proficiency rather than developing their conceptual knowledge (Brooks & Thurston, 2010). In a study she conducted in 2005, Callahan found fewer than 2% of ELL students took classes needed for four-year colleges. Kanno & Kangas (2014) found of the 46 ELL students they studied, only two of the students took an AP class in their high school career and that class was AP Spanish, their native language. They also found White and Asian students are disproportionately placed in high track courses while Black and Latinx students are disproportionately placed in low track courses. Kanno and Kangas (2014) saw this limited opportunity to learn resulted in disparate post-secondary attendance rates. They went on to report 45% of English-monolingual and 34% of English-proficient peers go on to four-year colleges while only 19% of ELL students do the same. Wang and Goldschmidt (1999) found over 20% of student performance differences can be attributed to being in different classrooms.

Mainstream teachers’ beliefs that ELL students slow down their English-proficient peers are represented in the placement choices for ELL students and English-proficient students (Callahan, 2005; Reeves, 2006). Placing ELL students in lower track classes limits their interactions and discourse with English-proficient peers (Kanno & Kangas, 2014). Vygotsky (1978) asserts social interaction is the key to success, but social interaction with peers who are more knowledgeable in the English language is stripped away when ELL students are tracked (Brooks & Thurston, 2010). Without English-proficient students in the low track classes, academic discourse is less likely to occur in English, denying ELL students the linguistic exposure they need to acquire the academic English needed at the college level (Kanno & Kangas, 2014). This seclusion, however, is not exclusive to low track classes.
Mainstream teachers will often create homogeneous small groups within their classrooms, basing their decision on English language proficiency (Brooks & Thurston, 2010). At the high school level, Brooks and Thurston (2010) found that 76% of mainstream classroom instruction was lecture-style, eliminating communicative interaction and discourse completely. The homogeneous small groups and lecture-style class structures add to an ELL student’s feeling of being an outsider (Burke, 1995; McCloud, 2015; Yoon, 2008). Similar to the reduction of discourse with English-proficient peers in tracked classes, grouping students based on English-proficiency or having ELL students sit through lecture-style classes regularly, denies them an opportunity to interact with what Vygotsky (1978) terms a more knowledgeable other. Vygotsky (1978) posits the more knowledgeable other enables the social interaction vital to learning and pushing a student to reach beyond their independent learning capacity. Thus, despite teachers’ beliefs about the appropriateness of placing ELL students in mainstream classes, placing them in ESL classes without the exposure to the English language limits their opportunity to learn.

Mainstream classrooms can be more beneficial for ELL students because the classes expose them to the English language and discourse that is essential to language acquisition and learning in general (Brooks & Thurston, 2010).

In a survey of 1,213 ELL students, Diaz et al. (2016) found ELL students perceive higher levels of coercive power from their teachers in the classroom than their English-proficient peers. Coercive power is power gained by communicating threats of punishment to enforce adherence (Diaz et al., 2016). In their analysis, punitive measures used when reprimanding Latinx students in 3,500 public schools, using the School Survey on Crime and Safety, described above, Welch and Payne (2018) took a closer look at the concept of coercive power. By analyzing the availability and use of disciplinary responses used for students of various demographics from
3,500 schools, Welch and Payne (2018) found referrals for behavior issues come almost exclusively from mainstream teachers. Additionally, they found Latinx students were more likely to experience harsher punishments for lesser offenses than their White counterparts (Welch & Payne, 2018). This study exposed higher suspension and expulsion rates for Latinx students, preventing in-seat learning altogether (Welch & Payne, 2018).

**Summary**

The Latinx ELL student population continues to struggle academically in the United States public education system, especially at the high school level (Brown & Chu, 2012; Fuligni, 1997). Macrosystem factors like English-monolingualism bias and the anti-immigrant movement (Good et al., 2010; Hill & Hawes, 2011; Marschall et al., 2011; Welch & Payne, 2018), cultural mismatches and unchanging teacher demographics (Benner & Graham, 2011; Delgado-Gaitan, 1994; Good et al., 2010; Henry et al., 2008; Pappamihiel, 2002) and exosystem factors like policies on testing, language, and teacher licensure (Cheatham et al., 2014; Ferguson, 2016; Giambo, 2010; Good et al., 2010; Menken, 2010) all influence mainstream teachers, contributing to behaviors and dispositions that perpetuate the Latinx ELL student opportunity gap. Mesosystem and microsystem cultural mismatches in the interactions between mainstream teachers and ESL teachers, administrators, the parents of Latinx ELL students, and Latinx ELL students also contribute to the Latinx ELL student opportunity gap. (Callahan, 2005; Cheatham et al., 2014; Delgado-Gaitan, 1994; Good et al., 2010; Henry et al., 2008; Jiménez-Castellanos & García, 2017; Kanno & Kangas, 2014; McCloud, 2015; Welch & Payne, 2018).
Figure 1. Conceptual framework demonstrating contributing factors to the Latinx ELL student opportunity gap

Each contributing factor in this conceptual framework has sub factors that are interrelated (see Figure 1). Dominant culture refers to the culture in power in the United States as a whole and in the United States public school system. It includes contributing factors such as the English-monolingualism movement, assimilationism, and traditional teacher roles. These three factors have a bidirectional relationship with the dominant culture, where they are both influenced by and influence the dominant culture (Marschall et al., 2011; Ogbu, 1982; Tyack & Cuban, 1995; Yoon, 2008).
Government policies are directly influenced by the dominant culture. In this conceptual framework, government policies include federal policies, state and local policies, and testing and graduation policies. Federal government policies affect aspects of assimilationism, such as the anti-immigrant movement in policy and in the populace (Marschall et al., 2011; Welch & Payne, 2018). State and local government policies also affect aspects of assimilationism, but this is a bidirectional relationship where beliefs and values, like the ideology of American culture as White and middle class, that are associated with assimilationism also influence state and local government policies (Marschall et al., 2011; Tyack & Cuban, 1995). Similarly, state and local government policies have a bidirectional relationship with the English-monolingualism movement.

Cultural mismatch is a contributing factor that addresses differences between the dominant culture in the American schools and the typical Latinx cultural practices. Cultural mismatch explains the differences in cultural backgrounds when two cultures interact. For example, in the typical Japanese culture, it is disrespectful to look a teacher in the eye. In American school culture, the dominant culture, it is disrespectful to avoid eye contact with a teacher. Therefore, the dominant cultural practice in American school culture and the Japanese cultural practice oppose one another, creating a cultural mismatch.

Components of the contributing factor cultural mismatch can be placed in and across three levels: societal, institutional, or intrapersonal. Cultural mismatches at the societal level include the contrasting priorities and values of both the dominant culture and the Latinx culture. American school culture places a lot of emphasis and high stakes on a single test taken individually. This contrasts with the typical Latinx cultural belief of collectivism and working together for the good of the whole (Delgado-Gaitan, 1994; Henry et al., 2008). Intrapersonal
cultural mismatches are related to the relationships between Latinx ELL students and their parents. Many Latinx ELL students are immersed in American school culture throughout the day and Latinx culture at home, so there can be tension at home if the values practiced there are not matched with the values the student practices throughout the day at school. This tension is further impacted by the power dynamics between American school culture and typical Latinx culture. Additionally, tension can occur as ESL teachers create intrapersonal relationships with the parents of Latinx ELL students. Since ESL teachers tend to be cultural brokers, or people who understand and navigate the dominant culture and the culture of their students simultaneously, intrapersonal relationships with the parents of Latinx ELL students tend to be made easily (McCloud, 2015). This can affect the relationship between mainstream teachers and ESL teachers, as mainstream teachers’ cultural barriers prevent them from forming those intrapersonal relationships with parents.

Teacher preparedness consists of the mainstream teacher’s background/demographics, experiences, disposition, and professional preparation. The background/demographics and disposition of a teacher have a bidirectional relationship with teacher preparedness. The way in which a teacher is prepared depends on the background and demographics of that teacher. For instance, the college a teacher attended and the pathway the teacher took to receive licensure may depend on where that teacher was raised or their ability to afford higher education. The experience a teacher has in their preparation program influences what the teacher brings into the classroom and, therefore, the teacher’s overall disposition. Teacher disposition is also influenced by assimilationism, the concept of traditional teacher roles, and societal priorities and values. Teacher licensure and state and local government policies are also connected through a bidirectional relationship. State licensure requirements change as state education legislation and
expectations for schools change. Similarly, as policy makers see different needs arising in schools, they may change the requirements for licensure, which will lead to changes in legislation.

All of these intricate relationships influence mainstream teachers and their interactions with administrators, their ESL colleagues, the parents of Latinx ELL students, and the Latinx ELL students themselves. Together these are the factors that contribute to the Latinx ELL student opportunity gap.

**Conclusion and Implications**

While several contributing factors to the Latinx ELL student opportunity gap at the high school level have been discussed in this literature review, some are more actionable than others. Contributing factors in the macrosystem, such as English-monolingualism and assimilationism, as well as factors in the exosystem, such as government policies on licensure and accountability, are not actionable for this researcher.

The most salient contributing factors to the Latinx ELL student opportunity gap at the high school level are those discussed in terms of the mesosystem and the various microsystems. These factors are all contingent upon the mainstream teacher: the mainstream teacher’s interactions with administration, ESL colleagues, Latinx ELL students, and their parents as well as the mainstream teacher’s disposition towards Latinx ELL students.

At Metro High School some of these factors are being addressed already. The high school requires all students, regardless of English language abilities, take at least two AP courses to graduate in order to prevent track placement of ELL students in less rigorous courses. Additionally, Metro High School has a full-time English-Spanish bilingual, Latinx parent liaison who cultivates strong parental involvement at the school. This person’s job as a cultural broker
helps create positive relationships between mainstream teachers and their ELL students’ parents and acts as a resource for parents to help navigate the American school culture as a whole. The school builds a sense of belonging for Latinx ELL students by embracing students’ English-Spanish bilingualism. The school provides bilingual signage in the hallways, translators at all school events, and an optional English-Spanish dual immersion program.

While those contributing factors are being addressed, the opportunity gap between Latinx ELL students and their English-proficient counterparts still exists at Metro High School. Thus, further research on mainstream teachers’ preparedness, including their understanding of second language acquisition, their classroom practices, and their interactions with ELL students is needed to potentially gain some insight into additional potential contributing factors for the Latinx ELL student opportunity gap at the high school level and provide hope for their future educational successes.
Chapter 2

An opportunity gap between Latinx ELL students and their English-proficient counterparts has existed in the United States for decades (Abramson et al., 1993; Brown & Chu, 2012; Callahan, 2005; Clair 1995; Office of Elementary and Secondary Education, 2016; Penfield, 1987; Wang & Goldschmidt, 1999). In comparison to both their English-proficient Latinx peers and their English-proficient peers from other ethno-linguistic backgrounds, Latinx ELL students at the high school level have lower standardized test scores (Niehaus & Adelson, 2014; Ross et al., 2010; Stamps & Bohon, 2006), lower grade point averages (Niehaus & Adelson, 2014), lower graduation rates (Chun & Dickson, 2011; Stamps & Bohon, 2006), higher dropout rates (Benner & Graham, 2011; Hill & Hawes, 2011; Jimerson et al., 2016; Menken, 2010; Ross et al., 2010), and lower post-secondary enrollment (Benner & Graham, 2011).

The English-monolingualism bias and anti-immigrant movement (Good et al., 2010; Hill & Hawes, 2011; Marschall et al., 2011; Welch & Payne, 2018), cultural mismatches and unchanging teacher demographics (Benner & Graham, 2011; Delgado-Gaitan, 1994; Good et al., 2010; Henry et al., 2008; Pappamihiel, 2002), and policies on testing, language, and teacher licensure (Cheatham et al., 2014; Ferguson, 2016; Giambo, 2010; Good et al., 2010; Menken, 2010) all influence mainstream teachers’ preparedness for working with ELL students in their classrooms, contributing to the Latinx ELL student opportunity gap. Without foundational knowledge of second language acquisition (SLA), mainstream teachers often place ELL students in lower-track courses and identify them as special education students disproportionately to their English-proficient peers (Benner & Graham, 2011; Cheatham et al., 2014; Fernandez & Inserra, 2013; Kanno & Kangas, 2014). Inexperience and lack of SLA training leads teachers to place ELL students in linguistically homogeneous groups, limiting the ELL students’ exposure to
English, social interactions and, ultimately, their opportunities to learn (Kanno & Kangas, 2014; Vygotsky, 1978). Additionally, the cultural mismatch in interactions between mainstream teachers and ESL teachers, administrators, the parents of Latinx ELL students, and Latinx ELL students themselves also contribute to the persistent Latinx ELL student opportunity gap at the high school level (Callahan, 2005; Cheatham et al., 2014; Delgado-Gaitan, 1994; Good et al., 2010; Henry et al., 2008; Jiménez-Castellanos & García, 2017; Kanno & Kangas, 2014; McCloud, 2015; Welch & Payne, 2018). American school culture, embraced and enforced by mainstream teachers, emphasizes self-reliance, individualism, and competition whereas typically the Latinx culture values collaboration and unity (Chun & Dickson, 2011; Delgado-Gaitan, 1994; Good et al., 2010; Henry et al., 2008; Penfield, 1987). Mixed messaging from school and home can cause misunderstandings and tension between Latinx ELL students and their parents, Latinx ELL students and their mainstream teachers, and mainstream teachers and the parents of Latinx ELL students (Delgado-Gaitan, 1994; Henry et al., 2008). This cultural mismatch forces students to learn a new culture while simultaneously learning the English language and academic content, contributing to the Latinx ELL student opportunity gap.

**Background and Overview**

The purpose of this needs assessment study was to determine which of the actionable contributing factors to the Latinx ELL student opportunity gap existed at Metro High School. The actionable factors investigated were access to higher-level courses, family engagement, cultural mismatches, and teacher preparedness to teach ELL students.

Metro High School already had many systems in place to address the contributing factors of the Latinx ELL student opportunity gap. The school was an AP for all school; in order to graduate, every student had to take AP English Language and Composition as well as AP English
UNDERSTANDING SLA AND THE LATINX ELL OPPORTUNITY GAP

Literature. This requirement existed in order to promote exposure to higher-level courses as well as eliminate tracking of all students. Metro High School also had a full time, English-Spanish bilingual parent liaison to build positive relationships with all the students’ parents, but especially the parents of Latinx students. Additionally, Metro High School celebrated the Latinx culture throughout the school with flags of various countries, tributes to famous Latinx leaders and activists, and bilingual signage in the hallways. Metro High School also partnered with an outside organization to train staff to conduct home visits. A home visit was a thirty-minute visit with a student’s parents at the student’s home or in the community in order to foster a positive relationship with parents and better understand the background and home life of that student.

Despite all of these efforts, however, the Latinx ELL student opportunity gap appeared to exist at Metro High School. The intent of this needs assessment was to verify the existence of the Latinx ELL student opportunity gap at Metro High School and explore factors contributing to it within that context. Two of the contributing factors found in the literature, but not addressed at Metro High School, were teacher preparedness and cultural and linguistic responsiveness, the lack of which produced cultural mismatches. Teacher preparedness, in this study, was defined as the training and experience a teacher had with teaching ELL students, the disposition of mainstream teachers towards ELL students in their classrooms, their knowledge of second language acquisition, and their self-efficacy about teaching ELL students. Cultural and linguistic responsiveness was a teacher’s knowledge SLA theory and use of SLA-based teaching strategies, knowledge of students’ cultures, and the teacher’s willingness to teach across cultures and varying linguistic levels. The following research questions aimed to measure teacher preparedness and cultural and linguistic responsiveness.
Research Questions

1) To what extent, if any, does the Latinx ELL student opportunity gap exist at Metro High School?

2) What are mainstream teachers’ perceptions of their own knowledge of SLA?

3) In what ways are mainstream teachers’ pedagogical practices with ELL students aligned with SLA theory?

4) How do misunderstandings stemming from cultural mismatches, as defined in the literature, between Latinx ELL students and their non-Latinx teachers manifest within Metro High School?

Context of Study

Metro High School was a public school in a mid-sized city on the east coast of the United States. The city had about 690,000 residents. In the 1980s, the Latinx population constituted about 2% of this city’s population and, as of 2018, the Latinx population was about 11% of the population, demonstrating the increase in the Latinx population over the course of the past four decades. Metro High School was an application-to-enroll high school that specialized in English-Spanish bilingual education and focused on multicultural curriculum. It had about 1,000 students. About 68% of the students were Latinx, 30% were African American, and 2% were from other ethnic and racial backgrounds. One hundred percent of the students were economically disadvantaged and 38% percent of the students were designated as ELL.

Of the ELL students at Metro High School, about 91% spoke Spanish as their first language. About 9% of students in the high school spoke world languages other than Spanish.
Due to the focus on Latinx students, languages other than Spanish were beyond the scope of this study.

**Participants**

Based upon the research questions, mainstream core-content teachers who gave instruction to ELL students and English-proficient students in the same class qualified as participants. Core-content teachers were defined as full time instructors of English, math, science, or history courses. There were about 50 teachers that fit this description and 29 expressed interest in participating in the study. Of those 29 teachers who received an invitation to take the survey, 16 participated; this was a 62% response rate.

Table 1 provides the approximation of the percentage of teachers from each content-area that participated in the survey. Table 2 provides an approximation of the percentage of participants who have taught ELL students by years of experience.

Table 1
*Teacher Participation Based on Content-Area*

<table>
<thead>
<tr>
<th>Subject Taught</th>
<th>English</th>
<th>History</th>
<th>Math</th>
<th>Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of Participants</td>
<td>33%</td>
<td>20%</td>
<td>40%</td>
<td>7%</td>
</tr>
</tbody>
</table>

Table 2
*Percentage of Participants’ Years of Experience with ELL Students*

<table>
<thead>
<tr>
<th>Number of years teaching ELL students</th>
<th>1-2 years</th>
<th>3-5 years</th>
<th>6-10 years</th>
<th>10 or more years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of Participants</td>
<td>12%</td>
<td>31%</td>
<td>19%</td>
<td>38%</td>
</tr>
</tbody>
</table>

The needs assessment data collection consisted of a mixed-methods survey and three focus groups. The focus groups were a subset of teachers who originally expressed interested in taking the survey. Mainstream teachers whose courses culminate in a standardized exam
participated in two of the focus groups. The standardized exams included the state exams for 9th and 10th grade math and English, and AP exams in math, history, English, and science. There were four teachers who participated in the focus groups. Two of the participants taught English and the other two participants taught history. Two of the participants had been teaching ELL students for ten or more years and the other two participants had been teaching ELL students less than three years. Three of the participants received licensure through alternative routes and one received licensure in a traditional licensure program.

A third focus group was conducted with members of the ESL department. Of the three teachers in the high school ESL department, two were able to participate. Both of these teachers were English-Spanish bilingual and have been teaching ESL for five or more years.

**Instrumentation**

This was a mixed-methods study that used two instruments to collect data. A survey was used to collect qualitative and quantitative data. Focus groups were used to collect data from mainstream teachers and the ESL department. Additionally, pre-existing graduation and survey data from Union School District, a pseudonym for the district where Metro High School is located, were collected.

**Survey**

It was difficult to find a single instrument that would be approved for use by the principal at Metro High School and Union School District while also making sure it accurately measured teacher preparedness and cultural and linguistic responsiveness. Thus, the researcher created her own survey instrument. In response to Metro High School’s administration’s concerns, which will be explained later in this chapter, and to ensure validity and precision, the researcher used some questions from pre-existing instruments and created other questions from language
assessments, teacher preparedness exams, and research findings (see Appendix A). Honorine Nocon Ph.D., associate professor emerita of culturally and linguistically diverse education at the University of Colorado Denver, validated this survey. The mixed-methods survey consisted of 55 questions varying from Likert scale items, open-ended questions, and multiple-choice questions. The questions were separated into three parts.

Part A of the survey consisted of three sections, each of which contained multiple statements participants were asked to rank on a 4-point Likert scale ranging from strongly disagree to strongly agree in order to measure three factors: teacher preparedness, cultural mismatches, and teacher disposition. Since this portion of the survey was modeled after Reeves’s (2006) survey on teacher disposition, the 4-point scale mirrored her survey, which excluded a neutral option. Statements such as “I have adequate training to work with ELLs” were taken from Reeves’s (2006) instrument measuring teacher preparedness for working with ELL students. Some statements used to measure teacher preparedness were also adapted from another instrument created by Swackhamer, Koeliner, Basile, Kimborough and Lyn (2009) to measure math and science teacher self-efficacy in teaching ELL students. Those statements were changed slightly by the researcher to be more inclusive of all subjects, such as: “Even if I try very hard, I will not be able to help my English language learners meet or exceed my content standards.” Cultural mismatches were measured using statements from Hsiao’s (2015) instrument, which was originally used to measure teachers’ culturally responsive teaching preparedness. One example of this is the survey statement: “I am able to provide students with knowledge and skills needed to function in mainstream U.S. culture.” The last section in Part A of the survey measured teacher disposition on the same 4-point Likert scale. Some of these statements were created using the findings from a study on effective instructional practices for ELL students. Deussen,
Autio, Miller, Lockwood, and Stewart (2008) reported 14 key principles that teachers of ELL students should know. Statements such as “Most of the foundational English skills ELL students need should be taught through English classes” and “Math is the easiest subject to teach ELL students” were created by the researcher based upon Deussen et al.’s (2008) key principles.

Part B of the survey consisted of two sections which each consisted of statements participants were asked to rank on a 5-point Likert scale ranging from never to always. This part of the survey measured teacher knowledge of SLA and used a 5-point Likert scale because it was modeled after a pre-existing format on the survey platform the researcher used. Some statements created by the researcher were based on Vygotsky’s (1978) seminal studies of development, such as “I group students homogeneously based on English language abilities” and “I group students heterogeneously based on language abilities.” Other statements were based on the theoretical analysis of Turkan, De Oliveira, Lee, and Phelps (2014). For example: “I teach prefixes, root words, and suffixes.” Many statements in this part of the survey were adapted from Lee and Maerten-Rivera’s (2012) instrument used to measure the improvement of elementary school science teachers’ instruction for ELL students over the course of five years. At Metro High School, the four quarters of the school year are each referred to as an advisory. The statements adapted from Lee and Maerten-Rivera’s (2012) instrument included: “In the last advisory, how many times did you revise curriculum to make it more accessible for ELL students?” or “In the last advisory, how often did you encourage small groups of bilingual and ELL students to use their home language in class?”

Part C of this instrument was based on two questions from Reeves’s (2006) instrument. They were open-ended questions: “What do you consider to be the greatest benefit(s) of
including ELL students in mainstream classes?” and “What do you consider to be the greatest challenge(s) of including ELL students in mainstream classes?”

Lastly, Part D of this instrument gathered demographic data about the participants. Race/ethnicity, gender, native language, subject taught, years of experience, years of experience teaching ELL students, and participants’ experience with attending formal training on teaching ELL students were collected in this part of the survey.

Focus groups

There were three focus groups which each lasted an hour. The first two focus groups each had two mainstream teachers and the third focus group had two ESL teachers from Metro High School. The semi-structured focus groups consisted of pre-established questions, as well as questions from survey results that required clarification. For example, the researcher used established questions such as “How do you assess an ELL student’s English abilities in your classroom?” and “How do you use student WIDA scores to inform your instruction and curriculum?” Inconsistencies in the survey results created some questions for the focus groups as well. For example, 75% of teachers said they had training in teaching ELL students, yet 44% of teachers said they do not feel they have adequate training in teaching ELL students, so the researcher asked: “What are the components of the trainings that you found prepared you for teaching ELL students?” and “Is there a pattern or type of training that you have attended for teaching ELL students that you do not feel prepared you for teaching ELL students?”

Secondary Datasets

The researcher requested pre-existing de-identified datasets from Union School District for the school years 2016-2019. The datasets consisted of ELL students’ performance on the standardized-state exam, attendance rates, and results from a survey administered by Union
School District every year. Multiple parts of this survey were used as part of the secondary datasets. The first part of the survey measured students’ sense of belonging, self-efficacy, perseverance, and overall school satisfaction. This data was disaggregated by ELL status for both Union School District as a whole as well as Metro High School. Similarly, the survey also provided data measuring teachers’ perceptions of student perseverance, rigorous expectations, and ability to educate all students. This dataset consisted of the answers from all the teachers in Union School District as well as the data from the teachers only at Metro High School.

Methods

This needs assessment started with a multi-step approval process that required approval from both Metro High School’s principal and Union School District. After data were collected, the researcher analyzed the data.

Approval Process

In order to conduct this needs assessment, approval was needed from the principal of Metro High School and from the Union School District. The first instrument proposed was the mixed-methods survey used by Reeves (2006) to measure teacher disposition towards ELL students in mainstream classrooms. The principal at Metro High School, however, did not approve this instrument. The principal thought the survey had the potential to portray Metro High School’s teachers in a negative light. The principal was specifically worried about a number of Likert scale questions about the inclusion of ELL students in mainstream classes. For example, “I would welcome the inclusion of ESL students in my class” and “Subject-area teachers do not have enough time to deal with the needs of ESL students.” Likert scale questions about language and language learning such as “I would support legislation making English the official language of the United States” and “ESL students should avoid using their native
language while at school” were also worrisome to the principal at Metro High School because of the perceived deficit language. Thus, as previously mentioned, a new instrument was created by the researcher using existing instruments and research. The principal approved this new instrument.

Once the principal’s approval was granted, the next step was to apply to the district for approval. Union School District only meets once a month to review research proposals. The proposal took several months to gain approval because the district required several edits to the application. One of the district’s concerns was asserting that there is a Latinx ELL achievement gap present at Metro High School. This was resolved by explaining there is a gap in graduation rates between Latinx students and the graduation rate of other ethnicities at Metro High School. There is also a difference in graduation rates between ELL students and English-proficient students. Since 91% of ELL students at Metro High School identify Spanish as their first language and the majority of students at Metro High School are Latinx, it can be assumed that an achievement gap between Latinx ELL students and their English-proficient peers from other ethnic backgrounds existed there. After permission to conduct the needs assessment study was granted from Union School District, it had to be approved by the contracts office at Johns Hopkins University. The entire approval process took five months to complete. After securing the school, district, and university approvals, the researcher was able to conduct this needs assessment.

**Data Collection**

Using a private, password protected account, an electronic survey was emailed to all teachers who expressed interest in participating in the needs assessment study. In the email, the

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2 In the original application sent to Union School District the researcher used the term achievement gap. She later changed this terminology to opportunity gap in her research.
voluntary nature of participation was explained. By taking the survey, teachers consented to participating in the study. Participants were asked to complete the survey within three weeks of the original email. Two reminder emails were sent out between the initial invitation and the closing date.

For the focus groups, an email was sent to the participants who had expressed interest in participating in the survey, offering three sessions for participation in the focus groups. Participants were asked to attend one of the three sessions, all of which were conducted by the researcher. A space in the school was reserved to conduct the focus group conversations. Four mainstream teachers participated in the first and second focus groups and two ESL teachers participated in the third focus group, for a total of six individuals. The focus groups were held within the same week in October. Two devices were used to audio record the focus groups and the researcher took notes throughout the conversations. Each focus group lasted about an hour. The audio recordings were later transcribed using an electronic tool for analysis.

**Data Analysis**

Since the researcher developed the instrument, she used multiple data analysis programs to test the reliability of the data. The researcher used SPSS, Google Sheets, and Excel in order to find the correlations between the constructs and to test the content validity. Due to differences in each analysis program, the findings did not match each other. The researcher conferred with a research methods expert through her university, who agreed the results were due to different formulas each program uses. She was directed to use the results from SPSS, as that is the norm for Johns Hopkins University.
Quantitative data. Since the \( n \) from the survey participation was so small (\( n = 16 \)), the researcher ran a frequency test to gain a better understanding of the participants’ professional experiences (see Table 3).

