CONTEXTUALIZING THE VAST AND VARYING LANDSCAPE OF SECONDARY EL PROGRAMS AND SERVICES

by

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DISSERTATION ABSTRACT

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Despite a large and growing population of English learner (EL) students in middle and high schools, research on EL education has focused on elementary grade services, with very little understanding of how ELs are served in the secondary grades. Drawing on a National Center for Education Statistics (NCES) survey, this dissertation offers a national exploratory descriptive study of the programs and services available to secondary English learners and the relationships of those programs and services to key contextual factors of district enrollment size, community type (urban, rural, etc.), region, and English learner density. The study also analyzed combinations of EL educational services in districts with more than 100 English learners. Data for 1,161 school districts across the country were analyzed using frequencies, percentages, chi-square tests, and combinations of concatenated variables to describe the variation in educational contexts of reception for English learners in secondary education and to find how those contexts relate specifically to the aforementioned contextual factors. Results provide a national landscape of secondary EL programs and services that serves as a reference for future decisions regarding policy and programs that may best serve the needs of an ever-increasing population of English learners spanning the spectrum of district demographics.

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CHAPTER I

INTRODUCTION AND LITERATURE SYNTHESIS

English Language students (ELs) in secondary education face some of the most daunting circumstances in the United States education system. They are tasked with learning high-level academic and linguistic knowledge and skills while navigating requirements to graduate and post-secondary opportunities. Additional challenges can be academic and social, including language barriers, cultural differences, trauma, economic adversity, discrimination, and more. In light of the rugged educational terrain for secondary ELs, districts across the U.S. are grappling with how to serve them with effective programs and approaches "that ensure that EL students can participate meaningfully and equally in educational programs" (U.S. Department of Education [USDOE], 2018, p. 1).

The mandate for districts to provide access to programs and services has strengthened over the last two decades as the EL population has increased in most states. More than a million new ELs have entered the public education system in the last two decades and, as of fall 2015, ELs made up an average of 9.5% of students attending schools in the United States (National Center for Education Statistics, 2018). The six states with the highest number of ELs, representing 60% of the national population, include California, Texas, Florida, New York, Illinois, and Arizona (Pitoniak et al., 2009). New destination states and shifts in immigration patterns (Gándara et al., 2010) create a need for all states to identify programs and services for their specific context and population of ELs.

The U.S. Department of Education has advised that "in order to select or create an appropriate EL program model, it is necessary to understand the local EL population" (USDOE, 2016, p. 5). The need to have information about the population, as well as how they are being served in similar educational contexts, is invaluable to district and local stakeholders. Additional research could provide stakeholders insight as to how districts are providing an equal and meaningful opportunity based on their interpretation and implementation of an "appropriate model" (USDOE, 2016). This research will be one step toward understanding and evaluating the models available to students based on current legislation, policy, and state and local choices for secondary EL programs.

In the following sections, I first provide an overview of the law as it pertains to EL education and a rationale for focusing on the educational programs and services for secondary EL students specifically. I then turn to describe core components of EL education, components that will later be analyzed in the dissertation. Third, I turn to discuss existing research on how social and contextual factors influence or are correlated with EL programs and services. I close the chapter with a brief description of the existing report using the dataset examined in this dissertation, before identifying gaps in the literature and presenting my dissertation research questions. I will also describe what the federal government has mandated through legislation for EL education.

Background on EL Secondary Education

Accountability for EL education came to the forefront of the American education system with the passing of the No Child Left Behind act in 2001. The act mandated new requirements for accountability of EL education, and, with the updates to Title I and Title III in the Every Student Succeeds Act (ESSA, 2015), has continued to be forefront in the

work of educators. Educational rights for ELs were guaranteed in the Civil Rights Act of 1964 and the Equal Education Opportunity Act of 1974. Additional clarification about how schools must serve ELs were fought for and won in important court cases including *Lau v. Nichols* (1974), where the Supreme Court ensured all students the right to participate meaningfully and equally regardless of race or language. In another important case, *Castañeda v. Pickard* (1981), the court decided that schools must use research-based programs that are implemented effectively and lead to English language proficiency "within a reasonable amount of time" (USDOE, 2016, pg. 1). Other requirements for programs and services are: a) schools must provide access to core content and grade-level standards, b) students should not be unnecessarily segregated, and c) students need programs that are equal and meaningful (USDOE, 2018). These laws and cases ensure the legal basis for ELs to receive services that meet their needs.