Table 3
*Frequency of Demographic Data on Participants’ Teaching Careers*

<table>
<thead>
<tr>
<th>Construct</th>
<th>1-2 years</th>
<th>3-5 years</th>
<th>6-9 years</th>
<th>10+ years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Years of Experience Teaching</td>
<td>0</td>
<td>5</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Years of Experience Teaching ELL Students</td>
<td>2</td>
<td>5</td>
<td>3</td>
<td>6</td>
</tr>
</tbody>
</table>

Further, the researcher used frequency tests to find the mean and median of the five constructs measured in the survey. Table 4 shows the mean and median for the constructs measured on the 4-point Likert scale. Similarly, Table 5 displays the mean and median for the constructs measured on a 5-point Likert scale.

Table 4
*Mean and Median of Survey Constructs Based on 4-Point Likert Scale*

<table>
<thead>
<tr>
<th>Construct</th>
<th>Teacher Preparation</th>
<th>Cultural Mismatches</th>
<th>Teacher Disposition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>2.62</td>
<td>2.79</td>
<td>2.78</td>
</tr>
<tr>
<td>Median</td>
<td>2.69</td>
<td>2.87</td>
<td>2.75</td>
</tr>
</tbody>
</table>

Table 5
*Mean and Median of Survey Construct (Knowledge of SLA) based on a 5-Point Likert Scale*

<table>
<thead>
<tr>
<th>Construct</th>
<th>Use of SLA in School Year</th>
<th>Use of SLA in Typical Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>3.09</td>
<td>3.52</td>
</tr>
<tr>
<td>Median</td>
<td>3.14</td>
<td>3.71</td>
</tr>
</tbody>
</table>

Using SPSS, the researcher used the quantitative data from the survey to create a dataset from which she could run tests. In order to do this, the researcher had to first break down Part D: Demographic Data. This part of the survey was broken down by content taught, years teaching overall, years teaching ELL students, and whether the respondents were trained or not. When put
into SPSS as part of the dataset, Part D: Demographic Data of the survey was coded numerically. Content taught was given a 1-4 code representing English (1), history (2), math (3), and science (4). Years teaching overall and years teaching ELL students were coded as separate entities but given the same codes since they were measured on the same scale. For participants who answered 1-2 years of teaching ELL students and/or overall years teaching were coded as 1; participants who answered 3-5 years were coded as 2; participants who answered 6-10 years were coded as 3; participants who answered 10 or more years were coded as a 4.

Parts A, B, and C of the survey consisted of five sections all together, each section measuring a different construct. As previously mentioned, each section consisted of multiple statements measured on Likert scales. First, the researcher assigned each item on the Likert scale a numerical value. Three of the sections were measured on a 4-point Likert scale: (a) section 1 measuring teacher preparedness; (b) section 2 measuring cultural mismatches; (c) section 3 measuring teacher disposition. Strongly agree was coded as a 4, agree was coded as a 3, disagree was coded as a 2, and strongly disagree was coded as a 1. Similarly for sections 4 and 5, measuring teachers’ knowledge of SLA, the Likert scale items were coded numerically. These statements were measured on a 5-point Likert scale. All the time was coded as a 5, frequently was coded as a 4, sometimes was coded as a 3, seldom was coded as a two and never was coded as a 1.

Once all the Likert scale answer choices were given numerical values, the researcher had to add the data from the five Likert scale questions to the SPSS dataset. Since section 1 about teacher preparation consisted of eight statements, the researcher added the Likert scale coded answers together and divided the answer by eight. For example, if a participant answered strongly agree (4) for five of the answers and disagree (2) for three of the statements in question
one, the researcher added 20 and 6 to get 26. Then the researcher divided 26 by 8 to get an average of 3.25. This weighted, averaged number was put into the SPSS dataset under the construct teacher preparation. The researcher repeated these steps to add the data for each of the questions from each participant into the SPSS dataset.

With a completed dataset, the researcher then ran a correlation test to find relationships between constructs. Setting the p-value at .05, the researcher then analyzed the correlation test results looking for significant relationships. ANOVA tests were run later on constructs where significant relationships were found.

**Qualitative data.** The qualitative data in this mixed-methods study consisted of the two open-ended questions from the survey about the challenges and benefits of having ELL students in mainstream classrooms, the open-ended question on the survey about the type of training participants had received, and the focus group transcripts. While those components, the two open-ended questions, the training description question, and the focus group transcripts, were all analyzed separately, the researcher followed the same procedure for each.

The researcher used emergent coding to analyze the qualitative data and organized the analysis in separate coding notebooks (Saldaña, 2013). In the first cycle of coding, the researcher immersed herself in the data, reading it numerous times, and used emergent coding, deriving language directly from the text as codes. This framed the researcher’s analysis, pulling words directly from the transcripts and written answers to create initial codes. For example, words such as “exposure,” “opportunities,” “show others,” and “in turn” were pulled directly from the data and used to create the codes for the first cycle.

In a second round of coding, the researcher clustered the initial codes into larger categories using patterns. For instance, as seen in Table 6, codes like “exposure” and
“opportunities” were collapsed into “exposure to English language” since they were identified to have a pattern in appearance. The researcher deemed these initial codes to follow a pattern of appearance because, in context, both codes discussed the benefits of exposure to the English language and the opportunities to interact with the English language when ELL students are in mainstream classrooms. Similarly, due to their likeness, words like “show others” and “in turn” were collapsed into “reciprocal teaching.” The collapse of these two codes into reciprocal teaching was determined by the context in which the two codes were found. Both were pulled from participant answers that discussed the reciprocity of teaching between ELL students and English-proficient students. The ability of one group of students to show others various skills and, in turn, the other group to demonstrate other abilities defined this code.

Table 6

<table>
<thead>
<tr>
<th>Theme</th>
<th>Code</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heterogeneous Learning</td>
<td>1.1</td>
<td>“Inclusion provides exposure and opportunities for application.”</td>
</tr>
<tr>
<td></td>
<td>Exposure to English Language</td>
<td>“There’s constant exposure to English through working with native speakers.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Exposure to the use of language and the societal expectations.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Allows ELL students to not miss class time and also gives the opportunity to work with bilingual peers.”</td>
</tr>
<tr>
<td></td>
<td>1.2</td>
<td>“They are able to show other students what tenacity looks like.”</td>
</tr>
<tr>
<td>Reciprocal Teaching</td>
<td></td>
<td>“Increased connection with students helps ELL students in general education classes. I teach them to connect and language skills. In turn, they help me learn their language.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“ELL students model perseverance, add new perspectives in terms of culture and language.”</td>
</tr>
</tbody>
</table>
After this second cycle of coding was completed, the larger categories were used to identify broader patterns in the dataset, thus creating emergent themes. Using La Pelle’s (2004) process, the researcher gave each theme and code a numerical value and organized them into a codebook. To create the codebook, the researcher looked for emergent themes among the collapsed codes. For example, “exposure to English language” and “reciprocal teaching” were two codes that fit under the theme of heterogeneity in the classroom. The researcher believed both of these codes identified heterogeneity as a benefit of having ELL students in mainstream classrooms. Therefore, she made one theme that emerged under the benefit(s) of having ELL students in mainstream classrooms “heterogeneous learning,” or the opportunity to learn from other students at varying stages of the English language acquisition process. For organizational purposes, the theme was given a number and the collapsed codes within that theme were given that same number with a decimal to differentiate. As seen in Table 6, in her coding notebook the researcher assigned the theme of “heterogeneous learning” as 1, thus, “exposure to English language” was assigned 1.1 and “reciprocal teaching” was assigned 1.2.

**Secondary datasets.** As previously stated, the researcher was provided pre-existing de-identified datasets from Union School District for the school years 2016-2018. The datasets consisted of ELL students’ performance on the standardized-state exam, attendance rates, graduation rates, and results from a district-administered survey measuring students’ sense of belonging, self-efficacy, perseverance, overall school satisfaction, as well as teachers’ expectations for ELL students, perceptions of ELL student perseverance, and their perception of their ability to educate all students. The researcher focused on the graduation data and survey data from Union School District in general in comparison to the data from Metro High School.

To do this, the researcher made a table with the 2018 graduation data that listed the
disaggregated data on the y-axis and the source of the data on the x-axis. Similarly, the researcher made a table with the survey constructs on the x-axis and the disaggregated survey data on the y-axis. After the tables were organized, the researcher used simple subtraction to find the differences in variables between Union School District as a whole, Union School District ELL students, and Metro High School ELL students. Lastly, the researcher compared the survey Union School District administered to teachers and the survey administered to students in order to find similar constructs. Only one construct was measured in both surveys, level of perseverance, so the researcher again subtracted to find the difference between each subgroup’s answer.

Findings

Using the analysis methods outlined above, the researcher examined the data and found the following results.

Quantitative Data

Setting the p-value at .05, the researcher found question 4 of the survey, measuring knowledge of SLA, and question 5 of the survey, also measuring knowledge of SLA, had a positive correlation, with a p-value of .049. Given that the researcher created this section of the survey, a correlation between question 4 and question 5 validated the instrument since they are both measuring the same construct: teachers’ knowledge of SLA.

In addition to question 4 and question 5 about the teachers’ knowledge of SLA, the researcher found a positive correlation between the number of years a teacher had been teaching overall and the number of years a teacher had been teaching ELL students with a p-value of 0.

Question 1 on teacher preparation for teaching ELL students and the number of years a teacher had teaching ELL students also had a positive correlation. The p-value for this
correlation was .027, demonstrating a relationship between experience with teaching ELL students and a teachers’ formal training to do so.

Lastly, the researcher found an association between question 1, measuring teacher preparation, and the question about whether or not a teacher had been formally trained in teaching ELL students. The p-value in this relationship was -.003, indicating a negative association. This will be discussed below.

**Qualitative Data**

When coding the qualitative data, the researcher found multiple codes in the first round of the coding process. More specifically, in the question about the benefit(s) of having ELL students in mainstream classrooms, there were nine initial codes found in the first cycle of analysis. For the question about the challenge(s) of having ELL students in mainstream classrooms, the researcher originally found fifteen codes. For the question about formal training attendance, six codes were established, and 24 codes were initially found for the focus group analysis.

After conducting a second round of coding, the researcher was able to collapse the nine codes for benefit(s) of having ELL students in mainstream classrooms into five and fifteen codes for challenge(s) of having ELL students in mainstream classrooms were collapsed into nine. The codes for types of formal training were collapsed from six to five and the 24 codes from the focus groups were collapsed into 12.

In the last part of the coding process for the qualitative data, the researcher defined the emergent themes. When asked about the benefit(s) of having ELL students in mainstream classrooms, the researcher found two emergent themes: heterogeneous learning and diversity (see Table 7).
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Table 7
Codebook from Benefits of Inclusion Question

<table>
<thead>
<tr>
<th>Data Source: Survey</th>
<th>Theme Code</th>
<th>Theme Code</th>
<th>Theme: Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section C: Question 6:</td>
<td>1</td>
<td>1.1</td>
<td>exposure to English language</td>
</tr>
<tr>
<td></td>
<td>Heterogeneous</td>
<td>1.2</td>
<td>reciprocal teaching</td>
</tr>
<tr>
<td></td>
<td>Learning</td>
<td>1.3</td>
<td>pace of learning</td>
</tr>
<tr>
<td>Section C: Question 7:</td>
<td>2</td>
<td>2.1</td>
<td>diversifying classroom (experiences and perspectives from outside)</td>
</tr>
<tr>
<td>What do you consider to be the greatest benefit(s) including ELL in mainstream classrooms?</td>
<td>Diversity</td>
<td>2.2</td>
<td>equity/in the same classroom</td>
</tr>
</tbody>
</table>

There were three emergent themes found for the challenges of teaching ELL students in mainstream classrooms: time, curriculum, and classroom environment (see Table 8). Trainings provided by Union School District, institutional requirements, and general professional developments were the three emergent themes found in the question about formal trainings participants attended (see Table 9).

Table 8
Codebook from Challenges of Inclusion Question

<table>
<thead>
<tr>
<th>Data Source: Survey</th>
<th>Theme Code</th>
<th>Theme Code</th>
<th>Theme: Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section C: Question 7:</td>
<td>1</td>
<td>1.1</td>
<td>limited resources (staff)</td>
</tr>
<tr>
<td></td>
<td>Time</td>
<td>1.2</td>
<td>time to and process of scaffolding</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.3</td>
<td>time to pay attention in classroom/understand/assess their needs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.4</td>
<td>wide range of abilities under umbrella of ELL</td>
</tr>
<tr>
<td>What do you consider to be the greatest challenge(s) including ELL in mainstream classrooms?</td>
<td>2</td>
<td>2.1</td>
<td>accessibility to curriculum</td>
</tr>
<tr>
<td></td>
<td>Curriculum</td>
<td>2.2</td>
<td>emphasis on English/inflexibility with curriculum to include other languages</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.3</td>
<td>Pacing</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>3.1</td>
<td>classroom environment (empathy and vulnerability)</td>
</tr>
<tr>
<td></td>
<td>Classroom Environment</td>
<td>3.2</td>
<td>communication barrier (between teacher and other students)</td>
</tr>
</tbody>
</table>
Lastly, five emergent themes were found in the focus group transcripts: professional developments, time, modifications, knowledge of SLA, and inclusion challenges (see Table 10).

<table>
<thead>
<tr>
<th>Data Source: Survey</th>
<th>Theme Code</th>
<th>Theme Code</th>
<th>Theme: Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section D: Demographic Data: Types of training teachers have received in teaching ELL students.</td>
<td>1 DCPS</td>
<td>1.1</td>
<td>School training</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.2</td>
<td>District level</td>
</tr>
<tr>
<td></td>
<td>2 Institution Requirements</td>
<td>2.1</td>
<td>Graduate/College courses</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.2</td>
<td>Certification</td>
</tr>
<tr>
<td></td>
<td>3 General PD</td>
<td>3</td>
<td>PD (general)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Data Source: Focus Groups</th>
<th>Theme Code</th>
<th>Theme Code</th>
<th>Theme: Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus Groups 1 Professional Development</td>
<td>1</td>
<td>1.1</td>
<td>challenges of professional developments that teachers have attended</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.2</td>
<td>benefits of professional developments that teachers have attended</td>
</tr>
<tr>
<td></td>
<td>2 Time</td>
<td>2.1</td>
<td>time to modify/plan</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.2</td>
<td>time to collaborate/find resources</td>
</tr>
<tr>
<td></td>
<td>3 Modifications</td>
<td>3.1</td>
<td>types of modifications/scaffolds used</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.2</td>
<td>how/when and for whom modifications are used</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.3</td>
<td>accountability for using modifications</td>
</tr>
<tr>
<td></td>
<td>4 SLA Knowledge</td>
<td>4.1</td>
<td>administration’s understanding of SLA and impact on teacher evaluations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4.2</td>
<td>teacher misconceptions</td>
</tr>
<tr>
<td></td>
<td>5 Inclusion Challenges</td>
<td>5.1</td>
<td>heterogeneous groupings and modified work</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5.2</td>
<td>vast disparities in background knowledge and English abilities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5.3</td>
<td>flexibility of curriculum and teacher willingness to modify</td>
</tr>
</tbody>
</table>
Secondary Datasets

In the secondary data provided by Union School District, the researcher found a discrepancy in student performance, student beliefs about self-efficacy, perseverance, and overall student satisfaction between ELL students at Metro High School and both the ELL students and English-proficient students within the entire district. These discrepancies will be further discussed below.

The secondary data provided to the researcher by Union School District, allowed for a comparison of graduation rates between students across the district at large, as well as students within Metro High School (see Table 11). In school year 2018, the overall graduation rate for Union School District was 69%. This was disaggregated: 68% of Black students graduated, 61% of Latinx students graduated, and 52% of ELL students graduated from Union School District in 2018. The overall graduation rate for Metro High School that year was 84.3%. At Metro High School, 95.2% of Black students graduated, 78% of Latinx students graduated, and 71.1% of ELL students graduated in 2018.

Table 11
2018 Disaggregated Graduation Rates for Union School District and Metro High School

<table>
<thead>
<tr>
<th></th>
<th>Overall</th>
<th>Black Students</th>
<th>Latinx Students</th>
<th>ELL Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Union School District</td>
<td>69%</td>
<td>68%</td>
<td>61%</td>
<td>52%</td>
</tr>
<tr>
<td>Metro High School</td>
<td>84.3%</td>
<td>95.2%</td>
<td>78%</td>
<td>71.1%</td>
</tr>
</tbody>
</table>

In a survey conducted by Union School District every year, students were asked questions about their sense of school belonging, personal perseverance, self-efficacy, and overall satisfaction with their educational opportunities and experience at their school. Table 12 shows the results from the annual survey administered by Union School District. The columns represent
the average for each construct. The averages were provided for the district as a whole and
disaggregated by ELL status for the district and for Metro High School. The average scores for
ELL students across the district include affluent ELL students from well-educated, bilingual
households who attend schools in more affluent areas of the city. In more affluent
neighborhoods, the density of ELL students in mainstream classrooms is lower. At Metro High
School, however, 100% of its students are classified by the state as economically disadvantaged
and qualify for free or reduced meals. The density of ELL students in mainstream classrooms at
Metro High School is much higher than other areas of the city.

Table 12
Disaggregated Student Responses to Union School District Survey Constructs

<table>
<thead>
<tr>
<th>Construct</th>
<th>Union School District (whole)</th>
<th>Union School District (ELL)</th>
<th>Metro High School (ELL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sense of School Belonging</td>
<td>50%</td>
<td>52%</td>
<td>50%</td>
</tr>
<tr>
<td>Personal Perseverance</td>
<td>59%</td>
<td>59%</td>
<td>56%</td>
</tr>
<tr>
<td>Self-Efficacy</td>
<td>53%</td>
<td>52%</td>
<td>49%</td>
</tr>
<tr>
<td>Overall Satisfaction</td>
<td>78%</td>
<td>87%</td>
<td>82%</td>
</tr>
</tbody>
</table>

In the 2017-2018 school year, students across the district were asked about their beliefs in
their personal ability to persevere. In its analysis of the survey results, the district defined this as:
“How well students are able to persevere through setbacks to achieve important long-term
goals.” Overall students across Union School District as well as the ELL students across the
district had an average rating of 59% for perseverance. At Metro High School the ELL student
average was 56%. Self-efficacy, defined as “how much students believe they can succeed at
achieving academic outcomes,” averaged 53% in the district as a whole, 52% for ELL students
across the district, and 49% for ELL students at Metro High School. As for sense of school
belonging, ELL students at Metro High School matched the students in Union School District at
50% but the ELL students in the school district as a whole had an average of 52% for sense of school belonging. In overall student satisfaction, ELL students at Metro High School averaged 82% while the overall district average was 78%. The overall student satisfaction rate for ELL students throughout the district, however, was 87%.

Union School District gave a similar survey to teachers. Teachers were asked about their “perceptions of students’ abilities to persevere through setbacks to achieve important long-term goals”, their perception of their “readiness to address issues of diversity in the classroom” and how much teachers “hold students to high expectations around effort, understanding, persistence, and performance in class.” In their survey, teachers in Union School District as a whole, estimated students’ abilities to persevere at 41%, while teachers at Metro High School estimated students’ perseverance at 30%. Teachers across the district, on average, rated their readiness to address diversity in the classroom at 80% and teachers at Metro High School averaged a score of 77%. For the variable of high expectations, however, Metro High School matched the district’s average rating at 96%.

Discussion

The researcher found the data verified there is an opportunity gap between Latinx ELL students and their English-proficient peers from other ethnic backgrounds at Metro High School. In comparison to Union School District as a whole, the students at Metro High School consistently graduate at higher rates. For example, in 2018, the average graduation rate for Union School District was 69%, whereas the graduation rate for Metro High School was 84.3%. The disaggregated data, however, indicated disparities in graduation rates among Latinx and ELL students. In 2018, 68% of Black students graduated from Union School District and 95.2% of Black students graduated from Metro High School. In that same year, 52% of ELL students
graduated from Union School District and 71.1% of ELL students graduated from Metro High School. The difference between Union School District and Metro High School’s overall graduation rate is 15.3%. The difference between the Black students who graduated from Union School District and Metro High School is 27.2% yet the difference between ELL student graduation rates from Union School District and Metro High School is only 19.1%. If all students were performing at the same rate, the graduation gaps between the district and Metro High School would be the same. The high difference between the graduation rates for Black students from Metro High School and Union School District and the graduation rates for ELL students from both institutions signifies a gap between the graduation rates and, by extension, a gap in the academic performance of Black students at Metro High School and the ELL students at Metro High School.

As previously mentioned, in 2018 Black students at Metro High School had a 95.2% graduation rate while Latinx students had a 78% graduation rate and ELL students had a 71.1% graduation rate. The difference in graduation rates within Metro High School mirrors the 20% nationwide graduation gap between ELL students and the overall graduation rate as discussed in Chapter 1. The literature suggests this opportunity gap may be due to cultural and linguistic mismatches between ELL students and their teachers as well as teacher preparedness to teach ELL students in mainstream classrooms.

In the mixed-methods survey administered by the researcher, about 75% of participants indicated they had received training in teaching ELL students. This ranged from trainings held at Metro High School to graduate courses. Forty-four percent of participants, however, stated they did not feel adequately trained to teach ELL students. This was further supported with the researcher’s finding between the amount of training a participant received in teaching ELL
students and participants’ perceptions of their preparedness to teach ELL students. Since there was a negative association between the amount of training a participant had in ELL student instruction and their perception of their own preparedness to teach ELL students, the researcher ran a t-test splitting the training a participant had into the subgroups of trained and untrained. The researcher found a p-value of .003, indicating there is a statistically significant difference between participants who were trained and participants who were untrained. The n for untrained participants, however, was much smaller than the n for trained participants, therefore, the researcher relied on the Pearson correlation test that found a negative relationship between the training a participant had in teaching ELL students and their perceived sense of preparedness to do so. The negative correlation between these two factors indicated the more training a participant had received, the less adequately trained they felt. This indicated the more a participant was trained in teaching ELL students, the lower their perception of their knowledge of SLA. One participant with ten years of experience teaching ELL students stated “When I’ve attended district PDs, it’s always the same thing: use sentence stems, frontload vocabulary. But I don’t ever see strategies for teaching high school level work. Of course I’m using sentence stems. Give me something else.” Trained participants also felt unsupported with one-off trainings and felt without follow-up they did not know if they were applying the strategies correctly. Hence, the more participants were trained, the less they realized they knew.

The concept participants found most challenging about having ELL students in their mainstream classrooms was making curriculum accessible. Twenty-six percent of the participants from the researcher’s survey felt curriculum access was the largest barrier for ELL students in the classroom. When asked about the greatest challenges of including ELL students in mainstream classrooms, 48% of participants voiced concern about the amount of time they had to learn the
process of curriculum modification and implement it, as well as adequate time to give individualized attention to ELL students in class in order to better understand their needs and content misconceptions. Seventy-seven percent of teachers at Metro High School felt they had the ability to educate all students in a diverse classroom, whereas the district average was 80%. This difference may be due to the time constraints teachers at Metro High School felt in the classroom to meet the needs of their ELL students.

During the third focus group, the ESL teacher participants questioned whether or not scaffolding throughout subject areas and grade levels were being used with fidelity. Meanwhile, mainstream teacher participants voiced concerns about having enough time to modify curriculum. In the second focus group, one mainstream teacher participant said time constraints to modify curriculum limited the use of modifications in her class. This was further supported when one ESL teacher participant explained, “Last week when the admin did a walk-through of 15 classrooms, they found that only 3 teachers were using writing scaffolds for ELLs.” The two ESL teacher participants expressed concern that teachers are not asked to prove they are using scaffolding. They believed ELL accommodations were not given the same priority or attention as special education accommodations, despite legislation that mandates both be used with their respective populations. When asked how often they are required to show the scaffolds they are using in class, the participants in the mainstream teacher focus groups said twice a year: December and June. The requirement to modify curriculum was checked by administration as part of a teacher’s final evaluation but, as one participant said, “I have never been pushed to actually show my modifications. They just ask, ‘Do you do it?’ It’s like a box we all just have to check but it doesn’t mean anything.” This comment from a mainstream teacher in the second focus group validated the concerns raised by the ESL teacher in the third focus group. Since
mainstream teachers have limited time, which limits their ability to modify curriculum, classroom content remains out of reach for many of the ELL students. On the survey provided by Union School District in the secondary dataset, about 49% of ELL students at Metro High School felt a high level of self-efficacy for completing coursework and meeting deadlines, denoting trouble accessing curriculum in mainstream classrooms.

Since all the participants in this needs assessment were teachers from ethnic backgrounds other than Latinx, the researcher found mixed results on the impact of cultural mismatches between Latinx ELL students and the non-Latinx teachers who participated in the survey and focus groups. On one question from the researcher’s survey, 31% of participants stated they rarely or never use their knowledge of a student’s first language’s grammatical rules and vocabulary to inform instruction, yet on another question 61% said they know how to access students’ funds of knowledge in their content area. This led the researcher to ask how participants defined funds of knowledge and, based on conversations in the first and second focus groups, the researcher found the mainstream participants equated funds of knowledge to a student’s background knowledge about the class’s content. For example, one participant said he accessed funds of knowledge by determining what students already knew and understood about his curriculum. None of the mainstream teachers in the first two focus groups made a connection between funds of knowledge and a student’s cultural background, family, or life experiences. This demonstrated that participants focused on a student’s educational background and the impact that has on the student’s academic progress but did not see or make the connection between a student’s cultural background and the influence culture had on a student’s academics. Despite being a school that specializes in multicultural curriculum, ELL students at Metro High School had the same rate for sense of belonging at their school as all students across Union
UNDERSTANDING SLA AND THE LATINX ELL OPPORTUNITY GAP

School District and a lower sense of belonging than ELL students across the district. The higher sense of school belonging from ELL students across the district could be due, in part, to the economic differences and each subgroup’s access to English. As previously stated, ELL students at other schools in more affluent areas are often in classes with a lower density of ELL students and, therefore, had more access to native English speakers. Based on the literature reviewed in Chapter 1 and the findings on the use of students’ funds of knowledge, the equal sense of belonging from Metro High School’s ELL students and students across the district as well as the disparity in sense of belonging between ELL students at Metro High School and across the district suggested that mainstream teachers may not have included students’ cultures into the curriculum or classroom environment at Metro High School.

Similarly, about 94% of survey participants agreed with the statement “I am able to provide students with the knowledge and skills needed to function in mainstream U.S. culture.” This demonstrated the mainstream teacher participants felt confident in their understanding of culture within the United States and their ability to prioritize the knowledge and skills a student needs to be successful in this country. Yet only 12% of participants agreed the statement “I interview students about the role the English language plays in their everyday lives.” This suggested participants were not aware of how Latinx culture and American school culture may interact in a Latinx ELL student’s life and the implications that may have on that student’s learning. When asked about their perseverance in the Union School District survey, 56% of ELL students at Metro High School considered themselves perseverant. In the same survey, when the teachers were asked about the students’ perseverance, however, 30% of teachers perceived students to be perseverant. The large disparity between the students’ and teachers’ perceptions of perseverance may be caused by the high expectations teachers hold for students in the classroom
at Metro High School. Based on the data, teachers believe they are culturally and linguistically responsive in their classrooms, but their actions do not support this claim. Thus, there is a gap between teachers’ perceived cultural and linguistic knowledge and their actual cultural and linguistic knowledge. This gap may cause teachers to believe they are culturally and linguistically supporting their ELL students in the classroom, but they are not. In believing they are supporting students culturally and linguistically, teachers at Metro High School may hold higher expectations for their ELL students. Without the proper supports, however, the students will not necessarily be able to meet those high expectations, creating the teachers’ lower perception of ELL students’ perseverance. Therefore, what teachers perceived to be giving up or lack of perseverance may have actually been a students’ struggle with navigating the American school culture while simultaneously learning the content without the cultural or linguistic supports they need.

Conclusion and Implications

The literature review from Chapter 1 suggests contributing factors to Latinx ELL student opportunity gap at the high school level are access to higher-level courses (Callahan, 2005; Kanno & Kangas, 2014; McCloud, 2015), family engagement (Delgado-Gaitan, 1994; Fuligni, 1997; Good et al., 2010), cultural mismatches (Delgado-Gaitan, 1994; Fuligni, 1997; Ogbu, 1982) and teacher preparedness (Clair, 1995; Menken, 2010; Reeves, 2006; Rizzuto, 2017; Yoon, 2008).

The researcher found that family engagement and access to higher-level courses were not actionable contributing factors at Metro High School, as they are already being addressed through different school policies and practices. The needs assessment found the factor of cultural mismatches from the literature did exist at Metro High School. The researcher found ELL
students at Metro High School had a lower sense of school belonging than ELL students across the district. Sense of belonging is affected by the students’ perception of the value a teacher places on diversity and the inclusion of their culture in the classroom (Brown & Chu, 2012). Sense of school belonging and student academic performance have a positive relationship (Brown & Chu, 2012). Therefore, the low sense of school belonging ELL students at Metro High School reported and the Latinx ELL opportunity gap that exists there, indicates the ELL students at Metro High School may be impacted by inclusion of their Latinx culture in the teachers’ instructional practices and teaching strategies.

Additionally, the needs assessment conducted at Metro High School identified teacher preparedness as a contributing factor to the Latinx ELL student opportunity gap there. The negative correlation between the number of years a teacher had been teaching ELL students and their perception of their preparedness to teach ELL students indicates the longer teachers interact with ELL students, the more they realize what they do not know. This is further confirmed by the low self-efficacy teachers at Metro High School reported for teaching in a culturally diverse classroom and the high number of teachers that stated they would like more training on instructional strategies to meet the needs of their ELL students.

Ultimately, the needs assessment demonstrated a need for training on cultural and linguistic responsiveness and preparation for teaching ELL students. More specifically, this indicates the need for a professional development series founded in SLA that would train mainstream teachers at Metro High School on how to include student culture and background in instructional strategies, create accessible curriculum, and implement lessons that will better meet the needs of their ELL students.
Chapter 3

The opportunity gap between students who are Latinx ELL students and their English-proficient counterparts has existed in the United States for decades (Brown & Chu, 2012; Callahan, 2005; Clair 1995; Penfield, 1987). In comparison to both their English-proficient peers and ELL students from other ethno-linguistic backgrounds, Latinx ELL students at the high school level have lower standardized test scores, lower grade point averages, higher dropout rates, and lower post-secondary enrollment (Benner & Graham, 2011; Menken, 2010; Niehaus & Adelson, 2014; Ross et al., 2010). The literature review in Chapter 1 suggests contributing factors to this opportunity gap are lack of access to higher-level courses (Callahan, 2005; Kanno & Kangas, 2014; McCloud, 2015), levels of family engagement (Delgado-Gaitan, 1994; Fuligni, 1997; Good et al., 2010), cultural mismatches (Delgado-Gaitan, 1994; Fuligni, 1997; Ogbu, 1982) and teacher preparedness (Menken, 2010; Reeves, 2006; Yoon, 2008).

A needs assessment was conducted at Metro High School to determine which actionable contributing factors to the Latinx ELL student opportunity gap exist there. Pre-existing quantitative data was used to determine how Latinx ELL students at Metro High School perform academically compared to their English-proficient peers. A mixed-methods survey was conducted to explore teachers’ perceptions of their knowledge of SLA, and the alignment of their pedagogical practices with regard to ELL students and SLA. The researcher found there is an opportunity gap between Latinx ELL students and their English-proficient counterparts at Metro High School. Additionally, according to the survey administered during the needs assessment, the researcher found teachers at Metro High School do not feel adequately prepared to teach ELL students in their mainstream classes. In this survey, about 55% of teachers expressed interest in receiving additional training for teaching ELL students. The conceptual framework below
understands how these foci relate to one another and to the overall goal of increasing Latinx ELL student academic performance.

**Conceptual Framework**

*Figure 2. Conceptual framework for the intervention addressing mainstream teacher knowledge of SLA and instructional practices specific to ELL students in mainstream classrooms at Metro High School.*

While the conceptual framework in Chapter 1 explained the relationships between contributing factors to the Latinx ELL student opportunity gap, the conceptual framework illustrated in Figure 2 is based upon the constructs identified in the needs assessment. Teachers at Metro High School expressed a need for more knowledge of SLA and SLA-based instructional practices. Banks et al. (2001) assert that professional development is essential in order for teachers to understand how race, culture, language, and socioeconomic class impact a student’s behavior and academics. The conceptual framework for the Latinx ELL student opportunity gap at Metro High School is founded in Vygotsky’s (1978) theories on development that place language at the center of
cognitive development as well as the theory of applied linguistics for second language learning and acquisition.

Vygotsky (1978) argued that language is essential for cognitive development. He found language to be a tool for learning and argued that we learn through our linguistic communication with others (Vygotsky, 1978). Vygotsky’s (1978) theories discuss the role of the zone of proximal development (ZPD) on student learning. The ZPD is the distance between the student’s potential development level and their actual developmental level (Vygotsky, 1978). Vygotsky (1978) further posits in order for teachers to push students beyond their actual developmental levels, they need to know the individual students’ actual developmental levels. A student’s actual developmental level and their ZPD are determined through assessment. Assessment is an essential tool in helping teachers to know which theories and practices will best support a student’s learning at a given time. A diagnostic assessment provides the teacher with the student’s actual developmental level and ongoing formative assessments guide instruction to promote the student’s continued growth in the ZPD.

Applied linguistics is the “theoretical and empirical investigation of real-world problems in which language is a central issue” (Brumfit, 1995, p. 27). In order to adequately address the needs of their Latinx ELL students, teachers need to have an understanding of instructional strategies specific to second language acquisition (de Jong, Harper, & Coady, 2013). Thus, the other foundational component of the proposed professional development will be instructional strategies for teaching ELL students, which will also be informed by SLA theory. While the assessment will determine an ELL student’s ZPD, the specific instructional strategies a teacher uses with ELL students will allow the student opportunities to learn independently and, therefore, increase their ZPD.
Emergent Area

As outlined in Chapter 2, to conduct the needs assessment for Metro High School the researcher needed to create a measurement tool because there was no existing instrument that would adequately measure the desired constructs: teacher preparedness, cultural mismatches, teacher disposition, and teacher’s knowledge of SLA. This problem of limited existing research also arose when looking for interventions to better prepare teachers for teaching ELL students in mainstream classrooms. At this time, there is limited research on interventions focused on the preparedness of mainstream teachers to educate ELL students (August, Branum-Martin, Cardenas-Hagan, & Francis, 2010; Bunch, 2013; Lucas, 2011). Lucas (2011), whose work is well known in the field of ELL education, acknowledges, “the literature focused explicitly on preparing mainstream teachers to teach ELLs is relatively small” (p. 40). Indeed, Bunch (2013), believes it is “necessary to emphasize that research on teacher preparation initiatives for linguistic diversity is in its infancy” (p. 308). Most intervention literature currently focuses on pre-service teachers or in-service teachers in graduate classes, leaving a small pool of literature focused solely on mainstream teachers’ in-service preparation for teaching ELL students. There is existing literature on professional development for overall teacher preparedness, differentiation, and teacher dispositions. These, by extension, can be applied to professional developments on SLA. This chapter outlines effective professional development interventions in general and then moves into the existing research on professional development interventions focused on SLA, which is less extensive.

History of ELL Students in American Schools

The thin intervention research base on improving SLA knowledge and strategies of in-service mainstream teachers may be explained through the dominance of English-
monolingualism in the United States (Watson & Shapiro, 2018). As of February 2019, only six states and the District of Columbia had explicit foreign language course requirements for high school graduation and 21 states had no foreign language requirements for high school graduates at all (McDonald, Zinth, & Pompelia, 2019). Eighteen states, however, had foreign language requirements that could be met by taking foreign language courses, visual arts courses, or career and technical education courses (McDonald et al., 2019). The inclusion of visual arts and career and technical education courses under the foreign language course requirement for high school graduation in those states and the 21 states that have no requirement for foreign language at all demonstrates states de-valuing of languages other than English. As discussed in Chapter 1, this societal and governmental mentality influences teacher mindset towards the value of the English language as well. Watson and Shapiro (2018) assert that teachers struggle to detach themselves from their English-monolingual ideologies, or may not recognize that attachment at all, because these beliefs are so deeply engrained within them. From the English-monolingualism movement that began in the early 1900s to the most recent emphasis on English-only instruction for ELL students, the United States has a strong legacy of endorsing English-monolingualism. The emphasis on the importance of the English language in the United States may impact teacher preparedness to teach ELL students in their mainstream classrooms (Good et al., 2010; Marschall et al., 2011).

Additionally, changes in legislation about teacher licensure requirements over the course of the past two decades may have impacted the research on interventions focused on mainstream teachers’ instructional practices with ELL students. In 2009, the Race to the Top legislation provided $4.35 billion dollars in grants to innovative educational reforms at the district and state levels (Gebhard, Willet, Caicedo, & Piedra, 2011). Many of these grants were given to
universities that created opportunities for teachers to return to school to receive their master’s degrees. Universities also used grant money to encourage teachers to participate in intervention studies using their dual identities as students and professionals (Brisk & Zisselsberger, 2011; Gebhard et al., 2011; Sakash & Rodriguez-Brown, 2011). As political priorities shifted, however, federal funding for mainstream teachers’ continued ESL education decreased, as did mainstream teacher enrollment in ESL focused graduate classes (Sakash & Rodriguez-Brown, 2011).

**Mainstream Teacher Resources**

Despite the limited intervention studies on mainstream teachers’ preparation to teach the ELL students in their classrooms, it is worth noting that there are many resources for teachers to reference. There is existing research on what teachers need to know about teaching ELL students, and how to implement the best strategies. Organizations such as Colorín Colorado, Great City Schools, the Center for Applied Linguistics, WIDA, and E.L. Achieve have become foundational resources for mainstream teachers seeking materials and strategies for teaching ELL students. In addition, the National Educational Association (NEA) (2011) and researchers, such as Lucas, Villegas, and Freedson-Gonzalez (2008), Lucas and Villegas (2011), Lucas (2011), de Jong and Harper (2005, 2011), de Jong, Harper, and Coady (2013), Echevarría, Vogt, and Short (2008), Echevarría and Vogt (2010), have created frameworks for professional development and graduate course curriculums focused on mainstream teachers’ preparedness for teaching ELL students in their classrooms. Much of the intervention literature discussed below integrates these approaches.

**Intervention Literature Review**

The following literature review begins with an overview of general professional development characteristics that have contributed towards the change of teacher dispositions.
This is followed by a literature review of interventions on instructional strategies for ELL students in mainstream classrooms. Then, because the needs assessment found teachers at Metro High School specifically need professional development on SLA, the final section of this literature review is on professional developments with an SLA focus.

**Key Characteristics of Successful Professional Development**

Thomas Guskey is an expert in the field of teacher professional development. Having contributed more than 250 chapters, articles, and professional papers to the field, in addition to 25 award-winning books, Guskey (2002) defines professional development as “systematic efforts to bring about change in the classroom practices of teachers, in their attitudes and beliefs, and in the learning outcomes of students” (p. 381). In order to accomplish this change, professional development needs to be effective. There are five key characteristics to effective professional development: contextualized, interactive, collaborative, reflective, and sustained (Avalos, 2011; Darling-Hammond, Hyler, & Gardner, 2017; Desimone & Garet, 2015).

Desimone and Garet (2015) describe the findings from recent research within the United States that tested the five key characteristics of successful professional development. They put particular emphasis on studies that used randomized control groups. In their literature review, they found professional development needs to be job-embedded and contextualized in order to be effective (Desimone & Garet, 2015). This means the content of the professional development needs to pertain to the teachers’ specific curriculum within the teachers’ specific classrooms (Darling-Hammond et al., 2017). As cited in Guskey’s (2002) work, in 1986 Guskey created a research-based professional development model for changing teacher dispositions which Clarke and Hollingsworth (2002) later added to using empirical data. Both models indicate if professional development does not address the context-specific needs for the teachers, the
professional development content may be too difficult to implement correctly, limiting its the effectiveness (Clarke & Hollingsworth, 2002; Guskey, 2002).

In a review of literature on professional development from 2000-2010 published in *Teaching and Teacher Education*, a total of 111 studies, Avalos (2011) found teachers need professional development to be interactive. In 2017, Darling-Hammond and colleagues wrote a detailed report for the Learning Policy Institute reviewing 35 methodologically rigorous studies that demonstrated characteristics of successful professional development for teachers. They found interactive professional development was a commonality among the studies because it moves away from lecture-style delivery towards a more participation-based style. This allows for more opportunities to engage with the material (Darling-Hammond et al., 2017). If there are no opportunities to interact with the professional development content, teachers may not have the self-efficacy or complete understanding for how to implement the professional development content which limits their buy-in as well as the professional development’s effectiveness (Clarke & Hollingsworth, 2002; Guskey, 2002).

Professional development that includes opportunities for collaboration fosters a sense of community that can positively change the culture and instruction across grade-levels and content areas (Darling-Hammond et al., 2017; Desimone & Garet, 2015). Reflection and regular feedback are important components of a professional development series in order to assess the effects of teachers’ efforts (Guskey, 2002). Embedding time for feedback and reflection allows for teachers to think about their new practices, solicit feedback, and make changes in order to move towards mastery of these new skills (Avalos, 2011; Darling-Hammond et al., 2017). New practices provided in professional development series are likely to be abandoned in the absence of reflection and feedback, reducing the impact (Guskey, 2002).
Lastly, professional developments need to be sustained (Darling-Hammond et al., 2017; Desimone & Garet, 2015). Professional development that is sustained allows for adequate time to learn, practice, implement and reflect on the professional development’s content (Darling-Hammond et al., 2017). Darling-Hammond et al. (2017) found that professional development that utilizes professional learning communities is one way to successfully incorporate all five of these essential professional development components.

**Interventions on Instructional Strategies for ELL Students**

The literature on ELL instruction interventions for in-service mainstream teachers who are not currently taking graduate courses is relatively small. There have, however, been studies conducted on pre-service mainstream teachers and in-service mainstream teachers in partnerships with universities.

**University connected: Pre-service teachers and partnerships.** A pre-service teacher is a person who is still in the process of taking courses and earning credits for a teaching license. A pre-service teacher is not a full-time teacher but someone who aims to be in the future. At the University of Minnesota, Walker and Stone (2011) found that pre-service mainstream teachers were unaware of the changing demographic landscape within the United States public school system. At that time, Minnesota had experienced a 161% growth in the ELL student population. When asked to estimate the probability of having at least one ELL student in their future classes, the answers of pre-service teachers at the University of Minnesota ranged from 3% to 60%. It was clear to Walker and Stone (2011) that these pre-service teachers were “completing their teacher preparation with very little sense of who their students would be” (p. 221). These findings, however, were not isolated. Sakash and Rodriguez-Brown (2011) found the same level
of awareness at University of Illinois at Chicago and Castañeda, Fisher-Young, and Perry (2010) had similar responses from their pre-service teachers at Miami University in Ohio.

**Infusion of SLA coursework.** To raise awareness of the ELL student demographics for these pre-service teachers, universities started to re-write curriculum and implement new programs for their pre-service teachers (Castañeda et al., 2010; Sakash & Rodriguez-Brown, 2011; Walker & Stone, 2011). Castañeda and colleagues (2010) created a five-year project called English for Speakers of Other Languages Mentoring Initiative for Academics and Methods Infusion (ESOL MIAMI) to intervene on the mainstream teacher preparation at Miami University of Ohio. In ESOL MIAMI, pre-service teachers had a choice of three tracks to follow: 1+, 2+, or 3+ (Castañeda et al., 2010). In the 1+ track for mainstream teacher licensure, pre-service teachers were required to take the courses with infused SLA content and competencies. In the 2+ track and the 3+ track, pre-service teachers were afforded the opportunity to earn another certificate when they took additional courses and completed field experience working directly with ELL students.

One of the key findings from this study was that infusion of SLA content and competencies into coursework that was already required changed the dispositions of pre-service teachers towards ELL students (Castañeda et al., 2010). Castañeda and colleagues (2010) found that infusing SLA content into pre-existing coursework made the concept of educating ELL students a more organic part of teaching, rather than the additional burden of a special population for which mainstream teachers had to adapt. Guskey (2002) and Clarke and Hollingsworth (2002) theorize this kind of shift in the dispositions of pre-service teachers relates directly to a change in student learning outcomes. In fact, over the course of the five-year study, researchers found the number of pre-service teachers earning additional ESOL certificates increased
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(Castañeda et al., 2010). Castañeda et al. (2010) attribute this increase to the natural infusion and exposure of the 1+ track, leading more mainstream teacher candidates to switch to 2+ or 3+ certification tracks.

**Experience.** Similar to Castañeda et al. (2010), Walker and Stone (2011) found that exposure to SLA content and experience working with ELL students prior to becoming a mainstream teacher helped better prepare the pre-service teachers at the University of Minnesota. As explained earlier, before the start of the first class for the first cohort in this study, Walker and Stone (2011) conducted a survey. The results revealed that these pre-service teachers were unaware of the growth of ELL students that Minnesota had recently seen or the probability that they would serve at least one ELL student in their mainstream classroom. Most interesting, however, was the finding that these pre-service teachers already felt overwhelmed by the number of special accommodations mainstream curriculum required (e.g., students with special needs, students reading below grade-level). The findings in this survey prompted Walker and Stone (2011) to add a one-credit course to the pre-existing required course framework. This course focused on the linguistic features of particular content areas and examined strategies and approaches for integrating ELL students’ needs into the mainstream classroom and curriculum.

One of the requirements for this one-credit course was working with an ELL student through a local school district (Walker & Stone, 2011). This manifested in tutoring sessions between ELL students and the pre-service teachers at the University of Minnesota. When surveyed about the usefulness of the new course two months into their teaching career, candidates from the first cohort had an overall positive response. Most respondents believed the tutoring experience best helped them prepare for what they would ultimately encounter in their own mainstream classrooms. The pairing of tutoring experience with the one-credit course,
allowed for the teaching candidates to put theory into practice prior to having their own classroom, which many participants cited as the most beneficial part of the tutoring experience (Walker & Stone, 2011). Learning SLA theory through this coursework and its immediate application in the tutoring mirrors the contextualized characteristic of successful professional development (Darling-Hammond et al., 2017; Desimone & Garet, 2015), highlighting the transferability of this intervention’s framework to professional development for mainstream teachers. Participants also noted, however, that the scope of SLA theory and practice was limited through the one-credit course and wondered if they were afforded a longer course how much better prepared they may have felt (Walker & Stone, 2011).

**Purposeful pairings.** At the University of Illinois at Chicago (UIC), researchers concerned with the preparation of their pre-service teachers in their college of education also created an intervention plan to better prepare their pre-service teachers for the inclusion of ELL students in their future classrooms (Sakash & Rodríguez-Brown, 2011). About one-third of UIC pre-service teachers were bilingual students seeking ESL licensure, so Sakash and Rodriguez-Brown (2011) decided to integrate purposeful pairing with field experience. They paired bilingual, ESL pre-service teachers with English-monolingual, mainstream pre-service teachers and placed them in mainstream classrooms half the time and ESL classrooms for the other half in order to complete the fieldwork necessary for licensure. Similar to the collaborative characteristic of successful professional development for teachers (Darling-Hammond et al., 2017; Desimone & Garet, 2015), the aim of this study was to foster collaboration between future ESL teachers and future mainstream teachers in hopes that collaboration between these two groups of teachers would continue in their future schools (Sakash & Rodríguez-Brown, 2011). At the end of this intervention, the researchers found that the English-monolingual, mainstream pre-
service teachers identified and embraced their roles of teaching ELL students. Similar to Castañeda et al. (2010), Sakash and Rodriquez-Brown (2011) discovered a paradigm shift in the mindset of their pre-service mainstream teachers. The pre-service mainstream teachers took ownership of teaching ELL students, rather than placing the responsibility solely upon the ESL teacher (Sakash & Rodriquez-Brown, 2011).

**University connected: Licensure.** With the passage of NCLB and the acknowledgement of immense growth in the ELL population, the federal government provided grants to universities and school districts to partner up and encourage mainstream teachers to further their own education (Gebhard et al., 2011). Some in-service teachers, defined as teachers who hold a current teaching position in a K-12 school, chose to earn a second license in ESL or entered into programs that addressed teaching ELL students in mainstream classrooms (Gebhard et al., 2011; Hansen-Thomas, Casey, & Grosso, 2013; Newman, Samimy, & Romstedt, 2010; Rodriguez & Manner, 2010; Sakash & Rodriquez-Brown, 2011; Spezzini, Austin, Abbott, & Littleton, 2009).

**SLA and culture infusion.** In a distance learning intervention, Kansas State University partnered with schools in eastern North Carolina to provide teachers the opportunity for add-on ESL licensure (Rodriguez & Manner, 2010). Due to the distance between Kansas State University and the in-service teachers in North Carolina, Rodriguez and Manner (2010) relied mostly on electronic modalities to deliver their professional development. They did, however, provide opportunities for participants to meet face-to-face in the opening and closing sessions of the professional development.

Rodriguez and Manner (2010) implemented a pre-existing, copyrighted five-course sequence curriculum: Critically reflective Lifelong Advocacy for Second language learners Site specific Innovation, and Cross-cultural competency (CLASSIC©) (Herrera & Murry, 2010;
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Rodriguez & Manner, 2010). CLASSIC© provides an in-depth focus on five critical issues in teaching ELL students: (a) planning, implementing, and managing ESL instruction; (b) assessment; (c) culture and language; (d) linguistics; (e) professionalism and evidence-based accountability (Herrera & Murry, 2010). More specifically, this professional development curriculum began with an examination of contemporary methods and instructional strategies for ELL students in order to aid teachers in their lesson planning and implementation (Rodriguez & Manner, 2010). The next course in the curriculum provided teachers an overview of assessing ELL students, which included the development of appropriate assessments for ELL students and how to use assessments to inform instruction. The culture and language aspect of the CLASSIC© curriculum, the next course, presented an overview of issues related to cross-cultural dynamics of ELL instruction, appropriate strategies to develop multicultural curriculum, and essential linguistic concepts for teachers of ELL students. Building on this, Rodriguez and Manner (2010) then provided teachers with the necessary linguistic foundations, emphasizing the structure and function of language. As previously stated, reflection is a key characteristic of successful professional developments (Avalos, 2011; Darling-Hammond et al., 2017; Guskey, 2002). Reflection manifested in the last course of this ESL licensure partnership between Kansas State University and schools in eastern North Carolina, when teachers participated in a critically reflective process on the development of cross-cultural curriculum. Participants reported the SLA content and language instruction in the first, second, and fourth CLASSIC© courses were the most useful aspects of the program. Rodriguez and Manner (2010) explain these elements are universal: “programs that connect such integration of strategies and content will serve elementary, intermediate, and high school students and their teachers” (p. 80).
In a similar study, He, Prater, and Steed (2011) conducted a year-long, sustained professional development for 22 teachers founded in SLA. The researchers’ positions as professors at the University of North Carolina at Greensboro afforded participants the opportunity to earn credits towards an ESL-license or a master’s degree in education at the University of North Carolina at Greensboro (He et al., 2011). The content of the professional development was delivered over the course of 46 hours and contained three domains: (a) second language learning process, (b) language and culture as a medium of learning, and (c) language and culture as a goal of instruction. He et al. (2011) found positive participant feedback about the pairing of SLA theory and teaching practices in each session, which mirrors the findings from Castañeda et al.’s (2010) study on simultaneous SLA coursework and tutoring with pre-service teachers. Due to the sustained and contextualized characteristics of this intervention (Darling-Hammond et al., 2017; Desimone & Garet, 2015), participants reported an increase in application of SLA theory and use of the teaching practices in their classrooms.

**Collaboration through coursework.** Calderón (1990) found that cooperative learning helps teachers’ academic and instructional skills. Cooperative learning is a format of instructional delivery in which small groups interact to complete learning activities that improve their understanding of the concept (Darling-Hammond et al., 2017). This is also known as collaborative learning (Darling-Hammond et al., 2017; Desimone & Garet, 2015). In collaborative learning, participants are not only responsible for their own learning, but they are also responsible for that of their small group teammates (Darling-Hammond et al., 2017). Collaborative learning allows for participants to capitalize on the skills and resources of others, unlike individualized learning (Darling-Hammond et al., 2017). Cited in the literature reviews of
other studies, Calderón’s (1990) findings influenced the emphasis on collaboration in some licensure program curriculums for teaching ELL students.

In a master’s program partnership called Teaching All Teachers About Transitioning (TATAT), Sakash and Rodriguez-Brown (2011) studied the partnership of in-service teachers seeking licensure in ESL/bilingual education and in-service teachers seeking reading or instructional leadership licensure. Similar to their findings from the purposeful pairings of their pre-service teachers that was described earlier, through the licensure program Sakash and Rodriguez-Brown (2011) paired ESL/bilingual in-service teachers with reading/instructional leadership in-service teachers. The pairs spent time collaborating on curriculum in their UIC graduate courses and gaining a better understanding of the roles each played in an ELL student’s education. In a similar study, Newman et al. (2010) found there was tension between ESL teachers and mainstream teachers due to misunderstandings about whose role it was to educate ELL students but, by the end of this intervention, Sakash and Rodriguez-Brown (2011) found the mainstream in-service teachers and the in-service ESL teachers had a shared understanding of accountability for teaching ELL students.

One of the most common findings from studies conducted through university and district partnerships has been the importance and value of collaboration between the knowledgeable experts at the university level and the professionals located in the context of the study (Darling-Hammond et al., 2017; Desimone & Garet, 2015; Gebhard et al., 2011; Hansen-Thomas et al., 2013; Newman et al., 2010; Spezzini et al., 2009). In fact, of the intervention literature reviewed in this chapter, the only two studies that had difficulty with in-service teacher buy-in were studies that did not confer with the district or teachers prior to planning and implementing the interventions (Brisk & Zisselsberger, 2011; Gebhard et al., 2011). The difficulties these studies
faced provide evidence of the critical component of district and university collaboration in university-led trainings for mainstream teachers with ELL students. These difficulties also speak to the key professional development characteristics of collaboration and contextualization (Darling-Hammond et al., 2017; Desimone & Garet, 2015).

With knowledge of success of professional development founded in collaboration (Darling-Hammond et al., 2017; Desimone & Garet, 2015) and in a partnership between Ohio State University and local school districts, Newman et al. (2010) created a professional development licensure program. This program afforded teachers the opportunity to earn ESL licensure through a professional development founded in collaborative efforts. First, the only participants accepted into the program were in-service teachers applying as teams, not as individuals, from schools within the chosen districts. The purpose behind this was to ensure contextualized collaboration in hopes that it would be sustained after the program ended (Darling-Hammond et al., 2017; Desimone & Garet, 2015; Newman et al., 2010). After participants had been accepted, Newman and colleagues (2010) conducted a needs assessment in order to tailor the professional development licensure content to meet the specific needs of the participants. They found the teachers needed a program that focused on SLA, teaching strategies for ELL students, curriculum design with infused SLA knowledge, the cultural and family influences on ELL students, and best practices for collaborating with peers. Through collaboration between the university and the district, the researchers and the participants, teachers of the same content, and content teachers and ESL teachers, the researchers found their job-embedded collaborative professional development licensure program improved instruction for ELL students and increased collaboration between colleagues to better meet the academic needs of ELL students.
The study Spezzini et al. (2009) conducted with the University of Alabama at Birmingham and a local school exemplifies the need for collaboration on multiple levels. Spezzini and colleagues (2009) created a study based on successful characteristics of professional development: collaborative and sustained in nature (Darling-Hammond et al., 2017; Desimone & Garet, 2015). The proposed ESL licensure program for in-service teachers was a 5-year study that would admit a new cohort every January for four years (Spezzini et al., 2009). At first, the district labeled the program a failure. The district claimed there was limited follow-up with the university and no interaction with mentors from the university. Similar to Gebhard et al. (2011), Spezzini et al. (2009) quickly amended the program. At first, program developers had worked under the presumption that veteran teachers would mentor novice teachers in instructional strategies for ELL students (Spezzini et al., 2009). The problem, however, was that neither the veteran teachers nor the novice teachers in this school had been trained in SLA or ELL instructional methods, so there was no more knowledgeable other within these two groups of teachers. Thus, Spezzini and colleagues (2009) reformatted the program to include more collaborative activities for in-service teachers as they took courses for their ESL licensure.