ESSA legislation requires state and local education agencies to have services in place for identifying and assessing EL students and providing the services they need (USDOE, 2016). The mandated services are meant to "support ELs in achieving college and career readiness, participating in our schools and society and maintaining their bilingualism as an asset" (USDOE, 2016, p. 5). The potential for ELs' success is largely dependent upon how states, local education agencies (LEAs), and local school leaders and teachers utilize resources, create systems, and form and enact policies. Currently, the only national data on EL programs and services is through targeted research projects.

Researchers have found that as each state has enacted its policies and practices to fulfill ESSA requirements, many similarities and differences existed (Callahan et al., 2009; De Cohen & Clewell, 2007; Gándara et al., 2010). Concerning similarities, after a

school or district identifies a student as having a possible need for EL services through a home language survey, that student's English language proficiency is assessed. The assessments that states use vary widely; more than half of states use an assessment created by the World-Class Instructional Design and Assessment (WIDA) Consortium, the WIDA ACCESS Placement Test (W-APT), while others use private vendors or create their own (National Research Council, 2011). After assessing students, schools and districts typically place students that score below a targeted proficiency level in English into EL programs. Districts reassess students classified as EL annually until they demonstrate sufficient mastery of the English language on selected assessments and benchmarks per state policy. This transition from EL education to general education is known as reclassification.

The differences in EL programs and services multiply because states delegate responsibility and control to districts and schools to determine the content and language services needed to fulfill federal and state requirements for EL education. Local leaders use various models and methods such as dual-language programs, push-in or pull-out English language development instruction, English as a second language classes, and sheltered instruction, all with varying effects on the linguistic knowledge and skills students acquire and the content available to them. Other policies and requirements such as those related to graduation, assessment, attendance, age limits, the language of instruction, and core content are additional factors that add variation in the services and programs provided to secondary ELs. With the variation introduced from district and school choices of programs and services, policymakers and key stakeholders need clear

documentation of the results of those choices and how they vary by district demographics.

Research on programs and services for ELs as a group tends to either be focused on the population as a whole or on primary age ELs as most ELs in the United States are identified at a younger age and exit EL status before entering secondary education. One illustration of this trend is seen in Figure 1 presented below. For example, in 2017 over three million or 64% of all ELs nationally were enrolled in grades K–5. The research on secondary programs and services is less prevalent but just as needed as many of these students are less likely to graduate (only 67% in 2015-16 for a four-year cohort model; McFarland et al., 2018), more likely to struggle academically (USDOE, 2020), and in need of a greater variety of supports (Umansky et al., 2018).

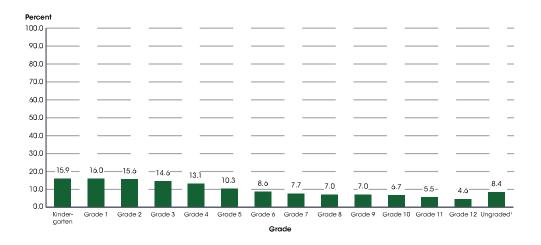


Figure 1. Percentage of public-school students who were English language learners, by grade level: Fall 2017. Taken from https://nces.ed.gov/programs/coe/indicator_cgf.asp#f4