Similar to the findings of Guskey (2002) and Clarke and Hollingsworth (2002) on interactive professional development, the course framework of Spezzini and colleagues’ (2009) study was changed to center on professional learning communities, rather than lecture-based delivery. In the field of education, a professional learning community is a small group of educators who meet regularly to share expertise and collaborate in order to improve their practice. This professional learning community approach manifested in regular participation in cyclical reflective assignments and research projects with their peers based on their school’s needs (Avalos, 2011; Clarke & Hollingsworth, 2002; Guskey, 2002; Spezzini et al., 2009).
Through a pre- and post-test, personal narratives, questionnaires, and interviews, data were collected to determine the value of these courses in conjunction with collaborative activities for the in-service teachers at the graduate level (Spezzini et al., 2009). The results highlighted the power of collaborative work between the in-service teachers and the natural transition to collaborative activities outside of the program. For example, there were 29 in-service teacher participants in the first cohort. When asked how frequently they informally shared ESL best practices with one another at the beginning of the program, 25 teachers responded never/rarely/monthly. At the end of the first year in the program, however, when asked the same question, only 4 teachers reported never/rarely/monthly sharing ESL best practices. Similarly, when asked about the duration of the informal meetings to share ESL best practices, 27 respondents reported the meetings were 5 minutes or less prior to the ESL licensure program but, by the end, 28 participants reported the meetings were 15 minutes or more. In a follow-up session after the conclusion of the program, 46 of the 84 participants were still sharing best practices with their colleagues on a regular basis (Spezzini et al., 2009).

The participants in this study reported higher self-efficacy for teaching ELL students in their mainstream classrooms as well as higher job satisfaction (Spezzini et al., 2009). Spezzini and colleagues (2009) attribute the success of this collaborative program to four aspects: (a) the mentor/mentee pairings happened naturally, teachers were not assigned to one another; b) the participants were adequately prepared through a diverse curriculum and various formats to interact with one another; c) participant interaction evolved through faculty at the university and the teachers themselves rather than the administration within the school building or district; d) relationships shifted from mere colleagues to a more intimate mentor/mentee relationship, creating a better sense of confidence in abilities and trust in one another. More confidence in
themselves and trust in each other allows for a stronger team of mainstream teachers to combat the Latinx ELL student opportunity gap.

**University connected: Researchers and in-service teacher pairings.** In addition to federal funding for in-service teachers seeking additional licensure in the early 2000s, there were also federal grants available for universities and districts to partner and implement professional development for in-service teachers with ELL students in their classrooms (Buysse, Castro & Peisner-Feinberg, 2009; He & Prater, 2010; Shin, Edmonds, & Browder, 2010; Walker & Stone, 2011).

**Mentoring.** One of the benefits of partnering with a university is that in-service teachers can be mentored by outside professionals. Mentoring, also known as coaching, is when an expert shares his or her experience, expertise, and evidence-based practices to meet another individual’s, or mentee’s, specific needs and in order to improve their professional performance (Darling-Hammond et al., 2017). In a randomized control trial focused on dual language instruction for Latinx students, Buysse et al., (2009) paired bilingual Latina doctorate students from the University of North Carolina Chapel Hill with in-service teachers to act as mentors. In this study, there were 26 teachers who received mentorship and 29 who did not. The doctoral students, or mentors, were each responsible for 6-8 teachers for an 8-week period. The mentors were responsible for visiting their teachers’ classrooms regularly. On weeks when the mentors did not visit the classroom, they would host a community meeting, which consisted of a roundtable discussion on student work, progress, and SLA strategies in general with all the mentees underneath the mentor. At the end of this program, the researchers found the 26 teachers receiving mentoring had greater gains in quality of classroom practices and classroom-wide literacy activities than the 29 teachers in the control group (Buysse et al., 2009).
Similarly, Walker and Stone (2011) used mentoring as a component of their study on the partnership between the University of Minnesota and local schools: Teaching English Language Learners Action Model to Unite Professionals (TEAM UP). Each school that participated had a team composed of ESL teachers, mainstream teachers, and paraprofessionals responsible for developing a school action plan with the mentoring help of a university faculty member. Participants appreciated the help and perspective this person was able to provide through the collaborative component of this mentorship. The success of the collaboration between participants and university faculty members in Walker and Stone’s (2011) study bolsters the findings of Darling-Hammond et al. (2017) and Desimone and Garet (2015) that collaboration is a key characteristic to professional development.

**Stakeholder collaboration.** Collaborative activities were incorporated into partnerships between universities and in-service teachers similarly to how collaborative activities had been carried out in pre-service teacher and other in-service teacher interventions. Shin et al. (2010) used collaborative development teams with representatives from the university and local school districts, including teachers and administrators, and found this helped create a better understanding among individuals who are not necessarily in the same position of power within the school building and community at large. Likewise, Walker and Stone (2011) had positive outcomes when they had ESL teachers, mainstream teachers, and paraprofessionals work together as a team to create a plan for addressing the needs of their shared ELL students.

Brisk and Zisselsberger (2011) did not have a collaborative component between the university and the school in their research study and it yielded negative results. The program they created was informed by a prior partnership University of Massachusetts (UMass) had with the school district: a licensure program that taught Systemic Functional Linguistics (SFL) through
content courses (Brisk & Zisselsberger, 2011). SFL-based pedagogy breaks down language to demonstrate how linguistic choices operate at the word, sentence, and conversational levels (Halliday, 1978). Unlike the other partnership, however, the delivery of SFL left the in-service teachers in this professional development series overwhelmed (Brisk & Zisselsberger, 2011). In-service teachers began to resist SFL altogether, claiming it was too daunting to implement such a large concept on top of the other district mandates (Brisk & Zisselsberger, 2011). The juxtaposition of this study to the collaborative component of the studies conducted by Walker and Stone (2011) and Shin et al. (2010) demonstrates the importance of collaboration. As demonstrated in the previous studies a collaborative component in an intervention enables all stakeholders’ voices to be heard, allowing for higher participation and proactive, rather than reactive, planning (Darling-Hammond et al., 2017; Desimone & Garet, 2015). In this study, Brisk and Zisselsberger (2011) overlooked the necessity of collaborating with teachers during the planning phase of the study, leading to limited foresight on how teachers would react to the work involved in the study.

**Professional Development that Focuses on SLA**

Researchers and organizations, such as the National Education Association (NEA), recommend any professional development on teaching ELL students for in-service teachers begin with the foundational knowledge of SLA (Bunch, 2013; de Jong et al., 2013; Lucas & Villegas, 2011; Lucas et al., 2008; NEA Quality School Programs & Resources Department, 2011; Newman et al., 2010). Due to the nature of the university partnerships of the following programs, this researcher will be unable to replicate the context of these studies. She will, however, be able to utilize the content and findings of the studies for her own research.
In a partnership between the University of Massachusetts (UMass) and two school districts with high numbers of ELL students, Gebhard and colleagues (2011) implemented an intervention through a master’s program. The faculty at UMass designed the program specifically for teachers with high levels of ELL students in their mainstream classes (Gebhard et al., 2011). This program was known as Access to Critical Content and English Language Acquisition (ACCELA) Alliance. Through ACCELA Alliance, UMass offered one course each school quarter and followed the school districts’ calendars so that teachers could finish the master’s degree in three years. Originally, UMass faculty had wanted to place ACCELA Alliance participants in a teacher-as-researcher role. The aim of this program was for teachers to use case studies from their own classrooms to discuss and analyze, which would later inform the development of a research project that they could present to the district at large (Gebhard et al., 2011).

In the initial stages of this program, it was hard to get in-service teacher buy-in and Gebhard and colleagues (2011) quickly realized the ACCELA Alliance curriculum needed to be altered. They found that the in-service teachers were missing the foundational knowledge of SLA needed to discuss and assess case studies of ELL students in their classrooms. Instead of focusing on research questions, the UMass faculty began with teaching in-service educators Halliday’s (1978) theory of systemic functional linguistics (SFL) (Gebhard et al., 2011) described above. Once the participating in-service teachers understood SLA, the UMass faculty were able to implement their professional development as they had originally planned (Gebhard et al., 2011).

After the adaptation to the program, Gebhard et al. (2011) found the participants valued the time they spent in the program and found its content useful. One participant in particular said
she gained a deeper understanding of the lexical, structural, and grammatical aspects of the writing curriculum through SFL. She continued that she fully comprehended how to incorporate SLA pedagogy into curriculum and how best to support academic literacy development. Overall, Gebhard et al. (2011) discovered that their professional development founded in SLA increased mainstream teacher confidence to write their own curriculum to best meet the needs of their ELL students.

In their professional development program for mainstream teachers, Hansen-Thomas et al. (2013) found professional development based in SLA theory and the use of collaborative activities moving towards implementation positively impacted teachers. As previously mentioned, collaboration is a well-researched component of successful professional development for teachers (Darling-Hammond et al., 2017; Desimone & Garet, 2015). Hansen-Thomas and colleagues (2013) conducted a sustained year-long project with nine experienced teachers, skilled in their content areas (math, science, social studies, or English language arts), who voiced feeling challenged with meeting the English language needs of their ELL students as well as the course content needs.

Through Texas Woman’s University, the participants took three graduate classes, which focused on improving academic achievement of ELL students in secondary classes (Hansen-Thomas et al., 2013). The researchers found after taking courses rooted in SLA theory, the most illuminating take-away for participants was the understanding that learning academic language and content language simultaneously takes effort from both the ELL student as well as the mainstream teacher. For example, in order to complete an assignment for a chemistry class, all students will have to master the content vocabulary such as nucleus, proton, or atom. In addition to the content vocabulary, ELL students will need to understand the academic language such as
identify, explain, or describe. Since all students are learning content vocabulary, this vocabulary instruction is usually accounted for in lessons, but mainstream teachers often overlook the ELL students’ needs for simultaneous academic vocabulary instruction (Hansen-Thomas et al., 2013). When their graduate classes ended, participants were deemed “ESL experts” at their schools and trained to provide professional development to their peers. Ultimately, Hansen-Thomas and colleagues (2013) found the in-service teachers who participated in a professional development founded in SLA theory had increased self-efficacy in teaching ELL students.

In 2010, He and Prater conducted a professional development between the University of North Carolina at Greensboro and a local school. In their needs assessment, they found the teachers were concerned with the low proficiency rate on the state science exam. About 63% of the students in the school were designated ELL students so teachers needed support in SLA and content instruction. Based on these findings, He and Prater (2010) framed their professional development using the Sheltered Instruction Observation Protocol (SIOP®) model created by Echevarría, Vogt, and Short (2008). The SIOP® model is a well-researched structure for planning lessons and instructional strategies to prepare teachers to work with their ELL students (Echevarría et al., 2008). Through eight professional development sessions in addition to attending regularly scheduled grade-level meetings, He and Prater (2010) helped grade-level teams create a science unit which was implemented in the 2008-2009 school year. In spring 2008, 4% of students at the school scored proficient on their standardized science exam. In the spring of 2009, however, 67% of the students scored proficient on the same exam. While He and Prater (2010) acknowledge this increase may not have been solely due to their intervention, they assert the focus on teacher planning through the SIOP® model contributed to the increase in student achievement. This is further supported by participants’ feedback. Participants reported an
increase in SLA knowledge as well as the use of instructional strategies to target ELL students’ needs using the SIOP® model (He & Prater, 2010).

**Summary**

Intervention literature on professional development for mainstream teacher preparedness to teach ELL students in bilingual high schools, such as Metro High School, is limited (August, Branum-Martin, Cardenas-Hagan, & Francis, 2010; Bunch, 2013; Lucas, 2011). There were many studies in the early 2000s when federal funds were being allocated to universities to create partnerships with local districts and federal grants were being given to teachers who returned to school for ESL licensure (Gebhard et al., 2011). During that time, programs implemented similar curriculums founded in SLA theory (Gebhard et al., 2011; Hansen-Thomas et al., 2013), concrete instructional strategies (He & Prater, 2010; Rodriguez & Manner, 2010; Shin et al., 2010), content modifications (August et al., 2010; Shin et al., 2010) and cross-cultural understandings (He et al., 2011; Herrera & Murry, 2010; Rodriguez & Manner, 2010). Each of these programs included characteristics of successful professional development (Avalos, 2011; Clark & Hollingsworth, 2002; Darling-Hammond et al., 2017; Desimone & Garet, 2015; Guskey, 2002). Programs focused on interactive activities through collaborative researcher-teacher design teams (Newman et al., 2010), collaborative learning and professional learning communities (Buysse et al., 2009; Spezzini et al., 2009), or professional pairings (Buysse et al., 2009; Sakash & Rodriguez-Brown, 2011). The programs were reflective (Herrera & Murry, 2010; Rodriguez & Manner, 2010), sustained (Hansen-Thomas et al., 2013; He et al., 2011; Newman et al., 2010; Spezzini et al., 2009) and contextualized in pre-service and in-service teachers’ actual practice (Castañeda et al., 2010; Hansen-Thomas et al., 2013; Newman et al., 2010; Walker & Stone,
so mainstream teacher participants felt they received the individualized attention and support they needed to successfully implement what they learned.

**Conclusion and Implications**

It must be acknowledged that the majority of interventions discussed in this chapter are university-connected and offer licensure, certification endorsements, or master’s degrees for the participants. While these studies do not resemble the circumstances in which this researcher will conduct her intervention, the interventions discussed in this chapter do offer characteristics of successful professional development for mainstream teachers instructing ELL students that can be implemented at Metro High School. Research on effective professional development provides evidence that professional development should be contextualized, interactive, collaborative, reflective, and sustained (Avalos, 2011; Darling-Hammond et al., 2017; Desimone & Garet, 2015). These are the characteristics that will frame the researcher’s intervention.

In order for teachers to equitably teach ELL students in the mainstream classroom, they must acknowledge the role language plays as a tool in learning and understand how students become proficient in English using linguistic tools through the process of second language acquisition (Banks et al., 2001; Bray, Adamson, & Mason, 2014; Vygotsky, 1978; Wink, 2011). A deeper understanding of SLA theory will allow teachers to understand how language and literacy manifest in the classroom and impact ELL student achievement.

One key takeaway from the intervention literature review on successful professional development for teachers, especially those that focus on teachers of ELL students, is the importance of SLA content and the connection of that content to the professional context of the participating teachers (Darling-Hammond et al., 2017; Desimone & Garet, 2015; Gebhard et al., 2011; Hansen-Thomas et al., 2013; He & Prater, 2010). Thus, the intervention designed for the
teachers at Metro High School consisted of five modules, all related to components of SLA theory. Each module covered a different aspect of SLA theory and the modules built on each other over the course of the intervention. Based on this literature review, the researcher originally proposed the following module topics: (a) an explanation of the four language domains and their timeline in the language acquisition process (Castañeda et al., 2010; He et al., 2011); (b) the differences between conceptual knowledge and linguistic knowledge (Hansen-Thomas et al., 2013; Walker & Stone, 2011); (c) comprehensible input (Hansen-Thomas et al., 2013; He et al., 2011); (d) scaffolds for comprehension (August et al., 2010; Shin et al., 2010); (e) on-going assessment (Gebhard et al., 2011; Herrera & Murry, 2010).

Each professional development session for the intervention at Metro High School was designed to be one hour, once a week, embedded into a pre-existing meeting the teachers already had. The individual modules took about two weeks and followed the same format. They began with a brief presenter-led overview of key aspects of the specific topic of that module. After the delivery of the topic content, the researched planned for participants to meet in their professional learning communities, which were to be based on the grade-level they taught, in order to apply the principles of the SLA topic to a lesson plan. Between sessions, participants were released to implement the lesson plan they created and collect data and student examples. In the second week of the module, participants analyzed the results of the lesson implementation and debriefed on the process. At the close of this study, the researcher asked the participants to generate a list of lessons that they learned and key takeaways from the professional development. This information was organized and presented to the administration at Metro High School and, ultimately, with other teachers at the school. Chapter 4 will provide further information related to
the intervention, as well as details on an evaluation of the process of implementation and outcomes. Chapter 5 will provide the findings of this intervention and a discussion.
Chapter 4

The Latinx ELL student opportunity gap in the United States has spanned decades (Abramson et al., 1993; Brown & Chu, 2012; Callahan, 2005; Clair 1995; Penfield, 1987; Office of Elementary and Secondary Education, 2016). Common factors associated with the Latinx ELL student opportunity gap are the English monolingualism movement and teacher demographics (Brown & Chu, 2012; Marschall et al., 2011; Ogbu 1982), cultural mismatches (Delgado-Gaitan, 1994; Good et al., 2010), teacher disposition and expectations (Cheatham et al., 2014; Penfield, 1987; Reeves, 2006; Yoon, 2008), and mainstream teachers’ understanding of second language acquisition (Fernandez & Inserra, 2013; Reeves 2006; Pappamihiel, 2002). A needs assessment conducted at Metro High School found the most salient context-specific and actionable factors contributing to the Latinx ELL student opportunity gap were mainstream teachers’ understanding of SLA.

Based upon the findings from the needs assessment and a review of relevant intervention literature, the researcher proposed an intervention consisting of contextualized, interactive, and collaborative professional development series delivered over a sustained period of time. This professional development series focused on key components of SLA theory and participants’ application of SLA-based scaffolding to their lesson plans and instruction for ELL students. Scaffolding, in the context of this study, is defined as a temporary, fluid support provided to ELL students in order to help them meet the objective. This chapter contains the research questions that framed the study, the research design, implementation design and activities as originally planned, and evaluation procedures.
Research Questions

The following outcome evaluation research questions framed the proposed intervention on the Latinx ELL student opportunity gap at Metro High School:

RQ 1. To what extent, if any, did mainstream high school teachers’ knowledge of SLA increase after participation in a professional development series focused on SLA theory?

RQ 2. In what ways, if any, did levels of SLA-based scaffolding in mainstream high school teachers’ lesson plans change after participation in reflective cycles on lesson design founded in SLA theory?

The following process evaluation research questions were used to assess the activities of the program to ensure fidelity of implementation:

RQ 1. To what extent was the professional development series implemented as planned?

RQ 2. In what way, if any, did the grade level taught by participants affect their use of instructional strategies?

RQ 3. To what extent, if any, were participants engaged in the professional development activities?

Research Design

The intervention at Metro High School sought to address the Latinx ELL student opportunity gap. Based on the literature reviews and needs assessment, the intervention for English teachers at Metro High School focused on teachers’ knowledge of SLA and the application of SLA knowledge in teachers’ lessons. The intervention was planned as a 12-week, contextualized and collaborative professional development series. The researcher collected data
on English teachers’ knowledge of SLA and how they incorporated that knowledge into the writing and implementation of their lesson plans.

The logic model in Figure 3 provides an overview of the originally anticipated materials, activities, and participants of the professional development series. It also shows the sequence of this professional development’s intended outcomes from short-term, to intermediate, to long-term goals.

The outcome evaluation for the intervention on mainstream teachers’ use of SLA knowledge in their instructional planning and practices at Metro High School used a partially mixed concurrent equal status design (Leech & Onwuegbuzie, 2007). (See Appendix B for the detailed outcome evaluation plan).

In this intervention, a pre- and post-test on teachers’ knowledge of SLA and session exit tickets were used to collect the quantitative data. Lesson plans and implementation materials, the researcher’s field notes, and the participants’ reflective journals were used to collect qualitative data. Creswell and Plano-Clark’s (2018) four-step framework was used for this research design. The separate collection of the qualitative and quantitative data were the first two steps of the framework that the researcher used to analyze her data.

The collection of the qualitative and quantitative data happened simultaneously and held equal value in the outcome evaluation, thus a concurrent equal status design was most appropriate (Leech & Onwuegbuzie, 2007). In keeping with step three of Creswell and Plano-Clark’s (2018) framework, the analyses of the quantitative and qualitative datasets were done separately and then the analyses were brought together and compared. The final step was the interpretation of the comparisons (Creswell & Plano-Clark, 2018). The partially mixed
Program: Professional Development for Latinx ELL Student Opportunity Gap at Metro High School Logic Model

Situation: The needs assessment at Metro High School found teacher preparedness is a contributing factor to the low academic performance of Latinx English language learners (ELL). Teachers’ knowledge of second language acquisition (SLA), training, and disposition all affect how the teachers at Metro High School interact with ELL students in mainstream classrooms. Based on an intervention literature review, a professional development for mainstream teachers is the proposed treatment.

<table>
<thead>
<tr>
<th>Inputs</th>
<th>Outputs</th>
<th>Participation</th>
<th>Outcomes — Impact</th>
<th>External Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time: researcher’s and participants’ time to participate, plan and implement</td>
<td>Professional Development (PD): one 1-hour virtual PD session every week for 12 weeks on SLA and instructional strategies for teaching ELL students</td>
<td>Teachers: volunteer teachers from Metro High School’s English department</td>
<td>Within 12 weeks this program will:</td>
<td>District calendar days</td>
</tr>
<tr>
<td>Materials: shared cloud platform, handouts, curriculum aids, readings, lesson plans to model, reflective journals, exit tickets, SLA test</td>
<td>Foundational SLA Knowledge: (a) language domains and process; (b) differences between conceptual and linguistic knowledge; (c) comprehensible input; (d) scaffolds for comprehension; (e) ongoing language assessment</td>
<td></td>
<td>Increase understanding of SLA</td>
<td>Participant interest/attendance</td>
</tr>
<tr>
<td>Technology: computers, internet, access to online resources, access to shared cloud platform, access to Teams virtual meeting space</td>
<td>Professional Learning Communities: collaborative grade-level teams that will design lesson plans and assessments</td>
<td>Reflective Cycle: (1) student work analysis (2) lesson plan design (3) implementation (4) reflection and professional learning community brief conversations (5) restart reflective cycle with analysis of student work</td>
<td>Increase teacher self-efficacy in teaching ELL students</td>
<td>Student effort during implementation of strategies</td>
</tr>
<tr>
<td>Knowledge Base: researcher’s and participants’ pre-existing knowledge on SLA and instructional strategies of ELL students</td>
<td></td>
<td></td>
<td>Increase lesson designs that include SLA</td>
<td>District IRB approval date</td>
</tr>
</tbody>
</table>

Assumptions:
- All participants are volunteers interested in increasing their instructional practices with ELL students
- Participants will attend the PD sessions virtually with fidelity
- Participants will implement what they learn in the PD into their instructional practices
- Participants will come with varying experiences and knowledge bases in teaching ELL students

Figure 3. Logic model for the intervention on the Latinx ELL opportunity gap at Metro High School
dimension of this researcher’s design was defined by the separation in steps one and two but the mixed analyses in steps three and four (Creswell & Plano-Clark, 2018; Leech & Onwuegbuzie, 2007).

Based on similar, successful interventions discussed in Chapter 3, proper implementation of this professional development series was measured by three indicators: adherence to the intervention implementation plan (Castañeda et al., 2010; Rodriguez & Manner, 2010; Shin et al., 2010; Zhang et al., 2011), participant engagement and responsiveness (Gebhard et al., 2011; Stufflebeam, 2003), and initial use of the materials (Baranowski & Stables, 2000). Proper implementation of this professional development series was vital in engaging participants, meeting the needs of participants, and, most importantly, achieving the positive change the intervention intended to make on the Latinx ELL student opportunity gap (Rossi, Lipsey, & Freeman, 2004). The effectiveness of the implementation of this intervention was evaluated through a process evaluation. (See the process evaluation plan in more detail in Appendix C).

**Context of Study**

For this professional development intervention, the physical context was a single secondary school in a Latinx neighborhood within a mid-sized city on the east coast of the United States. Metro High School, the context of the study, was a selective school in Union School District that specialized in English-Spanish dual language/bilingual education. Metro High School was one of five selective public high schools in the district that required an application but, unlike the other public high schools in the city, was open to anyone within Union School District boundaries. The emphasis on bilingual education at Metro High School allowed for students to enroll in a dual language cohort in their 9th and 10th grade years. This cohort of students was taught history and science in the Spanish language.
About 68% of the students at Metro High School were Latinx and 39% of the students were classified as ELL students. Of the ELL student population at Metro High School, 91% were native Spanish speakers. Per Union School District graduation requirements, all students had to take four years of English class, meaning the English teachers at Metro High School taught 100% of the student population. Given the demographics of Metro High School, all English classes had large numbers of Latinx students. All English teachers taught classes comprised of English proficient students as well as ELL students. Thus, a professional development series for English teachers on SLA was contextually appropriate.

**Participants**

The participants recruited for participation in this study were Metro High School English teachers. There were 12 teachers who fit the participation criteria and all 12 teachers volunteered to participate in the study. About half of the participants identified as male and half identified as female. All but one participant were native English speakers. Some of the participants were English-monolingual and others were multilingual speakers. There were three participants who were English-Spanish bilingual and one participant who was Arabic-English bilingual. This participant’s first language was Arabic. The participant population represented a range of race/ethnicity, age, overall teaching experience, and teaching experience with ELL students. All the participants held a bachelor’s degree and the majority held masters’ degrees as well. More than half of the participants received their teaching licensure through alternate routes, in which someone who sought a teaching license simultaneously worked full-time as a teacher. Among participants, alternate routes included Teach for America, the city’s Teaching Fellows, and partnerships with 3 local, private universities.
Participant Recruitment

In order to meet the criteria for participation in this study, all participants had to be full-time English teachers at Metro High School who had English-proficient students as well as ELL students in their classes. Verification of these criteria was met by using the school’s master schedule and records program. The master schedule identified the classes each participant taught, and the records provided the language acquisition levels of the students. Individuals who taught outside of the Metro High School English department were excluded from participation in this study.

At the request of the principal at Metro High School, the professional development series was delivered to all 20 teachers in the English department. This included English teachers, reading support teachers, special education teachers, ESL teachers, English elective teachers, and one student teacher from a local university. While all 20 teachers participated in the professional development activities, participation in the research activities was voluntary for those who met the criteria of being full-time mainstream English teachers with classes comprised of English proficient and ELL students.

In the first session of the professional development series, the purpose of the intervention, the activities, the time commitment, and the voluntary nature of the study was explained. The researcher made a distinction between participating in the professional development series and participating in the study. Active participation in this study was the participant’s choice to allow the researcher to collect and analyze data. The 12 teachers who met the criteria previously mentioned and who decided to participate were given a human subjects research consent form to sign, which explicitly stated participation was voluntary and participants could stop at any time.
Role of the Researcher

The researcher was a 10th grade English teacher within Metro High School. While her positionality eliminated the possibility of coercion of participants due to a power dynamic, the researcher was cognizant of a possible bias towards 10th grade curriculum (Milner, 2007). The researcher used the process evaluation to assess whether her bias towards the 10th grade curriculum affected the trustworthiness of this study. To do this, she used the process evaluation construct participant responsiveness to measure which grade level teachers were participating and which were not. The level of participation across the four grade levels and answers about the usefulness of the content in the exit tickets helped the researcher assess her objectivity in the delivery of the professional development. In addition, the researcher used trustworthiness practices like researcher reflexivity by identifying herself as a scholar practitioner as well as collaboration with participants to mitigate her biases (Creswell & Miller, 2000).

Instrumentation

The intervention at Metro High School was a partially mixed, concurrent, equal status design. It was a mixed-methods study that involved multiple methods of quantitative and qualitative data collection before, during, and after the intervention. Instruments for this study included a pre-and post-test on SLA, lesson plans and implementation materials, researcher field notes, session exit tickets, and reflective journals.

SLA Test

Similar to the instrumentation issues the researcher had during her needs assessment, as described in Chapter 2, the researcher had difficulty finding a pre-existing SLA test to measure mainstream teachers’ knowledge and application of that knowledge in the mainstream classroom. Using question stems from the TESOL certification test and the research of Fairbairn & Jones-Vo
(2019), the researcher created her own test. The SLA test consisted of 15 multiple choice questions and 10 true/false questions (see Appendix D). Questions about second language acquisition as a whole included “How many language domains does an ELL student have?” and “On average, how many years does it take for an ELL student to achieve English proficiency?” The test included questions about lesson planning, such as “What is the minimum number of objectives a lesson should have for a class of English-proficient and ELL students?” There were also simulation questions about SLA knowledge in the classroom. For example, “An AP-English teacher has given a reading and writing assignment to a level 4 ELL student. He provides the student with an English-Spanish dictionary, a simplified version of the text, and sentence stems. What else could the teacher provide the student to help the student succeed on this assignment?”

The true/false section of the test consisted of statements such as “ELL students and English-proficient students can be taught reading and writing skills with the same pedagogical approaches” and “Inclusion of a student’s background knowledge can be a scaffold for an assignment.”

To validate this instrument, the researcher asked the three high school ESL teachers to take the test. In addition, she asked Nancy L. Commins, Ph.D., clinical professor emeritus at the University of Colorado Denver of culturally and linguistically diverse education, to take the test. The researcher compared her intended answers to the answers of these four test-takers. If the answers varied, she amended the question or answer choices based on the experts’ recommendations. Due to the timeline of this intervention, establishing reliability of this instrument was beyond the study’s scope.
Lesson Plans and Implementation Materials

Before the intervention began and at the close of the intervention, the researcher asked participants for a lesson plan and the implementation materials that accompanied that lesson. Implementation materials included any visuals, such as PowerPoints, or assignments for students. The researcher had originally planned to collect lesson plans at the end of each session too but she did not collect those weekly lesson plans. This change will be explained further in Chapter 5.

Researcher Field Notes

The researcher used structured field notes to collect data (see Appendix E). The notes included the date, module, topic, and attendance disaggregated by grade-level. The researcher gave a brief summary of the professional development session which included what content was delivered and how, the activities completed within the session, and the duration of each part of the session. She then gave a personal reflection on the session as a whole, including her personal observations, as well as the strengths of the session and the weaknesses.

Since the researcher was the facilitator of the professional development series and the person conducting the study, she used audio-recordings of each session to accurately capture what happened during the session while she was implementing. Each week in her field notes, the researcher listened to the week’s audio-recording and transcribed important conversations and understandings.

Session Exit Tickets

At the end of each professional development session, the proposed plan for the intervention was that all participants would be asked to complete a mixed methods exit ticket (see appendices F and G). These exit tickets had four statements that participants answered with
a 5-item Likert scale. The Likert scale included: strongly disagree, disagree, neutral, agree, strongly agree. The questions included “I could confidently explain the topic of today’s session to a colleague” and “The content of today’s session is directly applicable to my classes.” The exit tickets also had three open-ended questions. The first question asked participants to explain any of the “disagree” or “strongly disagree” answer choices. The participants were also asked what the most useful component of the session was and what could make the session more effective in the future.

Due to changes in the implementation of the proposed intervention, the exit ticket format changed as the professional development series unfolded. These changes will be discussed in depth in Chapter 5 (see appendices H and I for additional exit tickets used).

**Reflective Journals**

In the second week of each module of this study, participants were given 15 minutes to write in their reflective journals. The journals had a set structure (see Appendix J). Participants were asked to fill in the date, grade-level, and strategy they were implementing at the top of the journal. The questions the researcher asked participants to reflect on included “How did you use the new strategy in your lesson?” and “How did your ELL students respond to the new strategy?” Additionally, participants assessed the strengths and weaknesses of the strategy. The researcher also asked participants to reflect on their use of the strategy with questions such as “Did the new strategy enhance or impede your lesson? Why?” “How did you feel while implementing this strategy? Why?” and “Will you implement this strategy again? Why or why not?” At the bottom of the reflective journal entry was a place for participants to put any additional comments, questions, or suggestions for future sessions.
Methods

This section describes the methodology for the partially mixed concurrent equal status intervention at Metro High School. The sections below include the intervention procedure, outcome evaluation data collection, process evaluation data collection, and data analysis.

As previously mentioned, upon the request of the principal at Metro High School, the professional development series was delivered to the entire English department, which was comprised of different types of reading teachers, eight of whom did not meet the study criteria. In this section of the chapter, the term participants will refer to those teachers who volunteered to participate in the study, whereas the term teachers will refer to those teachers in the English department who did not participate in the study but did sit in on the professional development series.

Intervention Procedure

As previously stated, this was an intervention on the Latinx ELL student opportunity gap at Metro High School. It was proposed to be conducted over the course of 12 weeks with the Metro High School English department. Changes to the intervention schedule and content, the events that provoked those changes, as well as the rationale for the design changes will be discussed in detail in Chapter 5. The intervention included content on SLA theory, instructional strategies for teaching ELL students, and implementation methods. This intervention occurred once a week for an hour during the school day. The intervention was proposed to have five modules to frame the intervention, each module lasting two weeks. The first week of each module was a presentation and discussion of one component of SLA and was proposed to allow for collaborative work in professional learning communities to incorporate that module’s SLA component into lesson plans. The second week of each module was a reflection and debrief on
the experience of implementing the planned lessons. Below are the specific details of each module. (See Appendix K for a more detailed explanation of the intervention content as originally designed).

**Introduction.** In the first professional development session, the researcher introduced her position as a scholar practitioner (Lochmiller & Lester, 2017). The researcher provided the English department the findings of the needs assessment conducted at Metro High School in the fall of 2019 to explain the rationale behind the intervention. Then she explained the module structure and the nature of participation. After this brief introduction the SLA test was administered to all teachers who met the participation criteria.

**Module 1: Language domains and process.** In the first module, participants learned about the four language domains and the second language acquisition process (Castañeda et al., 2010; He et al., 2011). Through the delivery of this content, participants were able to define each of the four language domains: listening, speaking, reading, writing. The researcher re-introduced the participants to pre-existing tools that Metro High School already used. Metro High School used a tool from WIDA called the Can-Do descriptors which provided explanations of what ELL students at different levels of second language acquisition can produce in each of the language domains. Originally, the intervention planned to have participants work in professional learning communities, based on grade-level, throughout this intervention in order to work collaboratively with other participants implementing the same material to students in the same grade level. The proposed portion of this model planned for participants to annotate the Can-Do descriptors in their professional learning communities. Participants in the study were asked to

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3 WIDA is an educational consortium among 35 states, the District of Columbia, the Northern Mariana Islands and Puerto Rico. Schools use proficiency standards and assessments created by WIDA to instruct and assess English language abilities for ELL students.
conduct informal assessments on the four language domains for each of their ELL students in one of their classes before the next session. The session culminated in an exit ticket that all participants were asked to complete.

In the second week of this module, as with every module, the researcher gave participants 15 minutes to write in their reflective journals. After they wrote in their reflective journals, the participants joined in a department-wide debrief conversation.

**Module 2: Conceptual knowledge versus linguistic knowledge.** The second module focused on the differences between conceptual knowledge, or knowledge about the content being taught, and linguistic knowledge and proficiency, or knowledge about the English language and the ability to use it to receive and express conceptual knowledge (Hansen-Thomas et al., 2013; Walker & Stone, 2011). The researcher provided content-specific examples of these two knowledge types and how they may manifest in an English lesson. After the delivery of this content, participants discussed examples from their own classroom experiences as a whole group. Then the proposed intervention planned for participants to return to their professional learning communities and create content and language objectives for a lesson they were going to teach in the following week. The participants completed an exit ticket at the end of the session and, before the next session, participants were asked to implement the lesson for which they wrote the language and content objectives.

The second week of Module 2 mirrored the second week of Module 1: participants wrote in their reflective journals and reflected on the implementation of the professional development content through a debrief conversation.

**Module 3: Comprehensible input.** Module 3 focused on comprehensible input (Hansen-Thomas et al., 2013; He et al., 2011). The researcher originally planned to use a video to aid in
explaining the concept of comprehensible input and she modeled how to create comprehensible input. She provided a brief explanation of how participants can use the assessment data they collected in the previous modules to determine what strategies would best meet the needs of their ELL students. Participants were originally supposed to work in their grade-level professional learning communities to incorporate the comprehensible input strategies into their lesson plans. At the closing of the session, the researcher asked participants to complete an exit ticket and to implement the lesson they worked on before they returned the following week.

Participants used the second week of the module to reflect on their experiences through reflective journals and debrief conversations.

**Module 4: Scaffolds for comprehension.** In Modules 1, 2, and 3, the participants at Metro High School learned how to define and assess the four language domains, create language objectives that helped students achieve content objectives, and create comprehensible input. Building on those skills, in module four, participants learned how to scaffold assignments for comprehension (August et al., 2010; Shin et al., 2010). In the proposed intervention plan, each professional learning community was to have been provided with a high-school level text and multiple scaffolded assignments that correspond to a reading analysis assignment for that text. The next planned step was to ask the professional learning communities to identify different scaffolding techniques from the assignment and match them to the WIDA level for which they would be most appropriate. A whole-group discussion about the findings followed the activity. The researcher explained the purpose of creating a scaffold, the process of making scaffolds, and the assessments teachers could use to see if the reading scaffolds made content comprehensible.

At this point in the intervention, consistent with improvement science, the intervention implementation deviated from the proposed plan. Improvement science, which informed this
study, proposes a cyclical pattern of assessing the success of the study and its ability to attain its goal. Using the exit tickets and comments made in the de-brief conversations, the researcher responded to the participants’ requests for more time and information by creating a new session based on participants’ needs. Significant changes were made to the two-week timeline of Module 4 and the timeline and content of Module 5. These changes will be explained in depth in Chapter 5. Originally, the intervention proposed participants would return to their professional learning communities after this conversation and create a lesson plan based on a text and reading comprehension assignment. At the end of the session, each participant would have been asked to complete an exit ticket and implement the lesson and scaffolds that their professional learning community created.

In week two of module four, the proposed intervention planned for participants to return and have time to reflect on their experiences in their journals. After this, they were to discuss their experiences in a debrief conversation.

**Module 5: Ongoing language assessment.** As previously mentioned, significant changes were made to Module 5 in the implementation of the professional development series. This will be discussed in detail in Chapter 5. The following explanation was the intended execution of this module.

In the last module of this professional development series, the researcher proposed participants would learn how to formatively assess the work their ELL students complete (Herrera & Murry, 2010; Rodriguez & Manner, 2010). The researcher would have explained the fluidity of scaffolds for ELL students and emphasized the importance of ongoing assessment in the role of removing scaffolds and moving ELL students towards English-proficiency. Through conversation, participants were supposed to understand scaffolds are meant to move students
towards mastery of standards and, therefore, they cannot remain constant. Participants would then have practiced how to evaluate work with a content score and a language score. Based on the scores, participants would have determined which scaffolding techniques to use for the following week. In their professional learning communities, participants were going to write lesson plans to incorporate the new levels of scaffolds for their ELL students. They would have been asked to complete the exit tickets and implement the new lesson plans by the following session.

The plan for the second week of the module proposed participants would complete the reflective journal they had practiced in the other modules.

**Closing.** In the last session of this professional development intervention, participants helped the researcher synthesize the information they deemed most important to disseminate to other colleagues by reflecting on their experiences over the course of the past 12 weeks. Participants were given guiding questions such as “Which module or strategy did you find most useful and why?” and “What is the most important thing you learned through your participation in this professional development?” Through a whole-group conversation, the participants created a list of the lessons they had learned and what they considered the most important takeaways from the professional development series.

In the last part of this closing session, the researcher administered the post-test to measure any changes in participants’ SLA knowledge after their participation in this professional development series.

**Data Collection**

The researcher collected quantitative and qualitative data to evaluate the process of the intervention as well as the outcomes of the intervention. She measured participants’ knowledge
of SLA, implementation of the professional development series, participant responsiveness to the professional development series, and initial use of the strategies covered in the professional development series. Since this professional development series was delivered virtually, all data collection was through a shared cloud platform or Survey Monkey. In order to provide participants with the documents they needed, such as reflective journal templates, the researcher had a shared folder with each participant where the participant and the researcher could both upload documents. This folder was referred to as the participant’s personal folder. For the researcher’s data collection and personal organizational needs, she created a copy of the participants’ personal folders that was only accessible to her and referred to the personal folders by the participants’ pseudonyms. The folders labeled by each participant’s pseudonym contained the data collected from that individual, such as lesson plans and reflective journals. In addition, the researcher also made copies of each instrument as they were completed and filed the copies in folders based on instruments that were only accessible to her. As data was compiled in the participants’ personal folders, the researcher made copies and placed the copies in folders named by the instrument and ordered by the date.

**SLA test.** The SLA test was administered during the first and last sessions of the professional development series. Participants accessed the test through an anonymous link to Survey Monkey.

**Lesson plans and implementation materials.** Similar to the SLA test data collection process, lesson plans and the corresponding implementation materials were collected from participants during the first session of the professional development series and the last session. The pre- and post-lesson plans were collected from the participants through a shared cloud storage platform. Participants uploaded their lesson plans and implementation materials to their
personal folder shared with the researcher before the first module and after the last module. The researcher made a copy of the participants’ documents and put the copies in a folder labeled “Pre-Intervention Lesson Plans” and, later, “Post-Intervention Lesson Plans” which were only accessible to her.

**Researcher field notes.** After each professional development session, the researcher sat down and took notes about the session’s format, content, and attendance, as well as her own observations and reflections. Then she would use the audio-recording of the session to transcribe important participant contributions. Each session was reflected in a new entry, ordered by the date at the top. The field notes were typed and stored in a folder on a password protected account on the researcher’s personal computer.

**Session exit tickets.** At the end of each professional development session, participants received an exit ticket. The exit tickets were located on Survey Monkey. After that week’s session, the participants were given an anonymous link to the survey to complete the exit ticket. After each session, the researcher downloaded each participant’s exit ticket from Survey Monkey and stored the copies in an exit ticket folder saved by the date the data was collected. This folder was in a password protected cloud storage account and the researcher accessed the account through her personal computer.

**Reflective journals.** As previously mentioned, during the second week of each module, participants were given time to write in their reflective journals. The researcher put a new reflective journal template in each participant’s personal folder before the second session of each module. At the end of the sessions where reflective journals were used, the researcher copied participants’ completed journals and stored them in a reflective journal folder, saved by the dates, in her password protected account on her personal computer.
Data Analysis

As previously mentioned, the outcome evaluation for this study followed a partially mixed, concurrent, equal status design. The methods used to assess the outcome evaluation and process evaluation are described below.

**Outcome evaluation data analysis plan.** Given the partially mixed, concurrent, equal status design of this study, quantitative and qualitative data were used to address the research questions. The first outcome evaluation research question needed to measure participants’ knowledge of SLA. An SLA test was given to participants during the first and last sessions of the intervention. Since the researcher was measuring change over a period of time, she graded the tests and compared the pre-test scores to the post-test scores using a paired t-test (Knapp, 2018).

To measure the extent to which participants included SLA into their lesson plans, the researcher used conventional content analysis (Hsieh & Shannon, 2005). Using a priori coding from Echevarría et al.’s (2008) SIOP® model, the researcher analyzed the participants’ lesson plans prior to their participation in the intervention and their new lesson plans at the end of the intervention. The researcher, however, also used the reflective journals to assess participants’ inclusion of SLA in their lesson plans. In this conventional content analysis, the researcher used emergent coding to explore when and how SLA was used in participants’ lesson plans.

**Process evaluation data analysis plan.** Throughout the study, quantitative and qualitative data were collected to conduct an ongoing evaluation of the intervention process. The process evaluation required data collection for three constructs: implementation, participant responsiveness, and initial use (Baranowski & Stables, 2000; Dusenbury, Brannigan, Falco & Hansen, 2003; Stufflebeam, 2003; Zhang et al., 2011).
Implementation. For this intervention, project implementation was defined by following components: regular delivery of professional development sessions and adherence to the intended professional development content. The researcher used her field notes to collect data for this construct (Rossi et al., 2004). To analyze the data, the researcher used content analysis to compare the Intervention Overview (see appendices K and L) and the data collected in her field notes (Hsieh & Shannon, 2005).

Participant responsiveness. The construct of participant responsiveness was defined as the perceived usefulness of the sessions, frequency of activity completion, and attendance differentiated by grade-level. As previously stated, all participants were high school English teachers but the grade-level they taught varied among participants. At Metro High School, students were enrolled in English I in 9th grade and English II in 10th grade. Since Metro High School was an AP for all school, all 11th grade students were enrolled in AP English Language and Composition and all 12th grade students were enrolled in AP English Literature. The workload, content covered, and standardized tests for 9th and 10th grade English varied greatly from those for 11th and 12th grade AP English. While all English teachers had to sit through the professional development sessions, as directed by Metro High School’s principal, participants’ engagement in the study was voluntary and participants were free to stop participating at any point throughout the professional development series. Therefore, participant responsiveness was used to measure the level of participant engagement based on the grade level they taught.

In order to measure participant responsiveness, the researcher needed to measure the attendance rates of all the participants. To do this, the researcher relied on her field notes. After each session, the researcher counted how many participants attended the professional
development session and organized this information by grade-level. Then she used a t-test to assess the relationship between attendance and grade-level (Knapp, 2018).

In addition to the frequency of attendance based on grade-level, the researcher also relied on the exit tickets to measure participant responsiveness. She used the exit tickets to measure the completion rate and the participants’ perceived usefulness of each session based on grade-level taught. The researcher counted the number of exit tickets completed each week and ran a t-test to determine the relationship between grade-level taught and completion rates. The Likert scale data from the exit tickets was analyzed using a t-test for each of the four exit ticket statements and the grade-level taught by the participant (Knapp, 2018). The strength of the relationships between grade-level taught and the exit ticket questions, determined the participants’ perceptions of the usefulness of the professional development sessions.

Lastly, conventional content analysis was used to measure participant responsiveness using participants’ reflective journal entries (Hsieh & Shannon, 2005). Using emergent coding, the researcher looked for patterns in the participants’ answers about the use of concepts and strategies learned in the professional development series.

*Initial use.* The last component of this program evaluation was initial use. Initial use was the “extent to which a participant conducted the activities specified in the materials” (Baranowski & Stables, 2000, p. 160). The outcome goals for this professional development program required direct implementation of the activities from the sessions in the participants’ classrooms. As part of the module format of this professional development series, initial use occurred multiple times. In this study, initial use occurred when participants implemented the lesson plans that they created during the professional development sessions. This implementation was measured by their reflective journals as well as the researcher’s field notes. Similar to the
analysis described above, initial use required a conventional content analysis of the reflective journals and researcher’s field notes (Hsieh & Shannon, 2005).

**Additional Analytical Framework**

Using Vygotsky’s (1978) sociocultural approach for this professional development required focusing on the movement between two critical dimensions of learning: public learning and private learning (Raphael, Vasquez, Fortune, Gavelek, & Au, 2014). Gallucci, as quoted in Raphael et al. (2014) explains when these two dimensions of learning are integrated, they create four quadrants that “capture a process by which cultural practices are internalized by individuals, transformed in the context of individual needs and uses, then externalized (shared) in ways that may be taken up by others” (p. 148). In quadrant I (QI), the teachers are taught new content by a more knowledgeable other (MKO). In this quadrant, they are given explicit explanations about the material they are learning from an expert (Raphael et al., 2014). The public dialogue between the teachers and the MKO allows for a transmission of new knowledge, which pushes teachers into quadrant II (QII). In QII, teachers discuss their new knowledge in a small group or professional learning community to gain a deeper understanding of the concept through dialogical practice (Raphael et al., 2014). Quadrant III (QIII) is where teachers internalize their learning and apply it to their specific, individual context (Raphael et al., 2014). Lastly, in quadrant IV (QIV) after having contextualized their learning and implemented it in their own classrooms, the teachers become the MKO and share with others their experiences with the material (Raphael et al., 2014). The verbal engagement in QIV allows for teachers to adapt and transform their initial application of the learning from QIII and begins the process again (Raphael et al., 2014).
The participants in this study at Metro High School learned aspects of SLA from a MKO in QI. As proposed in the original intervention, they would have then moved into professional learning communities where they would have used their new understanding of SLA and applied it to a lesson plan in QII. In QIII, participants implemented the lessons in their own classrooms. When participants returned to the professional development session the following week, they were in the QIV space where they discussed their experiences and received feedback from peers.

The additional analytical framework was initially proposed to analyze individual participant growth in each module. Using the data from the researcher’s field notes, the sessions’ exit tickets, and the reflective journal entries as proposed, the researcher would have traced teacher movement throughout the quadrants in each module, which would have helped her measure teacher knowledge of SLA and the use of SLA in lesson plans. Due to changes in the implementation of the professional development series, however, this additional analytical framework was not utilized. This will be discussed further in Chapter 5.

Conclusion

Contributing factors to the Latinx ELL student opportunity gap are the English monolingualism movement and teacher demographics (Brown & Chu, 2012; Marschall et al., 2011; Ogbu 1982), cultural mismatches (Delgado-Gaitan, 1994; Good et al., 2010), teacher disposition and expectations (Cheatham et al., 2014; Penfield, 1987; Reeves, 2006; Yoon, 2008), and mainstream teachers’ understanding of second language acquisition (Fernandez & Inserra, 2013; Pappamihiel, 2002; Reeves 2006). Within the context of Metro High School, the most salient contributing factor of the Latinx ELL student opportunity gap was mainstream teachers’ understanding of SLA and the use of SLA knowledge in their lesson plans. Intervention literature suggests the most successful professional developments are sustained, contextualized,
interactive, collaborative, and reflective (Avalos, 2011; Darling-Hammond et al., 2017; Desimone & Garet, 2015). Effective interventions conducted on mainstream teachers’ preparedness to teach ELL students provide teachers with foundational SLA knowledge (Castañeda et al., 2010; He et al., 2011) and instructional strategies to incorporate that knowledge into lesson plans (Herrera & Murry, 2010; Rodriguez & Manner, 2010). Therefore, the partially mixed, concurrent, equal status intervention for mainstream English teachers at Metro High School focused on teachers’ knowledge of SLA and the incorporation of SLA into their lesson plans. The researcher used a SLA test, lesson plans, researcher field notes, exit tickets, and reflective journals to gather data and assess the outcomes of the intervention as a whole, as well as the process of the intervention. Chapter 5 will discuss the findings of this intervention as well as provide a detailed explanation of any changes that were made in the implementation process.
Chapter 5

In Chapter 1, the researcher reviewed some of the factors contributing to the national Latinx ELL student opportunity gap such as teacher mindset, teacher preparation, and cultural mismatches. In Chapter 2, the researcher determined that the Latinx ELL student opportunity gap existed at Metro High School. Metro High School was an English-Spanish bilingual high school with a focus on multicultural curriculum. It had an AP for all program, meaning all students took two AP courses to meet graduation requirements, as well as an English-Spanish bilingual family liaison and an English-Spanish dual immersion program. Thus, despite having all of these policies and programs in place, the Latinx ELL student opportunity gap at Metro High School is indicative that other contributing factors outside of tracking (Benner & Graham, 2011; Callahan, 2005; Kanno & Kangas, 2014; Shin, 2018), family engagement (Delgado-Gaitan, 1994; Good et al., 2010; Henry et al., 2008), the English monolingualism movement (Brown & Chu, 2012; Good et al., 2010; Marschall et al., 2011), and cultural mismatches (Delgado-Gaitan, 1994; Pappamihiel, 2002; Reeves, 2006; Valdez, 2008) were impacting ELL student performance. The researcher found mainstream teachers’ knowledge about SLA was a salient contributing factor to this opportunity gap. The researcher reviewed studies conducted in other contexts that addressed teachers’ knowledge of SLA in Chapter 3. From that literature, the researcher outlined the intervention conducted at Metro High School in Chapter 4. Over the course of 12 weeks, a professional development focused on SLA was delivered to 12 participants in Metro High School’s English department. The researcher collected pre- and post-tests, weekly exit tickets, pre- and post-lesson plans, weekly reflective journals, and kept her own field notes to determine the answers to her research questions on page 109. This chapter will report the findings from the study and discuss them in light of the literature as well as the particular context.
Changes to the Intervention

The planned intervention was presented in Chapter 4 between pages 109 and 130. This section will explain the instances where the intervention implementation differed from the proposed plan.

Chronosystem Influences

As mentioned in Chapter 1, Bronfenbrenner and Morris (2006) posit the chronosystem is the part of the EST where long-term changes occur over the course of the focal individual’s lifetime and impact each of the other ecological systems. In March of 2020, schools across the United States closed their doors and began to provide virtual instruction due to the COVID-19 pandemic. The COVID-19 pandemic influenced every aspect of life for the focal individuals of this study: mainstream teachers. When this intervention was planned and proposed, Union School District had not decided whether the schools would return to in-person learning in the 2020-2021 school year. At the start of this intervention in February 2021, Metro High School had not returned to full capacity in-person learning. In-person learning at full capacity at Metro High School will begin again in August of 2021.

Intervention Adjustments

Prior to the COVID-19 pandemic, teachers at Metro High School were in school Monday-Friday from 8:00-3:30. The English department met every Wednesday and Thursday from 2:00-3:30. When this intervention was proposed, the researcher assumed she would provide her professional development sessions during the department meeting on Wednesday, leaving her participants time to collaborate and plan independently of the professional development. The schedule for all teachers, however, changed in the 2020-2021 school year in order to accommodate the virtual setting and new student needs. Rather than two 90-minute meetings a
week, the English department met once a week for an hour. This substantial loss of time in the department meetings for English teachers at Metro High School significantly impacted the proposed intervention.

As previously explained, each professional development module was composed of two weeks: new content was delivered in the first week and in the second week the participants were to reflect on the implementation of the new content. Then they were supposed to discuss their experiences in their grade-level PLCs and, lastly, discuss their experiences as a whole group. Due to the virtual nature of this professional development, putting participants into their PLCs meant creating breakout rooms. The researcher did not have an account through Teams that allowed her to do that independently, so she would have had to rely on one of her participants who did have those permissions to create, open, facilitate, and close the breakout rooms. Since this took so much time and did not allow for the researcher to maintain control over this part of the intervention, the PLC discussions were removed from the professional development series.

With the removal of PLCs from the intervention, the researcher was unable to utilize the additional analytical framework she proposed in Chapter 4. The additional analytical framework used Vygotsky’s (1978) sociocultural approach to track individual participant growth through four quadrants. As a reminder, in the quadrant I, participants learn new content from a MKO and in quadrant II they were supposed to move into their PLCs to discuss the content and get a deeper understanding from peers. In the quadrant III the participants implemented the lesson and in quadrant IV they shared about their experiences. While quadrants I, III, and IV were still part of the implemented professional development series, without access to the dialogical practice in quadrant II, it was not possible for the researcher to accurately analyze the growth participants made from the presentation of the content to the debrief conversation.
Additionally, when the intervention was planned, all English teachers had a total of three hours a week to plan with their grade-level teams and create lesson plans for the following week. The schedule change, however, eliminated two of those planning hours. Therefore, the administration at Metro High School did not require teachers to write formal lesson plans. At the end of the first week of each module, the researcher had intended to collect lesson plans to examine how the participants were planning to implement the content of the professional development, but she did not. Since each participant reflected on the lesson they used for implementation in their reflective journals during the second week of each module, the researcher decided having participants spend time outside of the professional development series writing formal lesson plans solely for data collection was unnecessary. The researcher eliminated the lesson plan collection at the end of each module’s first week but still collected the pre- and post-lesson plans.

Each week qualitative data was collected in the session exit tickets to use as a formative assessment of the professional development. Based on the answers to these questions, the proposed session topics changed as the intervention was implemented. For example, after the first and second modules on language domains and conceptual versus linguistic knowledge respectively, the exit ticket data demonstrated a need to stop and review these two topics more thoroughly. Comments such as “I wish I could’ve heard a model conversation being used as an informal assessment. I feel like I still don’t know what that looks or sounds like” and “It would be great if we could compile some activities and strategies to match language objectives so that I can easily implement them on a regular basis” were indicative of this need. Thus, instead of moving on to the third module, the researcher paused and did a review session of the previous two modules. (See appendices K and L for a comparison of the proposed module and the
implemented module). Based on the feedback, this added professional development session included more examples and practice with informal speaking assessments and how to write rigorous, relevant language objectives.

Similarily, based on the feedback from the first week in Module 4 on scaffolding, the researcher determined a second week of content delivery on the topic of scaffolding was necessary. Comments on the exit ticket such as “Going from last task to this one involved learning a lot of new moves, so I need more time to better understand” and “Perhaps showing a couple different examples of prompts from different genres or letting us practice the scaffolds in an assignment would help in the future,” revealed participants needed more time practicing this topic. In a quick poll of the participants, 100% of respondents voted to review the topic of scaffolding rather than moving forward into the debrief discussion. Thus, a total of three weeks were spent on the topic of scaffolding, rather than two. Two of those weeks were spent on delivering the content and practicing the skill as a group and the third week was the planned debrief conversation about their implementation of scaffolds in participants’ classes.

Finally, the last module of the proposed intervention, Module 5: Ongoing Language Assessment, was changed completely. Since the researcher added a session after Module 2 and a session in Module 4, Module 5 could not be included in the professional development series due to time constraints. At the end of the intervention, multiple participants noted they wished they could have learned about continuing to use informal language assessments to determine when they should remove scaffolds. This will be discussed later in the chapter.

Findings

This intervention had a partially mixed, concurrent, equal status design (Leech & Onwuegbuzie, 2007). This meant the quantitative and qualitative data were collected and
analyzed separately then compared. This section will reveal the initial findings from the researcher’s data analysis.

**Quantitative Findings**

In order to measure the construct of the participants’ knowledge of second language acquisition, all participants were given a pre-and post-test. A detailed description of this test can be found in Chapter 4 or Appendix D. Using descriptive statistics, the mean from the pre-test to the post-test rose by 9%. Setting the p-value at .05, the researcher ran a paired t-test to determine whether or not this increase was statistically significant. The p-value was .007, confirming the significance of the positive change between the pre-and post-tests.

Participant responsiveness was defined by attendance rates, exit ticket completion rates, and Likert scale responses from the exit tickets. For each of these constructs, the researcher separated the participants into two groups: AP teachers and English I/II teachers. As previously explained, the AP teachers taught 11th and 12th grade English whereas the English I/II teachers taught 9th and 10th grade. There were six AP teachers and six English I/II teachers who participated. The researcher used her field notes for the attendance records for each group of participants. The researcher intended to run a t-test to compare the AP participants’ attendance rates to the English I/II participants’ attendance rates but the data for this test had a negatively skewed curve, so the researcher had to run a Mann-Whitney U test instead. The p-value was set at .05. The Mann Whitney U-test found the p-value in this dataset to be .65. Therefore, the difference in attendance rates for AP participants and the attendance rates for English I/II participants was not significant during this intervention.

Using the same two groupings of participants, the researcher compared their answers on the 5-item Likert scale exit tickets. Each scale item on the exit ticket was given a numerical value
for the dataset: strongly disagree was coded as 1; disagree was coded as 2; neither agree nor disagree was coded as 3; agree was coded as 4; and strongly agree was coded as 5. Using these codes, the mean was found for the two groups of participants on each question for each of the 10 exit tickets. These averages were used as the dataset for each group and the researcher ran a t-test to compare them. The p-value was set at .05 to determine statistical significance in the Likert scale answers between AP participants and English I/II participants. The t-test the researcher ran found the p-value to be .001. Hence, the difference between the higher scores from AP participants and lower scores from the English I/II participants on the exit ticket Likert scale questions was statistically significant.

Lastly, the researcher counted the number of participants in each group who completed the exit tickets each week and used this as her dataset to measure completion rates. Similar to the attendance dataset, the number of participants who completed the exit ticket each week had a negatively skewed curve, thus a Mann-Whitney U test was conducted. Setting the p-value at .05, the researcher found the p-value from this test to be .22, so the difference in exit ticket completion rates for the AP participants and the English I/II participants was not significant.

Ultimately, the researcher found no significant difference between the attendance rates during the professional development series for English I/II participants and AP participants. There was also no significant difference in the exit ticket completion rates between these two groups of participants. The researcher did, however, find that AP participants had higher Likert scale scores than English I/II teachers, indicating a higher rate of perceived usefulness of the professional development content. When looking at the aggregate scores of the pre- and-post-test, the researcher found statistically significant growth from the beginning of the professional development series to the end of the professional development series.
Qualitative Findings

The researcher’s field notes, the participants’ reflective journals, and the pre- and post-lesson plans were the instruments that collected qualitative data. The researcher wrote field notes at the end of each session; therefore, there were 12 field note documents for analysis. There were 47 reflective journal entries, 12 pre- and post-tests, and 20 pre- and post-lesson plans to analyze. As described in Chapter 4, these instruments were used to measure the initial use, participant responsiveness, and the inclusion of SLA-based scaffolding in lesson plans (see appendices D, E, F, G, H, I, and J for instruments). The pre- and post-lesson plans were analyzed using a priori coding. The researcher’s field notes and the reflective journals were analyzed using emergent coding.

The a priori codes for the lesson plans came from the SIOP® lesson plan framework established by Echevarría et al. (2008). The a priori codes for this analysis included: (a) content objectives; (b) language objectives; (c) key vocabulary; (d) opportunity for language practice; (e) activation of prior knowledge; (f) differentiation; (g) student groupings; and (h) assessment. (Refer to Table 13 for the operational definitions of these codes and the examples from participants’ lesson plans).

In order to analyze the reflective journals, the researcher used conventional content analysis to determine emergent codes (Hsieh & Shannon, 2005). She immersed herself in the data, conducting multiple reads. In her first round of coding, the researcher used descriptive coding, pulling words directly from the journals to use as codes (Miles, Huberman, & Saldaña, 2013). Words like “simple” and “worked well,” were used as codes for the first round. The researcher also used emotion coding to analyze the journals, using words such as
“disheartening,” “failure,” “empowered,” and “excited” as codes in the first round (Miles et al., 2013). Overall, the first round of coding the reflective journals produced 32 codes.

Table 13

*A Priori Code Definitions for the Pre- and Post-Lesson Plans*

<table>
<thead>
<tr>
<th>Code</th>
<th>Definition</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content Objective</td>
<td>The lesson’s goal related to the content of the class</td>
<td>SWBAT analyze the motivations of a particular character based on their thoughts, words, and actions</td>
</tr>
<tr>
<td>Language Objective</td>
<td>The lesson’s goal related to the English language skills required to meet the content objective</td>
<td>SWBAT write complex sentences using subordinating conjunctions</td>
</tr>
<tr>
<td>Key Vocabulary</td>
<td>How vocabulary words necessary to access the content of the lesson including content words like symbolism and protagonist as well as academic words like explain or define were used in the lesson</td>
<td>Provided the word and definition on the student handout</td>
</tr>
<tr>
<td>Opportunity for Language Practice</td>
<td>Places in the lesson where students were able to practice using the English language in each of the 4 language domains</td>
<td>Listening to audio of the text</td>
</tr>
<tr>
<td>Activation of Prior Knowledge</td>
<td>The use of a student’s own prior knowledge from previous lessons or life experiences in a lesson</td>
<td>Free-write: “What do you know about the Black Lives Matter movement?”</td>
</tr>
<tr>
<td>Differentiation</td>
<td>Scaffolded assignments and the use of comprehensible input to aid students at different stages of the second language acquisition process</td>
<td>Sentence stems</td>
</tr>
<tr>
<td>Student Groupings</td>
<td>How students are grouped throughout the lesson</td>
<td>Homogeneous groups based on WIDA ELL levels</td>
</tr>
<tr>
<td>Assessment</td>
<td>The assignment used to assess student progress at the end of the lesson</td>
<td>Exit ticket based on the higher order thinking question</td>
</tr>
</tbody>
</table>
In the second round of coding, the researcher looked for patterns in the 32 codes in order to collapse them into more encompassing codes. For example, “empowered” and “excited” were collapsed into “Positive teacher feelings,” whereas “disheartening” and “failure” were collapsed into “Negative teacher feelings.” Similarly, “simple” and “worked well” were collapsed into “Strategy’s effect on lesson.”

After the 32 codes from the first round of coding were collapsed into 11 codes in the second round of coding, the researcher looked for overarching themes among those codes. Codes such as “Positive teacher feelings,” “Negative teacher feelings,” and “Strategy’s effect on lesson” were collapsed under the theme “Experience.” Using La Pelle’s (2004) codebook organization model, the researcher gave each theme and code a numerical value in a coding notebook (see Table 14). The themes were assigned a whole number. Each code under that theme was assigned the same whole number to indicate its theme categorization with a decimal number to indicate its entity as a code within the theme. For example, “Experience” is the theme, which has been coded with a 3. There are three codes within that theme, thus the labels 3.1, 3.2, and 3.3 in Table 14. At the end of this analysis, the researcher created a codebook for the reflective journals that had four themes which were comprised of 11 codes (see Table 15).

In order to analyze the researcher’s field notes, the researcher used the same process used for the reflective journal analysis. First, she used descriptive coding to find emergent codes in the field notes. In this first round of analysis, she found 36 codes such as “unfair,” “work avoidance,” “engaging,” and “acknowledge difference.” In the second round of coding, she collapsed those 36 initial codes into 16 codes. Words like “unfair” and “work avoidance” were labeled “Fixed mindset” and words like “engaging” and “acknowledge difference” were labeled “Growth mindset.” Looking through the 16 codes for patterns, the researcher found six major
### Table 14

**Example of Reflective Journal Coding Notebook**

<table>
<thead>
<tr>
<th>Theme</th>
<th>Theme Code</th>
<th>Example</th>
</tr>
</thead>
</table>
| 3 Experience        | 3.1        | - “The student didn’t complete the work and I found this disheartening. Based on our conversation, I thought he would do better.”  
- “This was a complete failure on my part.” |
| Experience          | 3.2        | - “I feel confident that this strategy was helping more students access the text.”  
- “I felt empowered.”  
- “I was excited because it feels like this is an opportunity for success and understanding.” |
| Experience          | 3.3        | - “The new strategy enhanced the lesson because it gave me permission to simplify without feeling like I am not being rigorous enough.”  
- “I wish I had known it would be as simple as it ended up being.” |

### Table 15

**Reflective Journal Codebook**

<table>
<thead>
<tr>
<th>Theme Code</th>
<th>Theme Code</th>
<th>Theme Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.1</td>
<td>Need for more knowledge</td>
</tr>
<tr>
<td>Challenges of Implementation</td>
<td>1.2</td>
<td>Virtual setting</td>
</tr>
<tr>
<td></td>
<td>1.3</td>
<td>Time</td>
</tr>
<tr>
<td></td>
<td>1.4</td>
<td>Impact on students</td>
</tr>
<tr>
<td>2</td>
<td>2.1</td>
<td>Equity</td>
</tr>
<tr>
<td>Benefits of Implementation</td>
<td>2.2</td>
<td>Change in teacher mindset</td>
</tr>
<tr>
<td>3</td>
<td>3.1</td>
<td>Positive teacher feelings</td>
</tr>
<tr>
<td>Experience</td>
<td>3.2</td>
<td>Negative teacher feelings</td>
</tr>
<tr>
<td></td>
<td>3.3</td>
<td>Strategy’s effect on lesson</td>
</tr>
<tr>
<td>4</td>
<td>4.1</td>
<td>Changes in student work completion</td>
</tr>
<tr>
<td>Student performance</td>
<td>4.2</td>
<td>Changes in student engagement</td>
</tr>
</tbody>
</table>
themes in the field notes (see Table 16). For example, “Fixed mindset” and “Growth mindset” were placed under the theme of “Mindset.”

Table 16

Researcher’s Field Notes Codebook

<table>
<thead>
<tr>
<th>Theme Code</th>
<th>Theme Code</th>
<th>Theme Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.1</td>
<td>Application</td>
</tr>
<tr>
<td>SLA Knowledge</td>
<td>1.2</td>
<td>Necessity</td>
</tr>
<tr>
<td></td>
<td>1.3</td>
<td>Assessment</td>
</tr>
<tr>
<td>2</td>
<td>2.1</td>
<td>Heterogeneous</td>
</tr>
<tr>
<td>Groupings</td>
<td>2.2</td>
<td>Homogeneous</td>
</tr>
<tr>
<td>3</td>
<td>3.1</td>
<td>Student choice</td>
</tr>
<tr>
<td>Challenges</td>
<td>3.2</td>
<td>Time</td>
</tr>
<tr>
<td></td>
<td>3.3</td>
<td>Curriculum rigor</td>
</tr>
<tr>
<td>4</td>
<td>4.1</td>
<td>Exposure to English</td>
</tr>
<tr>
<td>Virtual teaching</td>
<td>4.2</td>
<td>Technology problems/literacy</td>
</tr>
<tr>
<td></td>
<td>4.3</td>
<td>Checking for understanding</td>
</tr>
<tr>
<td>5</td>
<td>5.1</td>
<td>Fixed</td>
</tr>
<tr>
<td>Mindset</td>
<td>5.2</td>
<td>Growth</td>
</tr>
<tr>
<td>6</td>
<td>6.1</td>
<td>Feedback</td>
</tr>
<tr>
<td>Reactions to PD</td>
<td>6.2</td>
<td>Need for more training</td>
</tr>
<tr>
<td></td>
<td>6.3</td>
<td>Essential understandings</td>
</tr>
</tbody>
</table>

Looking at the a priori codes used in the pre- and post-lesson plans, as well as the emergent codes found in the participants’ reflective journals and the researcher’s field notes, the researcher found common threads that appeared in all three. These threads include participants’ reaction to the professional development series and increased application of SLA knowledge as indicated by mindset and experiences, the benefits of implementing SLA-based scaffolding in
lesson plans, and the challenges participants faced, especially in the virtual setting. These findings will be discussed later in the chapter.

**Integrated Findings**

Using the data and findings discussed above, in this section the researcher will present and discuss the integrated findings. The sections are organized by the five research questions that framed this study.

**Change in SLA Knowledge**

The first outcome research question presented in Chapter 4 on page 109 was: “To what extent, if any, does mainstream high school teachers’ knowledge of SLA increase after participation in a professional development series focused on SLA theory?”

The researcher found a statistically significant increase in teacher knowledge of SLA. The mean on the pre- and post-test went from 68% prior to the professional development to 77% afterwards. Four of the questions with the most growth required application of SLA knowledge on scaffolds for hypothetical students. For example, one multiple-choice question asked, “How could a teacher scaffold a text for a level 2 ELL student?” There were four answer choices: (a) provide a summary in English and their native language; (b) chunk the text; (c) allow students to work in small groups; (d) all of the above. The correct answer was (d) all of the above. On the pre-test, 75% of participants answered correctly and the other 25% of participants answered (b) chunk the text. On the post-test 100% of participants answered correctly. Similarly, another question asked participants: “When working with a grade-level text, the teacher should give a lower-level ELL student another, simpler text with the same idea.” The answer to this was false and on the pre-test 87% of participants answered this correctly but after the professional development series, 100% of the participants answered correctly. The question with the most
growth, however, asked participants: “On average, which language domains take longer to develop?” The correct answer was reading and writing. On the pre-test 25% of participants answered correctly. The other 75% of participants answered “speaking and writing” for this question on the pre-test. On the post-test, however, 75% of participants answered correctly, demonstrating a stronger understanding of how a second language is acquired.

In the second week of each module, teachers participated in a debrief conversation about their experience implementing a specific SLA topic in their lessons. Throughout these conversations, it was common practice for participants to pose questions. In the first conversation, these questions were posed directly to the researcher and teachers waited for an answer from her. The researcher was forced to take on a facilitator role in that discussion. In the later conversations, when a participant posed a question, other participants quickly responded, allowing the researcher to be an observer in the conversation instead of a facilitator. For example, in a conversation about giving summaries to ELL students prior to giving the assigned text, one participant asked, “I wonder if I am taking away the productive struggle when I give my ELL students a summary of the text prior to the assignment. How will they gain confidence in their reading abilities if they are not grappling with the text?” In response to this, another participant said, “I don’t really agree with that idea. I think it depends on their levels. I’m not giving a level 1 a plain text with no help so they can struggle. They struggle with everything, so I’d just be contributing to killing their self-esteem.” Another participant added, “Students need to dig into the how, not the what. If our ELL students spend all their time trying to figure out the what while the other students are already determining the how, we haven’t done our job of making the lesson accessible for everyone. Giving summaries allows them to persist and have success.” In this conversation, participants demonstrated their understanding of the SLA process
and the necessity of SLA-based scaffolds to create equitable opportunities to learn for the ELL students in their classrooms. The less reliance on my facilitation and the more autonomy participants took in the conversation indicated an increase in confidence when speaking about SLA and SLA-based scaffolding as well.

Participants self-reported an increase in SLA knowledge as well. In a conversation during the last professional development session, 100% of participants agreed with the statement “I learned new information from this professional development series.” During Module 2, a participant emailed the researcher to ask her for the materials from that day’s session since she was unable to attend. The participant said “I feel like I’m actually learning things and I enjoy that feeling. I don’t want to miss out.” In an exit ticket after Module 4, a participant said, “I feel like I couldn’t make [a scaffold] by myself, but now I feel like I could totally try one.”

This increase in SLA knowledge was also evident in the participants’ responses in their reflective journals. Participants used words like “confident,” “comfortable,” “empowered,” and “secure” to describe how they felt while implementing the content of the professional development series in their classrooms. One participant wrote “Trying something new during pandemic virtual learning, teaching in really short class periods, always makes me anxious. However, examples from last week’s training made me more confident about it.” At the end of the professional development series, 100% of participants agreed with the statement “I feel confident about implementing the information/strategies I learned from this professional development series.”

A change in participant mindset also indicated a better understanding of SLA. In the introduction session, one participant said she was apprehensive about differentiating instruction for ELL students because she did not want to give them a “crutch.” In a later session this same
participant said, “This was really, really helpful. I will trust this process.” In a pre-lesson plan another participant referred to the handout with scaffolding as a “cheat sheet.” In a debrief conversation in Module 4, however, this same participant said, “I felt like providing the scaffolds was inclusive and engaging for all the student levels.” Here the participant had shifted her mindset about scaffolds from being a form of cheating to an aid in comprehension. As indicated by her label of the scaffolded assignment as a “cheat sheet” this participant believed she was giving her ELL students the answers to the assignment, providing them a resource that gave them an advantage over their English-proficient peers in the classroom. In her later comment, this participant demonstrates her knowledge of SLA and the necessity of SLA-based scaffolding. She indicated an understanding that SLA-based scaffolding is not provided to ELL students to give them an advantage over the English-proficient students but, rather, to allow the ELL students to be included and engaged in the lesson at the same level as their English-proficient peers. Two other participants vocalized similar shifts in mindset. One participant said, “It provided multiple means of accessing the content without compromising the rigor of the assignment.” Another participant agreed, “The strategy let me break things down in a way that’s not dumbing down the text.” As the professional development unfolded, misconceptions about the purpose of scaffolds and how they function were corrected. Rather than helping students cheat or giving them watered down work, participants began to verbalize the understanding that scaffolds make content equally accessible for all students and create opportunities for ELL students to learn the conceptual knowledge without requiring a full command of the linguistic knowledge.
Frequency of SLA-based Scaffolding in Participant Lesson Plans

On page 109, the researcher also asked: “In what ways, if any, do levels of SLA-based scaffolding in mainstream high school teachers’ lesson plans change after participation in reflective cycles on lesson design founded in SLA theory?”

As participants’ mindsets about using scaffolding shifted and their knowledge of SLA increased, so did the appropriate SLA-based scaffolding in their lesson plans. In the pre-lesson plan analysis, the researcher counted 15 different types of scaffolds being used among 12 participants. Very few of the participants were using the same scaffolds. While some were appropriate, many of the strategies participants labeled as scaffolding were not SLA-based. Appropriate scaffolding in the pre-lesson plans included “sentence stems,” “audio,” and “multiple choice.” Other strategies, however, such as “more detailed directions,” “extra time,” and “1-on-1 help” were not necessarily SLA-based scaffolds. Even though extra time can be a scaffold for ELL students in mainstream classrooms, the context in which it was being used in the participants’ lesson plans did not demonstrate a thorough understanding of the way scaffolds work. For example, the teacher who was using extra time as the scaffold also wrote the assessment of the lesson was the finished classwork, which was due at the end of the lesson. Extra time would indicate the ELL students had more time to work on the assignment than English-proficient students but, in the lesson plan, there was only one deadline. Of the 15 scaffolding strategies the researcher counted in the pre-lesson plans, five were contextually appropriate and aligned with SLA theory.

In an analysis of participants’ post-lesson plans, the researcher found six scaffolding strategies. Unlike the 15 strategies from the pre-lesson plan analysis, these six strategies were repeatedly used across the 12 lesson plans. All six strategies had been covered in the professional
development series and were applied correctly. “Sentence stems” and “multiple choice” were both listed as scaffolds again. In addition, participants had “simplified instructions,” “images,” “chunked text,” and “summaries.” Unlike the pre-lesson plans, each participant explained the use of these scaffolds in their post-lesson plans. In addition to explaining how the scaffolds would be used, most participants included an explanation of which students would receive which scaffolds. For example, one teacher wrote “Level 1/2 ELL students will be provided simplified instructions, a summary of the text, and multiple-choice questions. Level 3/4 ELL students will be provided simplified instructions and sentence stems.” The continuity in scaffolding strategies and the participants’ rationale for the use of these scaffolds demonstrate a significant change in how SLA-based scaffolding appears in participants’ lesson plans after their participation in the professional development series.

When looking at the implementation materials along with the pre- and post-lesson plans, the researcher found an increase in comprehensible input on the participants’ PowerPoint slides for the lessons. Teachers included purposeful images, sentence stems, and key vocabulary on their post-lesson plan PowerPoints. There was a decrease in superfluous images, excessive colors, and decorative fonts on the slides as well. In this environment of virtual learning, one of the scaffolds introduced during the professional development series was the use of embedded links in PowerPoint slides. This limited the number of directions participants needed to give in order to navigate students to their assignment for the day. In all of the lessons that required students to access an external link, the participant had embedded the link in the PowerPoint. None of the pre-lesson plans included this scaffold.

In the pre-lesson plans, five participants mentioned the groupings they created for students: two said whole group; one said heterogeneous; one said based on choice; and one said
small groups. None of these lesson plans, however, explained how or when the groups would be utilized in the lesson. In the post-lesson plans six participants mentioned student groupings. Two participants said heterogenous; one said homogeneous based on need; and four teachers said homogenous based on reading and/or writing abilities. The teacher who grouped students based on need described the use of a co-teacher who would work with students that had not shown mastery of the skill from the exit ticket the day before. Three of the participants who created groups based on reading and/or writing levels indicated using WIDA levels, Reading Inventory data, and informal assessments based on observations and classwork. The Reading Inventory is a formal assessment used at Metro High School to gauge the reading levels of all students. In any given class of both English-proficient students and ELL students, at least 50% of them read below grade level. Therefore, homogeneous groups based on reading and writing abilities implied the small groups would have a mix of ELL students as well as English-monolingual students who read below grade level. Since there are both ELL students and English-monolingual students in these groups, the ELL students are still exposed to the English language and, as Vygotsky (1978) proposed, the MKO. The participants who grouped students based on need or reading and writing levels explained their use of both formal and informal assessments to determine the groups. Informal assessments, such as exit tickets, observations, and classwork and the use of this data to create small groups were discussed in Module 1 and again in the sixth week of the intervention.

Most interesting, however, was the rationale for using heterogenous groupings by the one participant who used that in the post-lesson plan. When prompted about groupings in the pre-lesson plan, one participant wrote “heterogenous, of course,” indicating the futility or inability to make small groups. In the post-lesson plan, however, the rationale for heterogenous groupings
was strongly embedded in SLA theory. The heterogenous groupings align with Vygotsky’s (1978) theory on the MKO. In creating heterogenous groups, the participant was promoting the ELL students’ exposure to the English language. In addition to this, the same participant had assigned students roles such as scribe, reader, and questioner. In creating these roles, the participant ensured the ELL students had exposure to all four language domains. The thought behind these student groupings demonstrates growth in SLA knowledge and its application in the thought process of writing the lesson plan.

At Metro High School, the exit ticket consists of one or two questions at the end of the class period that assess the students’ understanding of the day’s lesson. Most teachers at Metro High School use exit tickets each day. Student choice and open-ended questions with no right answers were other scaffold techniques that the researcher found in most of the post-lesson plans but only in one of the pre-lesson plans. In the pre-lesson plans, most of the exit ticket questions had right and wrong answers, leaving little room for ELL students to use their own personal experience or simplified language to answer. For example, in one pre-lesson plan, the exit ticket asked, “The Clergy men accused Dr. King of being ‘untimely.’ Explain how King responded to that accusation. Refer to specific evidence King used to support his claim.” While another asked, “How do the characters’ perspectives on the world around them support the overall meaning and message of the text?” Student choice and open-ended questions were scaffolding strategies that were integrated into most post-lesson plan exit tickets. Presenting students with three images all thematically tied to the text in a post-lesson plan, one participant asked students “Which image is the best representation of the poem’s message? Why?” In another post-lesson plan, the participant asked students, “Are you a pessimist (like Jabril) or an optimist (like Brielle)? Why would you label yourself that way? What, if anything, contributed to your way of thinking?” An
increase in SLA knowledge, led participants to include more student choice and open-ended questions in their exit tickets.

One participant exemplified her new understanding of the research behind utilizing student choice and open-ended questions in a debrief conversation when she said, “The Can-Do descriptors made me realize students’ life experiences can be used as scaffolds.” Another participant added, “Yeah. I did this with an exit ticket. I usually focus more on reading the exit tickets for academic writing, but I changed it to ask about their own experiences and this focused me on the comprehension and application of the topic and improved the turn-in rate.” Later in the same debrief conversation, another participant said, “I hope to do this again in the future as a way of guiding students to become better at original thinking.” The conversation that followed demonstrated a mindset shift. Participants discussed the more rigorous nature of an assignment that required one to apply the content topic to one’s own life instead of analyzing the text for the protagonist’s lived experiences or literary techniques. One participant said, “My lesson was enhanced because it gave me permission to simplify without feeling like I am not being rigorous enough.” Participants agreed that inclusion of open-ended questions and questions that relate to the students’ own lives is a scaffold but preserves and even propels all students’ content skills. This conversation was a drastic change from prior discussions that used words and phrases like “crutch,” “avoiding hard work,” and “watering down curriculum.” This drastic change is evidence that as the participants’ knowledge and understanding of SLA increased through this professional development series, their mindsets about the use of scaffolding in their mainstream classrooms was positively changed.

Similarly, in the reflective journals and the debrief conversations, participants explained how their thought processes changed throughout the professional development series, which
impacted their use of the strategies. Comments like, “I’m loving this because it’s making me think about things differently and had you not introduced that concept to us, I probably would not have dug that deep into it” and “I’ve never really thought about making a language objective. I think centering language was really helpful” demonstrated the content delivered in the professional development series was new to participants and provided them opportunities to think about ELL students and the teaching strategies they have used with those students differently. Additionally, in the debrief conversation about the inclusion of language objectives one participant suggested, “Moving forward, it would be cool to create language objective goals for the entire quarter, rather than just one lesson. We could even focus on language domain goals as a department so there is vertical alignment as well as horizontal.” Others in the conversation agreed to make that a priority at the start of the 2021-2022 school year.

**Fidelity of Professional Development Implementation**

The researcher asked, “To what extent, if any, was the professional development series implemented as planned?” as a research question in Chapter 4. This question was discussed earlier in this chapter under the heading “Changes to the Intervention.” As a reminder, due to the COVID-19 pandemic, the day-to-day schedule at Metro High School was changed. With this change, the planning time for the English teachers at Metro High School was cut from three hours a week to one. This severely limited the time the researcher had to conduct the professional development series and, ultimately, caused the deviations from the intervention as it was proposed.

The use of PLCs was also eliminated from the professional development series due to time. Putting participants in break-out rooms for PLCs in the virtual professional development
The researcher had less time to deliver the content of the professional development content and, consequently, found herself rushing through some of the material. Due to this, she had to pause in week six and week 10 to review the content from the previous weeks’ sessions. This decision was made based on feedback from participants on the exit tickets. Participants felt rushed and unable to absorb all the information being provided. Since she took two weeks to review prior content, the researcher had to eliminate Module 5 entirely. (See Appendix L for a detailed explanation of the implemented intervention overview).

Use of Professional Development Content

As mentioned on page 109, one question the researcher used to evaluate the process was: “In what way, if any, did the grade level taught by participants affect their use of instructional strategies?”

The researcher used the completion rate of exit tickets as a measure of participant responsiveness. In her analysis, the researcher found English I/II participants completed the exit tickets more often than the AP participants. Despite the same exit ticket completion rates, however, the analysis of the difference of the scores from the Likert scale on the exit tickets indicated AP participants found the professional development sessions more useful. Through observation and field notes, the researcher found the AP participants’ higher rate of perceived usefulness aligned with the frequency of verbal contributions to the debrief conversations. AP participants were more likely to mention their lack of confidence with successfully implementing SLA-based strategies in the classroom. For example, in the introduction session, one AP participant mentioned “When I spend a lot of time making scaffolds and it doesn’t work, I feel
like a complete failure.” As the professional development progressed, however, the AP participants were also more likely to verbalize the changes in student engagement and work completion. One AP participant noted, “One student who had not previously responded to close read questions answered the scaffolded multiple-choice questions accurately,” illustrating success when implementing content from the professional development. As previously mentioned, due to COVID-19, the classroom was a virtual setting and most of the participation occurred through posts in the class chat box. When implementing the content from the professional development series, another AP participant demonstrated success in the virtual environment when he said, “I had students post who had been radio silent pretty much all year.”

Levels of Participant Engagement

Lastly, to evaluate the process of this study, in Chapter 4 the researcher asked: “To what extent, if any, were participants engaged in the professional development activities?”

As described in Chapter 4, the researcher’s positionality as an English II teacher at Metro High School for eight years may have influenced the participation in the professional development series. Specifically, she was afraid the content of the professional development series might be skewed towards English I/II and, therefore, the AP participants might not find the professional development as useful to them. When looking at participant responsiveness, the researcher analyzed the participants’ attendance rates. She found no significant difference between the attendance of English I/II participants and AP participants. Thus, the attendance rates between English I/II and AP participants were the same.

Based on the exit ticket data, English I/II participants found the professional development series to be slightly less useful than AP participants. The researcher found that the English I/II participants were already using some of the content presented. For instance, one English I/II
participant said, “I’ve been very focused on language techniques for a while. Honestly, I didn’t go that far outside of my comfort zone to create this objective.” The researcher posited, however, her positionality as a 10th grade teacher who worked on a team with other English II teachers impacted these findings. On a question about what the participant wished he knew about this strategy before implementing it, one English I/II participant wrote, “Nothing. I’ve watched you scaffold assignments for years, so I know how to do a lot of this already.” This was not true, however, for all English I/II participants. When introduced to the WIDA Can-Do descriptors, one English I/II participant said, “I’m a ton embarrassed because I feel like I’ve never seen this. I’ve been here for four years, okay, and I swear to God I opened this and was like ‘oh, like I can literally look here. Can they do this? Check. Can they do this?’ Like where has this been my whole life?” Thus, while AP participants displayed higher opinions of the usefulness of the professional development series content than English I/II participants, the professional development series was not futile for the English I/II participants. This was bolstered by the researcher’s finding that 100% of participants agreed with the statement “I think other departments in my school would benefit from a similar PD series.”

**Key Takeaways**

The integrated findings from the professional development series data strongly suggest that even though the professional development series was not implemented as planned, participants’ knowledge of SLA and their inclusion of SLA-based scaffolding in their lesson plans both increased. The researcher found no difference in attendance rates or exit ticket completion between grade-levels but did find AP participants believed the professional development series was more useful than the English I/II teachers.
UNDERSTANDING SLA AND THE LATINX ELL OPPORTUNITY GAP

Discussion

Metro High School is an English-Spanish bilingual, AP for all public high school that focuses on multicultural curriculum. Yoon (2008) found that mainstream teachers were reluctant to work with ELL students in their classrooms because they defined themselves as content teachers, not ESL teachers. The teachers at Metro High School, however, willingly work at a school that is known to have a high population of Latinx ELL students as well as English-proficient students in all classes, regardless of content. Generally, teachers at Metro High School do not define themselves in the traditional teacher role, focusing solely on content (Clair, 1995; Good et al., 2010; Yoon, 2008), but rather as a teacher of all students and embracive of language learning. The AP-credit requirements for graduation, the English-Spanish bilingual family liaison, the English-Spanish bilingual signage and translation services, and the English-Spanish bilingual program demonstrate the active attempts Metro High School is making to combat contributing factors such as tracking (Benner & Graham, 2011; Callahan, 2005; Kanno & Kangas, 2014; Shin, 2018), family engagement (Delgado-Gaitan, 1994; Good et al., 2010; Henry et al., 2008), the English monolingualism movement (Brown & Chu, 2012; Good et al., 2010; Marschall et al., 2011), and cultural mismatches (Delgado-Gaitan, 1994; Pappamihiel, 2002; Reeves, 2006; Valdez, 2008).

Even at a school that seems to be doing all the right things to close the opportunity gap that exists between Latinx ELL students and their English-proficient peers, the need for SLA still exists. This study investigated the impact of professional development on mainstream teachers’ knowledge of SLA and their inclusion of SLA-based scaffolding in their lesson plans. Relying on research, especially Vygotsky’s (1978) sociocultural theory, applied linguistics (Brumfit, 1995; Halliday, 1978; Gebhard et al., 2011), and best practices for instructing ELL students (de Jong &
Harper, 2005; Echevarría & Vogt, 2010; Echevarría et al., 2008; Fairbairn & Jones, 2019; Lucas & Villegas, 2011; Lucas et al., 2008), the researcher created a framework for a professional development series to address the Latinx ELL student opportunity gap at Metro High School. There were five major findings from this study: (a) SLA knowledge and the application of SLA-based scaffolding in participants’ lesson plans increased; (b) engagement differed between the two participant groups; (c) there was a shift in participants’ mindsets about scaffolding; and (d) the length of the professional development series was insufficient.

The logic model on page 80 (Figure 2) lays out the three types of expected outcomes of this professional development. The short-term goal for this professional development series was to increase teachers’ knowledge of SLA and the use of SLA-based scaffolding in their lesson plans. As evidenced by the quantitative data from the pre-and post-tests and the exit tickets as well as the qualitative data from the researcher’s field notes and reflective journals, the researcher found this professional development series did increase participants’ knowledge of SLA and, in turn, increased infusion of SLA-based scaffolding in participants’ lesson plans. Kanno and Kangas (2014) found when mainstream teachers were not trained in SLA, they were more likely to focus on grammar or give ELL students different assignments than their English-proficient peers. Participants demonstrated similar practices prior to the professional development series, as evidenced by the question on the pre- and post-test about how to modify curriculum for a level 2 ELL student. All participants who had that question wrong chose the same answer: give the ELL student a different text. In giving ELL students different texts the participants in this study limited the ELL students’ exposure to the English language and the conceptual content of the class. Kanno and Kangas (2014) and Callahan (2005) assert actions like these hinder an ELL student’s opportunities to learn. Post-lesson plans from the study’s
participants demonstrate an understanding that SLA-based scaffolding creates accessible
curriculum. In using this scaffolding as well as linguistically heterogenous groupings,
participants were able to provide their ELL students with the same work as the English-proficient
students in the same classroom.

He et al. (2011) also found an increase in teachers’ knowledge of SLA through
professional development led to an increase in the application of SLA theory to their teaching
practices. They posited this was due to the contextualized nature of their professional
development format (He et al., 2011), which was mirrored in this professional development
series. In addition to the contextualization, this professional development series also focused on
creating content that was interactive, collaborative, reflective and sustained to create high
engagement among participants. High levels of engagement are consistent with the literature on
effective professional development (Avalos, 2011; Darling-Hammond, et al., 2017; Desimone &
Garet, 2015). Reeves (2006) found when mainstream teachers deemed professional
developments inapplicable or ineffective, they stopped attending. Thus, the findings that
attendance rates between the English I/II participants and the AP participants were similar,
indicated both groups found the professional development series engaging and useful.

While the researcher had anticipated higher levels of engagement from English I/II
participants prior to the professional development series, she was surprised by the findings that
AP participants found the material from the professional development to be more useful. As AP
teachers in a high school that only offered an English-Spanish bilingual program through grade
10, the AP teachers had less experience with SLA. Typically, ELL students are tracked in high
school, limiting their access to AP courses (Benner & Graham, 2011; Callahan, 2005; Kanno &
Kangas, 2014; Shin, 2018; Sox, 2009; Wang & Goldschmidt, 1999). That is not the case at Metro
High School, where all students take AP courses. However, AP participants that came from teaching AP at other schools had even less experience with teaching ELL students in this type of course than teachers who had been teaching AP classes at Metro High School. The AP participants’ need to address SLA in their classrooms was evidenced in the needs assessment as well as their comments throughout the professional development series.

Similarly, the lower level of engagement from English I/II participants was surprising to the researcher. She had anticipated the content of the professional development to be more relevant to the English I/II participants due to her positionality as an English II teacher at Metro High School for eight years. However, English I/II participants may have already been using SLA-based scaffolding and instructional strategies in their teaching practices due to their regular interaction with the researcher and work with the dual immersion program. Since infusing SLA into lesson plans positively increases student achievement (Gebhard et al., 2011; Hansen-Thomas et al., 2013; He & Prater, 2010; Newman et al., 2010; Rodriguez & Manner, 2010; Sakash & Rodriguez-Brown, 2011; Spezzini et al., 2009), ELL students in English I/II, for the most part, may have already been able to access the curriculum to a degree. Therefore, English I/II participants may not have seen a drastic change in their ELL students’ engagement and work completion rates. As indicated by attendance rates, the Likert scale answers, and comments, despite the difference in the perceived usefulness of the professional development series between AP participants and English I/II participants, the English I/II participants did value the time they spent participating in the study.

In this study, an increase in self-efficacy was alluded to with comments about feeling “empowered” and “secure” as teachers practiced the SLA strategies. Guskey (2002) found an increase in teacher self-efficacy through professional development leads to a change in teacher
mindset. Guskey’s (2002) findings are congruent with the findings from the qualitative data in this study. As participants implemented more SLA-based strategies in their teaching practices, their self-efficacy seemed to rise, and their mindset about SLA-based scaffolding shifted. Participants who had demonstrated a fixed mindset towards scaffolding, believing it to be a crutch, at the beginning of the professional development series began to understand the purpose of scaffolding and experience the equity it creates in the mainstream classroom.

In Chapter 3, there were three studies that failed due to a lack of collaboration with teacher participants and a lack of understanding of the participants’ context. Gebhard et al. (2011) and Spezzini et al. (2009) were separate groups of researchers at different universities who provided professional development on the application of SLA to curriculum lesson plans for veteran teachers. The professional developments, however, failed because Gebhard et al. (2011) and Spezzini et al. (2009) planned the trainings under the assumption teachers had foundational knowledge of SLA. Similarly, Brisk and Zisselsberger (2011) were outsider researchers from a local university who tried to provide mainstream teachers with trainings on SFL, which failed. The teachers in that study found the professional development material too daunting to learn on top of the demands of their district.

The researcher’s dual role as a scholar and practitioner, enabled her to provide professional development as an indigenous researcher (Banks, 2016). The researcher knew the values, beliefs, perspectives, and knowledge of the participants because she had worked at Metro High School for eight years prior to this professional development series. She was “perceived by people within the community as a legitimate member who can speak with authority” (Banks, 2016, p. 141). There was a trust that existed between the researcher and her participants because she understood their knowledge of SLA, the unique attributes of Metro High School, and the
expectations placed upon teachers in the context. For example, when delivering the content on comprehensible input and scaffolding, the researcher explained how images can be used to create access for ELL students who may not have the linguistic knowledge to verbalize the answers. One of the participants quickly responded she was always afraid to use images in fear of being reprimanded by administration for not making the assignment rigorous enough in a high school classroom. Another participant agreed saying “Admin will come in and see the pictures and ask, ‘where’s the rigor in that?’ It’s why I’m afraid of using this kind of thing.” Anticipating this question, the researcher had already asked an English I/II administrator and an AP administrator about the use of images in a lesson and was able to answer the question immediately, instilling confidence in the use of this SLA-based practice with her participants. Hansen-Thomas et al. (2013) found teacher-led trainings increased self-efficacy among participants.

The findings from Hansen-Thomas and colleagues’ (2013) are congruent with the findings of this study. After listening to the researcher explain the administration’s perspective on the use of images in a lesson, one participant said, “Okay. I could see that. I don’t feel so afraid to use this then.” The researcher’s role as an insider allowed her to anticipate the fear of using this type of scaffold and, because she knew the dynamics of the evaluation system and administrative hierarchy at Metro High School, preemptively find the answer from the appropriate people. Based on the reactions of the participants, the researcher’s role as an insider in this instance enabled a shift in mindset about using images as a scaffold. Prior to this teacher-led professional development series, participants had expressed fear and hesitancy about using this SLA-based scaffold but, after hearing the answer to their questions, they voiced a willingness to try it.
In their semester-long study with pre-service teachers, Walker and Stone (2011) found the pre-service teachers who participated in their study on SLA felt more prepared in their first year of teaching than their pre-service counterparts who did not participate. Unexpectedly, the participants noted they wished the study had been longer. The participants believed if the study had been longer, they would have been even more prepared to teach the ELL students in their mainstream classrooms (Walker & Stone, 2011). This is consistent with the findings from this study. Shortened time in each professional development session due to the unanticipated schedule change, rushed the delivery of the content. As explained previously, due to the time constraints, the researcher was forced to eliminate the content from Module 5, which was about on-going assessments and understanding when to remove scaffolds. In their concluding session, participants in the study voiced the need for more training on this topic. Participants were eager to continue the training, recognizing their own need to better understand SLA and SLA-based teaching practices.

Limitations

As previously mentioned, this professional development series occurred during an unprecedented time in the educational field. The COVID-19 pandemic caused schools to physically close their doors and conduct all classes in a virtual setting. Participants were struggling significantly to navigate this new way of teaching. In all of the professional development sessions and the reflective journals, questions about how to successfully reach, assess, and scaffold for ELL students in the virtual setting arose. In both the coding for the reflective journals and the researcher’s field notes, virtual teaching was its own theme. The number one experience all participants consistently faced was silence from their ELL students.
Since Metro High School is a public school, teachers could not require students to turn on their cameras or microphones when they were in class, which severely hindered participants’ abilities to interact with their ELL students. One participant’s comment epitomized the problem participants were having:

I’ve noticed that the majority of my students who are silent with their cameras off during my lesson are my ELL students. I just can’t figure it out. Is it tech issues? Tech literacy? Language barriers? Are they taking care of a smaller child and away from the computer? I have no idea how to reach them. I feel like in person even if a student wasn’t participating, I was able to read body language and move forward from there. Now I feel like I’m just throwing spaghetti against the wall giving them work and hoping they produce something. It’s just one more layer I have to figure out. I guess given where we are right now, I’m struggling with what to prioritize: the student’s engagement, work completion, tech literacy, something else? It is really overwhelming. I keep trying different things and failing. It’s so disheartening.

Without the ability to see or hear from ELL students, participants struggled implementing the professional development content with fidelity to all of their ELL students. Most participants were unable to conduct live informal speaking assessments, but rather resorted to students recording themselves. When participation was in the chat or always included the computer, participants were not sure if ELL students were producing work with the help of an online translation tool or a family member sitting next to them.

Given the researcher’s dual role as a scholar and a practitioner, she faced the same problems as her participants in her own classes. She could only speak anecdotally about how to engage ELL students and decipher why the students were not engaging. Most of the questions
the participants had, like “How do I make sure the scaffolds are being used in breakout rooms when I’m not there?” or “How do I know why an ELL student is not participating?” the researcher was unable to answer.

The impact of virtual teaching and the lack of existing literature for the researcher to rely on limited the kinds of interactions the participants had with their ELL students as well as the ability to fully implement the content of the professional development series to all students.

**Early Dissemination**

Despite the limitations of the professional development series due to the COVID-19 pandemic and virtual nature of the implementation, over the course of the twelve weeks of this professional development series, the researcher was approached multiple times to provide professional development and training materials to colleagues outside of Metro High School’s English department.

After the professional development session on writing language objectives, the researcher was approached by the partner of one of the participants. The participant had informed her partner about the professional development. As an assistant principal at a local charter school, the participant’s partner reached out to ask for help delivering a professional development on language objectives to the middle school science department at his school. The researcher met with him to review the content and materials delivered in her professional development. That assistant principal reported high teacher buy-in and participation in the professional development and said he saw an increase in language objectives in his teachers’ lesson plans.

In the module on comprehensible input, the researcher presented the participants with a poem in French and then, in French, asked them to analyze the use of symbolism to convey theme. Since none of the participants were fluent in French, the researcher was placing them in
the position of language learners to demonstrate the experience of their ELL students in English class. After this session, one of the participants reached out to use the French slides in another meeting. She is the lead teacher on a committee charged with creating more equitable grading policies at Metro High School. She wanted to use the slides to create empathy for ELL students in mainstream classrooms and shift teacher mindset about this population of students with the teachers on this committee. Ultimately, she hoped the experience as a French language learner would influence the grading policies the committee was creating. When asked how it went, she said “It went really well! I believe folks were able to feel the frustration that comes from learning in a language that is not native to you.”

It is very common for administrators to come to English Department meetings in order to see what the department is discussing. This happened multiple times during the researcher’s professional development series. After seeing one of these sessions, one assistant principal asked the researcher to give a professional development session at the 10th grade weekly meeting. The researcher was later approached by another assistant principal to give the same session to the 11th grade weekly meeting. Shortly after, the 10th grade assistant principal reached back out to the researcher and said several specific members of the 10th grade team needed help scaffolding reading assignments and asked the researcher to meet with these teachers and coach them in the scaffolding process.

The researcher was also approached twice to deliver her professional development content in larger meetings. The first time she was approached by Metro High School’s instructional coach. After seeing the researcher put the instructional strategies to use in her own English II classroom, the instructional coach asked the researcher to explain the process for creating lessons that are accessible to all learners to the teachers who were returning to teach
UNDERSTANDING SLA AND THE LATINX ELL OPPORTUNITY GAP

students in-person. As previously explained, due to COVID-19, the Metro High School was not open at full capacity. This professional development session was administered to about 25% of the staff. Her delivery of instructional strategies at that meeting led the principal to ask the researcher to present a similar training to all teachers in a school-wide staff meeting. In this presentation, however, the researcher asked her professional development participants if they would like to present material instead of her. One participant volunteered to present on comprehensible input. When asked about his motivation to present, he said “I felt confident that I knew what it was about, could explain it with evidence from my class, and was excited to present to my colleagues!”

The day after the researcher’s last professional development session, the researcher received an email from a teacher at Metro High School whom she had never met. The teacher explained he was speaking with a colleague about the challenges he is having with reaching his ELL students. The colleague he spoke to was not a participant in the researcher’s professional development study, but he was a member of the English department who had attended all of the professional development sessions. The teacher who emailed the researcher said the professional development series was spoken of very highly and he asked for help implementing the same strategies in his own classroom.

Conclusion and Implications

The needs assessment in Chapter 2 determined a Latinx ELL student opportunity gap existed at Metro High School. The needs assessment demonstrated a need for more training on SLA and teaching practices for ELL students in mainstream classrooms. Chapter 4 outlined the professional development series the researcher implemented as an intervention to address this opportunity gap. The researcher found through an intervention based in SLA theory, participants’
knowledge in SLA increased, SLA-based scaffolding increased in participants’ lesson plans, participants’ mindsets towards scaffolding shifted, and participants reported higher levels of ELL student engagement and higher work completion rates. While the findings present an overall positive impact, much work remains.

The multiple requests for early dissemination of the content from the professional development at the researcher’s school indicates an immediate need for and interest in this type of training both in and out of the English department. Although the focus of this study was Metro High School, the request to use the professional development content at a local charter school is indicative of widespread need for this type of training.

This study is a starting point for policy makers, administrators, and teachers. For teachers, the study is evidence that knowledge of SLA and the inclusion of SLA strategies have a direct impact on the accessibility of the curriculum for ELL students. It also reveals appropriate scaffolding can create more equity in the classroom, engaging all students and maintaining the same pace for all students during the lesson. Many teachers are overwhelmed by the needs of students in the classroom. Knowledge about SLA and the implementation of SLA-based scaffolding will help to address the needs of one of the classroom’s student populations.

The appeals for early dissemination of the content from the professional development is indicative that teachers acknowledge the need for this type of training and want it. Contextualized, sustained, collaborative, interactive, and reflective professional development on SLA can provide teachers the help they are searching for and positively impact ELL student academic performance. Administrators, however, need to provide opportunities for mainstream teachers to receive this type of professional development. Putting the onus of understanding SLA on teachers diminishes the likelihood teachers will receive this vital training, further contributing
to the Latinx ELL student opportunity gap. Additionally, having teachers seek out their own professional development opportunities on SLA sends the message that this knowledge is not essential for teaching in the mainstream classroom, or that mainstream teacher roles do not include SLA-based instructional practices.

Lastly, policy makers need to change the requirements for licensure. While the participants at Metro High School became certified to teach in a variety of ways, such as undergraduate licensure degrees from public and private colleges, or alternative routes through a master’s degree program or Teach for America, they all had similar levels of understanding of SLA. This demonstrates a need to change what teachers are required to study before they get their license. There is a clear need for policy makers to include SLA as a mandatory criterion for licensure. Guskey (2002) theorized effective professional development increases teacher self-efficacy, which positively changes teachers’ mindsets and, ultimately, leads to a change in student learning. Closing the Latinx ELL student opportunity gap does not start with the students, but the materials put in front of them and their teachers’ understanding of SLA.

As the United States faces the immigration crisis at the Mexican border, the public schools are faced with one of the largest influxes of unaccompanied Latinx minors in recent history. It is essential for the public school system to address mainstream teachers’ knowledge of SLA and the immense implications their understanding of SLA has on the academic outcomes of Latinx ELL students.
References


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UNDERSTANDING SLA AND THE LATINX ELL OPPORTUNITY GAP


UNDERSTANDING SLA AND THE LATINX ELL OPPORTUNITY GAP


NEA Quality School Programs and Resources Department (2011). An NEA policy brief:

Professional development for general education teachers of English language learners.

*National Educational Association*. Retrieved from:

http://www.nea.org/assets/docs/PB32_ELL11.pdf


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### Appendix A

Mixed Methods Survey for Needs Assessment

By completing this survey or questionnaire, you are consenting to be in this research study. Your participation is voluntary and you can stop at any time.

1. Please read each statement and choose the answer that best describes your opinion.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have adequate training to work with ELL students.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am interested in receiving more training in working with ELL students.</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My teacher preparation program accurately prepared me for working with ELL students.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>When an ELL student does better than expected in English language progress, it is often because the teacher has had relevant training or skills, for example, in sheltered instruction and/or ESL techniques.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am comfortable working with ELL students in my classes.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Even if I try very hard, I will not be able to help my ELL students meet or exceed my content standards.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>When an ELL student has difficulty understanding a concept in my class, I have the resources and capacity to help them.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have the necessary skills to teach ELL students.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2. Please read each statement and choose the answer that best describes your opinion.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am able to develop a repertoire of instructional examples that are culturally familiar to students as a scaffold for learning.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am able to develop a repertoire of instructional examples that are linguistically familiar to students as a scaffold for learning.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am able to assess culturally diverse students’ readiness, intellectual and academic strengths and weaknesses, and development needs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am able to assess linguistically diverse students’ readiness, intellectual and academic strengths and weaknesses, and development needs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am able to create a community of learners by encouraging students to focus on collective work, responsibility, and cooperation.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am able to provide students with the knowledge and skills needed to function in mainstream U.S. culture.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I know how to access ELL students’ funds of knowledge about my content area.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3. Please read each statement and choose the answer that best describes your opinion.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most of the foundational English skills ELL students need should be taught through English classes.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Math is more accessible to ELL students than other subject-areas.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>The expectations and norms of my class are explicitly taught.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I use variety of tools to assess student performance.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>When an ELL student’s grade improves, it is most often due to the teacher having found a more effective teaching-approach.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I am continually finding better ways to teach English language skills.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

Mainstream Teacher Mindset of ELL Students S19

4. Please indicate the extent to which each of the following occurs in your classroom over the course of the year.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Never</th>
<th>Seldom</th>
<th>Sometimes</th>
<th>Frequently</th>
<th>All the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>I teach prefixes, root words, and suffixes.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I teach vocabulary applicable to other subject areas.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I group students homogeneously based on English language abilities.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I group students heterogeneously based on English language abilities.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I know how other content areas scaffold and/or modify work for ELL students.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>The types of scaffolds and/or modifications I use in my classroom are similar to those used in other content areas.</td>
<td>Never</td>
<td>Seldom</td>
<td>Sometimes</td>
<td>Frequently</td>
<td>All the time</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
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</tr>
<tr>
<td>I use my knowledge of a students’ first language’s grammatical rules and vocabulary to inform my instruction for ELL students.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>I use collaborative learning in my classes.</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>I use collaborative learning with my ELL students.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>I interview students about the role the English language plays in their everyday life.</td>
<td></td>
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</tr>
<tr>
<td>I frontload the vocabulary unfamiliar to ELL students for texts students may not understand completely.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Together with students, I develop strategies for learning vocabulary.</td>
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<tr>
<td>I use my ELL students’ primary language literacy as a starting place for English literacy instruction.</td>
<td></td>
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<tr>
<td>I model how to communicate meaning within my content area.</td>
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<tr>
<td>I engage ELL students in using content-specific language in written and oral form.</td>
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<tr>
<td>I provide multiple representations of the content I am teaching.</td>
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<tr>
<td>I promote student interaction in the classroom.</td>
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<tr>
<td>I teach content from my course through translation of an ELL student's native language to English.</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
5. In your class, how often do you...

<table>
<thead>
<tr>
<th>Activity</th>
<th>Never</th>
<th>Seldom</th>
<th>Sometimes</th>
<th>Frequently</th>
<th>All the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>revise curriculum to make it more accessible for ELL students?</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>talk with an ELL student one-on-one in English to assess their</td>
<td></td>
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</tr>
<tr>
<td>communication of ideas?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>purposefully create small groups of English proficient and ELL</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>students to work together?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>allow ELL students to discuss topics in their home language?</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>encourage small groups of bilingual and ELL students to use their</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>home language in class?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>allow ELL students to write about ideas/concepts from class in their</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>home language?</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>talk about things your ELL students do at home that are similar to what</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>you do together in class?</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

**Mainstream Teacher Mindset of ELL Students S19**

6. Please list what you consider to be the greatest benefit(s) of including ELL students in mainstream classes.


7. Please list what you consider to be the greatest challenge(s) of including ELL students in mainstream classes.


### Mainstream Teacher Mindset of ELL Students S19

8. Please indicate your gender.
- Female
- Male
- Non-binary
- Rather not say

9. Which best describes your race/ethnicity? (check all that apply)
- White or Caucasian
- Black or African American
- Hispanic or Latino
- Asian or Asian American
- American Indian or Alaska Native
- Native Hawaiian or other Pacific Islander
- Other
- Rather not say

10. What subject area do you teach?
- English
- History
- Math
- Science

11. How many years have you been employed as a full-time teacher (including this year)?
- 1-2 years
- 3-5 years
- 6-10 years
- 10+ years
- Rather not say

12. How many years have you been employed as a full-time teacher with ELL students in your classes (including this year)?
- 1-2 years
- 3-5 years
- 6-10 years
- 10+ years
- Rather not say
13. Is English your first language?
☐ Yes
☐ No
☐ Rather not say

14. Have you ever received training in teaching language-minority/ELL students?
☐ Yes
☐ No

15. If yes, please describe.

16. Comments: Please write any additional comments you may have concerning the inclusion of ELL students in mainstream classes.
### Appendix B

#### Outcome Evaluation Summary Matrix

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Constructs</th>
<th>Measures or Instrumentation</th>
<th>Data Collection and Timeline</th>
<th>Data Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>RQ1: To what extent, if any, do mainstream high school teachers’ knowledge of SLA increase after participation in a professional development series focused on SLA theory?</td>
<td>knowledge of SLA</td>
<td>SLA Test</td>
<td>Survey Monkey session 1 and session 12 (pre-post PD)</td>
<td>paired t-test</td>
</tr>
<tr>
<td></td>
<td></td>
<td>session exit tickets</td>
<td>Survey Monkey end of every PD session</td>
<td>t-test</td>
</tr>
<tr>
<td>RQ2: In what ways, if any, do levels of SLA-based scaffolding in mainstream high school teachers’ lesson plans change after participation in reflective cycles on lesson design founded in SLA theory?</td>
<td>levels of SLA-based scaffolds in lesson plans</td>
<td>lesson plans and implementation materials</td>
<td>shared cloud platform session 1 and session 12 (pre-post PD)</td>
<td>content analysis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>reflective journals</td>
<td>shared cloud platform the 2nd week of each module</td>
<td>content analysis</td>
</tr>
</tbody>
</table>
### Appendix C

#### Process Evaluation Summary Matrix

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Constructs</th>
<th>Instrumentation</th>
<th>Data Collection and Timeline</th>
<th>Data Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RQ1:</strong> To what extent was the professional development implemented as planned?</td>
<td>adherence to researcher’s design</td>
<td>reflective journals</td>
<td>shared cloud platform the 2&lt;sup&gt;nd&lt;/sup&gt; week of each module</td>
<td>content analysis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>researcher field notes</td>
<td>researcher notebook end of every PD session</td>
<td>content analysis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>session exit tickets</td>
<td>Survey Monkey the 2&lt;sup&gt;nd&lt;/sup&gt; week of each module</td>
<td>t-test</td>
</tr>
<tr>
<td><strong>RQ2:</strong> In what way did content taught by participants affect their use of instructional strategies?</td>
<td>frequency of activity completion</td>
<td>reflective journals</td>
<td>shared cloud platform the 2&lt;sup&gt;nd&lt;/sup&gt; week of each module</td>
<td>content analysis</td>
</tr>
<tr>
<td></td>
<td>participant’s satisfaction level with PD content and activities</td>
<td>session exit tickets</td>
<td>Survey Monkey the 2&lt;sup&gt;nd&lt;/sup&gt; week of each module</td>
<td>t-test</td>
</tr>
<tr>
<td></td>
<td></td>
<td>researcher field notes</td>
<td>researcher notebook end of every PD session</td>
<td>content analysis</td>
</tr>
<tr>
<td><strong>RQ3:</strong> To what extent were participants engaged in the professional development activities?</td>
<td>frequency of attendance</td>
<td>reflective journals</td>
<td>shared cloud platform the 2&lt;sup&gt;nd&lt;/sup&gt; week of each module</td>
<td>content analysis</td>
</tr>
<tr>
<td></td>
<td>frequency of activity completion</td>
<td>session exit tickets</td>
<td>Survey Monkey the 2&lt;sup&gt;nd&lt;/sup&gt; week of each module</td>
<td>t-test</td>
</tr>
<tr>
<td></td>
<td></td>
<td>researcher field notes</td>
<td>researcher notebook end of every PD session</td>
<td>content analysis</td>
</tr>
</tbody>
</table>
Appendix D

SLA Pre- and Post-Test

By completing this test, you are confirming your role as a full-time high school general education English teacher. By completing this test, you are also consenting to have this data used in the research study. Your participation is anonymous. Your participation is also voluntary. You can stop taking this test at any time.

1. How many language domains does an ELL student have?
   - 1
   - 2
   - 3
   - 4

2. On average, how many years does it take for an ELL student to achieve academic English language proficiency?
   - 1-2 years
   - 3-4 years
   - 5-7 years
   - 8-10 years

3. On average, which skill takes longer to develop?
   - speaking
   - writing
   - listening
   - they develop at the same pace

4. On average, which skills take longer to develop?
   - speaking and listening
   - reading and writing
   - listening and speaking
   - speaking and writing

5. What is the minimum number of objectives a lesson should have for a class of English-proficient and ELL students?
   - 1
   - 2
   - 3
   - depends on the lesson
UNDERSTANDING SLA AND THE LATINX ELL OPPORTUNITY GAP

6. How is conceptual knowledge related to linguistic knowledge?
   - linguistic knowledge allows ELL students to express conceptual knowledge
   - linguistic knowledge is required for an ELL student to access conceptual knowledge
   - conceptual knowledge is dependent upon an ELL student’s linguistic knowledge
   - conceptual knowledge and linguistic knowledge are not related to each other

7. What is the definition of comprehensible input?
   - text that has been modified for an ELL student to understand
   - using an ELL student’s native language to ensure content is understood
   - a section of the WIDA test used to access an ELL student’s listening skills
   - content that is presented in a way an ELL student can understand

8. How does the Supreme Court decision in Lau v. Nichols (1973) impact ELL students?
   - it requires districts to include ELL students in mainstream classrooms
   - it requires teachers to make curriculum accessible for ELL students at all levels
   - it permits bilingual education in public schools
   - it prohibits English-only policies in schools

9. Which of the following is an example of a cultural mismatch between the typical Latinx culture and American school culture?
   - Latinx culture is based on the same linguistic roots and American school culture is not
   - Latinx culture is collectivist and American school culture is individualist
   - Latinx culture values personal accomplishments and American school culture values independent achievement
   - Latinx culture believes expertise is contextualized and American school culture believes it is created

10. Which of the following is an example of an informal language assessment?
    - a teacher-made quiz
    - homework
    - a conversation in English with a student
    - all of the above
11. An AP-English teacher has given a reading and writing assignment to a level 4 ELL student. He provides the student with an English-Spanish dictionary, a simplified version of the text, and sentence stems. What else could the teacher provide the student to succeed on this assignment?

- specific vocabulary words in a student's native language
- a summary of the text
- multiple choice
- nothing because the teacher over-scaffolded

12. A 9th grade English teacher is teaching a poem to a level 2 ELL student. She has provided the student with the poem in English and Spanish, key vocabulary words and phrases in English and Spanish, and multiple choice questions to check for understanding. What else could the teacher provide the student to succeed on this assignment?

- a summary of the poem's main idea in Spanish
- sentence stems
- a simpler poem instead of the original
- nothing because the teacher over-scaffolded

13. A 10th grade English teacher provides a level 3 ELL student with the following accommodations for a reading and writing assignment: a Spanish-English dictionary, Spanish and English sentence stems, an audio version of the text, and a list of key vocabulary words. Which of the following is not an appropriate accommodation for an ELL student at this level?

- an audio version of the text
- a list of the key vocabulary words
- Spanish and English sentence stems
- they were all appropriate

14. How could a teacher modify a text for a level 2 ELL student?

- provide a summary in English and Spanish
- chunk the text
- allow students to work in small groups
- all of the above

15. Which of the following accommodations would be most appropriate for a level 3 ELL student on a test assessing reading comprehension?

- reduce the number of questions
- more time
- give the test in Spanish
- provide a summary of the text
16. ELL students and English-proficient students can be taught reading and writing with the same pedagogical approaches.
   - True
   - False

17. Only ELL students require linguistic instruction
   - True
   - False

18. Providing an ELL student with key vocabulary words and definitions ahead of the lesson is the most effective way to teach key vocabulary.
   - True
   - False

19. A student’s cultural background influences his/her learning
   - True
   - False

20. When working with a grade-level text, the teacher should give lower-level ELL students another, simpler text with the same main idea.
   - True
   - False

21. The words describe, explain, and analyze are content words.
   - True
   - False

22. Listening and reading are receptive skills.
   - True
   - False

23. When grouping students by ability, a teacher should use an ELL student’s composite ACCESS score.
   - True
   - False
24. A student's academic speaking ability can be informally assessed by listening to him/her in the hallway.

- True
- False

25. Inclusion of a student's background knowledge can be a scaffold for an assignment.

- True
- False
## Appendix E

### Researcher Field Notes

<table>
<thead>
<tr>
<th>Date of Field Note</th>
<th>Topic:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of Observation:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Module/Week</th>
<th>Number of participants present:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>English I/II:</td>
</tr>
<tr>
<td></td>
<td>AP:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Summary of session</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Content delivered, how it was delivered, activities, completion rate, and timeline of session</em></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Strengths of the session</th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Weaknesses of the session</th>
<th></th>
</tr>
</thead>
</table>

| Notable comments, behaviors, and actions of participants. |  |

### Overall Observations:

---
By completing this exit ticket, you are confirming your role as a full-time high school general education English teacher. By completing this exit ticket, you are also consenting to have this data used in the research study. Your participation is anonymous. Your participation is also voluntary. You can stop answering the exit ticket at any time.

1. What content area do you teach?
   - AP
   - English III

2. Answer the following questions based on today’s PD.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>The information presented today was new to me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>After today’s session, I can confidently explain TOPIC to a colleague.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The content of today’s session is directly applicable to my classes.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel prepared to implement the content of today’s session in a lesson.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. If you answered disagree or strongly disagree to any of the previous statements, please explain.

4. What was the most useful component of today’s session?

5. What would make today’s session more effective in the future?
Appendix G

Session Exit Ticket for Week 2 of Each Module

By completing this exit ticket, you are confirming your role as a full-time high school general education English teacher. By completing this exit ticket, you are also consenting to have this data used in the research study. Your participation is anonymous. Your participation is also voluntary. You can stop answering the exit ticket at any time.

1. What content area do you teach?
   - [ ] AP
   - [ ] English I/II

2. Answer the following questions based on today’s PD.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I learned new information from today’s discussion.</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>After today’s discussion, I can confidently explain TOPIC to a colleague.</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>The content of today’s session is directly applicable to my classes.</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>After today’s discussion, I feel prepared to implement TOPIC in a future lesson.</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
</tbody>
</table>

3. If you answered disagree or strongly disagree to any of the previous statements, please explain.

   

4. What was the most useful component of today’s session?

   

5. What would make today’s session more effective in the future?

   

Appendix H

Exit Ticket for Week 6: Review Session

By completing this exit ticket, you are confirming your role as a full-time high school general education English teacher. By completing this exit ticket, you are also consenting to have this data used in the research study. Your participation is anonymous. Your participation is also voluntary. You can stop answering the exit ticket at any time.

1. What content area do you teach?
   - AP
   - English I/II

2. Answer the following questions based on today's PD.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree or Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Today’s session clarified some of my lingering questions about informal language assessments.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel more prepared to conduct and grade informal speaking assessments than I did before today’s session.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Today’s session clarified some of my lingering questions about language objectives.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel more prepared to write language objectives than I did before today’s session.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The feedback and concerns I have written on previous exit tickets and reflective journals are being acknowledged.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The feedback and concerns I have written on previous exit tickets and reflective journals are being adequately addressed.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. If you answered disagree or strongly disagree to any of the previous statements, please explain.
4. What was the most useful part of today's PD?
- Reading the script of an informal language assessment
- Determining the stronger language objectives
- Listening to student recordings and grading them
- Writing your own language objectives
- Reviewing the sequence of language objectives
- Other

5. What would you prefer to work on in next week's PD?
- I would prefer to learn new content next Wednesday.
- I would prefer to debrief on my new experience with informal speaking assessments and language objectives next Wednesday.
Appendix I

Exit Ticket for Week 10: Review Session

By completing this exit ticket, you are confirming your role as a full-time high school general education English teacher. By completing this exit ticket, you are also consenting to have this data used in the research study. Your participation is anonymous. Your participation is also voluntary. You can stop answering the exit ticket at any time.

1. What content area do you teach?
   - AP
   - English III

2. Answer the following questions based on today’s PD.

<table>
<thead>
<tr>
<th>今天的会议澄清了我关于为ELL学生设计分层作业时的疑问</th>
<th>不同意</th>
<th>不同意</th>
<th>不同意</th>
<th>同意</th>
<th>非常同意</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel more prepared to create scaffolded assignments for level 1/2 ELL students than I did before today’s session.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel more prepared to create scaffolded assignments for level 3/4 ELL students than I did before today’s session.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The feedback and concerns I have written on previous exit tickets and reflective journals are being acknowledged.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The feedback and concerns I have written on previous exit tickets and reflective journals are being adequately addressed.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. If you answered disagree or strongly disagree to any of the previous statements, please explain.
4. What was the most useful part of today's PD?

- Reviewing the steps to scaffolding an assignment.
- Reviewing the scaffolding techniques I can use to create scaffolded assignments.
- Creating scaffolded questions in the Padlet activity.
- Other

5. What questions, if any, do you still have about scaffolding assignments for ELL students?

6. What would make today's session more effective in the future?
Appendix J

Reflective Journal

This journal is intended to capture your personal implementation experience of the teaching strategy you learned in the first week of this module. The questions below seek to help the researcher understand your perspective and experiences. The data collected from these journals will help her refine the module for future iterations.

Instructions: Please use this time to complete the reflective journal below. The text in red is required information. While there are pre-existing questions, your answers are optional. Please complete the journal to the best of your ability within your comfort level.

<table>
<thead>
<tr>
<th>Date:</th>
<th>Grade-level: English I/II or AP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class Period:</td>
<td>Number of students present in class:</td>
</tr>
<tr>
<td>Number of ELL students present:</td>
<td>Number of English-proficient students present:</td>
</tr>
<tr>
<td>Strategy you were implementing:</td>
<td></td>
</tr>
<tr>
<td>Describe the lesson. (i.e., text used, objective(s), activities, delivery methods, materials used)</td>
<td></td>
</tr>
<tr>
<td>How did you use the new strategy in your lesson?</td>
<td></td>
</tr>
<tr>
<td>What went well in this lesson? What indicated this went well? (i.e., pacing, delivery, engagement, participation, classroom management, groupings, work completion)</td>
<td></td>
</tr>
<tr>
<td>What needed improvement in this lesson? What indicated this element needed improvement? (i.e., pacing, delivery, engagement, participation, classroom management, groupings, work completion)</td>
<td></td>
</tr>
<tr>
<td>How did your ELL students respond to the new strategy? (i.e., increase/decrease/no change in participation, engagement, work completion, effort, confidence)</td>
<td></td>
</tr>
<tr>
<td>Did the new strategy enhance or impede your lesson? Why?</td>
<td></td>
</tr>
<tr>
<td>Question</td>
<td>Answer</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>How did you feel while implementing this strategy? Why?</td>
<td></td>
</tr>
<tr>
<td>What questions arose for you during the implementation of this new strategy?</td>
<td></td>
</tr>
<tr>
<td>What do you wish you knew before implementing this strategy?</td>
<td></td>
</tr>
<tr>
<td>What did you learn from implementing this strategy?</td>
<td></td>
</tr>
<tr>
<td>Will you implement this strategy again? Why or why not?</td>
<td></td>
</tr>
<tr>
<td>Additional thoughts, comments, questions and/or suggestions for future sessions.</td>
<td></td>
</tr>
</tbody>
</table>
## Appendix K

**Proposed Intervention Overview**

<table>
<thead>
<tr>
<th>Module and Week</th>
<th>Major Concept</th>
<th>Goal: Participants will be able to…</th>
<th>Activities</th>
<th>Evaluation of Study (Participants Only)</th>
<th>Homework</th>
</tr>
</thead>
</table>
| Pre-Module Session | Introduction                  | Articulate details on the purpose format, and the nature of participation for this study | **Researcher:** give basic information of study  
**Researcher and Participants:** Q & A  
**Participants:** SLA test | - SLA test  
- pre-existing lesson plan | - consent forms from volunteers (participants) |
| Module 1 Week 1 | Language Domains and Process   | Define each language domain and articulate the abilities of ELL students at various levels | **Researcher:** provide key details, review WIDA and ELLevation  
**Participants:** annotate WIDA can-do descriptors  
**Researcher and Participants:** discuss manifestations of those descriptors  
- model how assessment can be done in class  
**Participants:** create assessments for language domains | - exit ticket  
- assessments | - independent assessment of language domains of ELL students in 1 class |
| Module 1 Week 2 | Language Domains and Process   | Reflect and debrief on experiences   | **Participants:**  
- reflection in journal  
- debrief in PLC\(^4\)  
- debrief as whole group | - exit ticket  
- reflective journal entry | - provide researcher with the following week’s lesson plans |

\(^4\) professional learning community
UNDERSTANDING SLA AND THE LATINX ELL OPPORTUNITY GAP

Module 2  
Week 1  
Conceptual Knowledge Versus Linguistic Knowledge

- Write content and language objectives
- Create assessment to measure objectives

Researcher:
- Differentiate between conceptual and linguistic knowledge
- Model how to address conceptual and linguistic knowledge in a lesson

Researcher and Participants:
- Discuss examples from their classes
- Discuss how this knowledge may affect language domains class to class

Participants:
- Create language and content objectives
- Choose how to assess those objectives

Participants:
- Reflection in journal
- Debrief in PLC
- Debrief as whole group

Module 2  
Week 2

Comprehensible Input

- Define comprehensible input and create materials to deliver comprehensible input

Researcher and Participants:
- Watch Farsi video and discuss takeaways

Researcher:
- Define comprehensible input
- Model ways to achieve that

Participants:
- Create multiple resources for comprehensible input

Module 3  
Week 1

- Exit ticket
- Written objectives
- Chosen assessments
- Implement lesson with content and language objectives and assess students for mastery of objective

- Exit ticket
- Reflective journal entry
- Provide researcher with the following week’s lesson plans

- Exit ticket
- Resources for comprehensible input
- Implement lesson with comprehensible input resources
### Module 3
#### Week 2

**Comprehensible Input**

Reflect and debrief on experiences

**Participants:**
- reflection in journal
- debrief in PLC
- debrief as whole group

**Module 4**
#### Week 1

**Scaffolds for Comprehension**

Identify scaffolds in a lesson and match them to the appropriate ELL level

**Researcher:**
- explain the use of scaffolds and the process of scaffolding
- handout scaffolds for example lesson
**Participants:**
- annotate the scaffolds
- determine the ELL level for each scaffold

**Researcher and Participants:**
- discuss the scaffolds’ contents
- match the scaffold to an ELL level
**Participants:** create a scaffold(s) for a lesson

**Module 4**
#### Week 2

**Scaffolds for Comprehension**

Reflect and debrief on experiences

**Participants:**
- reflection in journal
- debrief in PLC
- debrief as whole group

**Module 5**
#### Week 1

**Ongoing Language Assessments**

Use assessments to determine if scaffolds need to be removed and identify new scaffolds to put in place

**Researcher:**
- explain the fluidity of scaffolds
- model how to assess students for removing or adding scaffolds
- handout hypothetical student examples
**Participants:**
- annotate the examples

**Module 4**
#### Week 2

- exit ticket
- reflective journal entry
- provide researcher with the following week’s lesson plans

**Module 4**
#### Week 1

- exit ticket
- scaffold(s) for lesson plan
- implement the lesson with the scaffold(s)

**Module 5**
#### Week 1

- exit ticket
- scaffold(s) for lesson plan
- implement the lesson with the scaffold(s)
UNDERSTANDING SLA AND THE LATINX ELL OPPORTUNITY GAP

- determine if the hypothetical student needs scaffolds removed or added
  
  **Researcher and Participants:**
  discuss the student work they analyzed
  **Participants:** use student work to determine appropriate scaffolds for the following week’s lessons

<table>
<thead>
<tr>
<th>Module 5</th>
<th>Ongoing Language Assessments</th>
<th>Reflect and debrief on experiences</th>
<th>Participants:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 2</td>
<td></td>
<td></td>
<td>- reflection in journal</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- debrief in PLC</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- debrief as whole group</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- exit ticket</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- provide me with the following week’s lesson plans</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Post-Module Session</th>
<th>Reflect and debrief on experiences throughout the entire professional development series</th>
<th>Participants:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- PLC notes on lessons learned</td>
<td>- SLA test</td>
</tr>
<tr>
<td></td>
<td>- SLA test</td>
<td>- lesson plan</td>
</tr>
<tr>
<td></td>
<td>- lessons learned</td>
<td>- lessons learned</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Post-Module Session</th>
<th>Reflect and debrief on experiences throughout the entire professional development series</th>
<th>Participants:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- PLC notes on lessons learned</td>
<td>- SLA test</td>
</tr>
<tr>
<td></td>
<td>- SLA test</td>
<td>- lesson plan</td>
</tr>
<tr>
<td></td>
<td>- lessons learned</td>
<td>- lessons learned</td>
</tr>
</tbody>
</table>

N/A
### Appendix L

*Implemented* Intervention Overview

<table>
<thead>
<tr>
<th>Module and Week</th>
<th>Major Concept</th>
<th>Goal: Participants will be able to…</th>
<th>Activities</th>
<th>Evaluation of Study (Participants Only)</th>
<th>Homework</th>
</tr>
</thead>
</table>
| Pre-Module Session | Introduction | Articulate details on the purpose format, and the nature of participation for this study | Researcher:  
- give basic information of study  
Researcher and Participants:  
- Q & A  
Participants:  
- SLA test | - SLA test  
- pre-existing lesson plan | - consent forms from volunteers (participants) |
| Module 1 Week 1 | Language Domains and Process | Define each language domain and articulate the abilities of ELL students at various levels | Researcher:  
- provide key details, review WIDA and ELLevation  
Participants:  
- annotate WIDA can-do descriptors  
Researcher and Participants:  
- discuss manifestations of those descriptors  
- model how assessment can be done in class  
Participants:  
- create assessments for language domains | - exit ticket | - independent assessment of language domains of ELL students in 1 class |
<table>
<thead>
<tr>
<th>Module 1</th>
<th>Language Domains and Process</th>
<th>Reflect and debrief on experiences</th>
<th>Participants:</th>
<th>- exit ticket</th>
<th>- continue implementation of content in lesson plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 2</td>
<td></td>
<td></td>
<td>- reflection in journal</td>
<td>- reflective journal entry</td>
<td></td>
</tr>
<tr>
<td>Module 2</td>
<td>Conceptual Knowledge Versus Linguistic Knowledge</td>
<td>- Write content and language objectives</td>
<td>Researcher:</td>
<td>- exit ticket</td>
<td>- implement lesson with content and language objectives and assess students for mastery of objective</td>
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<tr>
<td>Week 1</td>
<td></td>
<td>- Create assessment to measure objectives</td>
<td>- differentiate between conceptual and linguistic knowledge</td>
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<td>- model how to address conceptual and linguistic knowledge in a lesson</td>
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<td>Participants:</td>
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<td>- choose the stronger language objectives for the content objective that is given</td>
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<td>Researcher and Participants:</td>
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<td>- discuss their answers and the correct answers and explain rationale</td>
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<td>Participants:</td>
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<td>- create language and content objectives</td>
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<tr>
<td>Module 2</td>
<td>Conceptual Knowledge Versus Linguistic Knowledge</td>
<td>Reflect and debrief on experiences</td>
<td>Participants:</td>
<td>- exit ticket</td>
<td>- continue implementation of content in lesson plans</td>
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<tr>
<td>Week 2</td>
<td></td>
<td></td>
<td>- reflection in journal</td>
<td>- reflective journal entry</td>
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<tr>
<td>Review Module</td>
<td>Review of Informal Speaking Assessments and Language Objectives</td>
<td>- Determine a student’s speaking level through informal assessments</td>
<td>Researcher:</td>
<td>- exit ticket</td>
<td>- conduct speaking assessment for ELL students in 1 class</td>
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<td>- review the purpose and ways to conduct informal speaking assessments</td>
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<td>Participants:</td>
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</table>
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- Write language objectives that align to content objectives
- listen to examples of recorded student responses to a question and determine the student’s speaking level
  Researcher and Participants:
  - discuss their answers and the correct answers and explain rationale
  Researcher:
  - review the purpose and process to building language objectives
  Participants:
  - out of two language objectives, determine which better aligned to the content objective

Researcher and Participants:
- discuss their answers and the correct answers and explain rationale
Participants:
- write a language objective for a given content objective
Researcher and Participants:
- review the written language objectives

<table>
<thead>
<tr>
<th>Module 3</th>
<th>Comprehensible Input</th>
<th>Define comprehensible input and create materials to deliver comprehensible input</th>
<th>- exit ticket</th>
<th>- implement lesson with comprehensible input resources</th>
</tr>
</thead>
</table>
| Week 1   |                      | Researcher: 
- define comprehensible input 
- present slides in French and ask analysis question in French making participants FLL)  
Researcher and Participants: 
- discuss the experience of being French language learners |              |                                                      |
UNDERSTANDING SLA AND THE LATINX ELL OPPORTUNITY GAP

<table>
<thead>
<tr>
<th>Module</th>
<th>Comprehensible Input</th>
<th>Reflect and debrief on experiences</th>
<th>Participants:</th>
<th>- reflection in journal</th>
<th>- debrief as whole group</th>
<th>- exit ticket</th>
<th>- reflective journal entry</th>
<th>- continue implementation of content in lesson plans</th>
<th>- implement the lesson with the scaffold(s)</th>
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<tbody>
<tr>
<td>3</td>
<td>Week 2</td>
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<td></td>
<td>Comprehensible Input</td>
<td></td>
<td>Researcher:</td>
<td>- re-present the same slides with comprehensible input</td>
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<td></td>
<td>Reflect and debrief on experiences</td>
<td></td>
<td>Researcher and Participants:</td>
<td>- discuss the experience of being French language learners</td>
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<td></td>
<td>- annotate the scaffolds</td>
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<td>- create lessons that include comprehensible input</td>
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<td>Identify scaffolds in a lesson and match them to the appropriate ELL level</td>
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<td>Researcher:</td>
<td>- explain the use of scaffolds and the process of scaffolding</td>
<td>- present scaffolds for example lesson</td>
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<td>Researcher and Participants:</td>
<td>- discuss how the scaffolds build from level 1 to grade-level</td>
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<td></td>
<td>Participants:</td>
<td>- create lessons that scaffolded assignments</td>
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</table>
| Module   | Scaffolds for Comprehension | Create scaffolded assignments | Researcher: - review the scaffolding process  
Participants: - scaffold a question from classwork in different hypothetical scenarios for different student levels  
Researcher and Participants: - Discuss their answers and the correct answers and explain rationale  
Participants: - create lessons that scaffolded assignments | - exit ticket  
- implement the lesson with the scaffold(s) |
|----------|----------------------------|-------------------------------|-----------------------------------------------|
| Week 2   | Scaffolds for Comprehension | Reflect and debrief on experiences | Participants: - reflection in journal  
- debrief as whole group | - exit ticket  
- reflective journal entry |
| Post-Module Session | Reflect and debrief on experiences throughout the entire professional development series | Participants: - SLA test  
- Whole group notes on lessons learned  
Researcher and Participants: discuss experiences and provide feedback | - SLA test  
- lesson plan  
- lessons learned N/A |