ELs in secondary education are a critical population who need additional support with the hurdles needed to graduate and be successful in post-secondary life. Several programs and supports, such as literacy programs, are typically for younger grades and do not support secondary students such as ELs (Marchand-Martella et al., 2013). This is

an issue as ELs in secondary education have greater difficulty with reading in English because their teachers are less likely to be prepared to teach them (Barrow & Markman-Pithers, 2016). In addition, they are overlooked because, as with literacy, learning English is commonly thought to happen during earlier years (Ruiz-de-Velasco & Fix, 2000). Researchers have found that students in ninth grade who struggle academically are less likely to graduate (McCallumore & Sparapani, 2010), and, due to their language barrier, many ELs have even less time than the typical student ninth-grade student to achieve success. Other issues researchers found are secondary ELs struggle academically due to lack of academic language and the knowledge of how to be successful in the academic system (Maxwell-Jolly et al., 2007). Secondary ELs have limited time and they are often racing against multiple clocks because of the need to acquire strong enough academic English to obtain enough credits to graduate (Calderón et al., 2011). More research is needed to determine how secondary ELs are being served and to understand whether those educational contexts are adequate to address the plethora of challenges and disadvantages.

The circumstances of ELs in secondary education are diverse and afford another important reason why additional research is needed in this area (Menken, 2013). Length of time classified as an EL is one characteristic where secondary ELs differ. Long term ELs — a common definition of which is students who have been enrolled in U.S. schools for over seven years (Menken et al., 2012) — are on one end of the spectrum, with newcomer ELs — those who have recently arrived from other countries (Short & Boyson, 2012) — at the other. The variation also occurs in the educational experience of newcomers, some having little or interrupted formal schooling. Research is available to

describe the differences in the EL population generally and how they are being served in a limited number of districts, areas, and contexts, but more is needed to understand on a broader scale.

Components of EL Education

As discussed in previous sections, the federal government places the responsibility on districts to provide programs and services to ELs that enable them to acquire the English language, access core academic content, and achieve academic success. Districts and schools have implemented two main approaches and several different models to English language instruction. Faulkner-Bond et al. (2012) define an approach as "a broad, conceptual framework" and a model as "a specific set of instructional services or a fully developed curriculum designed to help ELs acquire English proficiency and meet high academic standards" (p. 5). The two main approaches are English as a Second Language (ESL) and bilingual education. The instructional approaches and models integrate with other programs and services that support academic needs and opportunities such as newcomer programs, technology, language support, and other support services. In this section, I will describe what researchers have learned about instructional approaches and models as well as the programs and services for secondary ELs, and I will identify areas still needing research.

Instructional Approaches. The ESL approach and the bilingual approach are both touted as effective through evaluation and research (Calderón et al., 2011; Collier & Thomas, 2004; Steele et al., 2017; Valentino & Reardon, 2015). Researchers Calderón et al. (2011) reviewed the research on effective EL instruction and determined that the *quality* of instruction is what matters most in educating English learners. They also

identified components from reform models such as school structures and leadership and the integration of language, literacy, and content instruction as being effective in ensuring quality EL education. Another review of language instruction programs highlighted "instruction that is modified or that accommodates the special needs of ELs is more likely to help these students progress than instruction that is not modified" (Faulkner-Bond et al., 2012). To ensure instruction is modified to meet the needs of ELs, some states such as California and Arizona have changed their EL education by establishing English language development standards tied to ELA standards. However, it is unknown how many districts are integrating core content and English language standards, integrating content instruction into ESL instruction, or combining services to provide access to content and English language development.

English Language Instruction. English language instruction and acquisition are a primary component of EL programs and services. ESL is the most common form of instruction (NCES, 2016) and can be provided as a separate class, or delivered through pull-out (students are removed from a class to participate in an ESL session) or push-in instruction (provided within a classroom during content instruction). This approach and model have been utilized for decades and is common in large urban districts and especially in the Northeast and Western regions (NCES, 2016).

Bilingual Education. Bilingual education is the other main instructional approach and is used to capitalize on students' native language as a resource for learning content through language arts instruction. Two of the main forms of bilingual education for ELs are dual-language or dual-immersion programs, the main difference being that the latter includes non-English learners trying to learn a second language. The longer-term

programs include as a primary goal the development of language and literacy in the target language (National Academies of Sciences, Engineering, and Medicine, 2017).

The bilingual approach has waxed and waned in popularity and legality depending on the decade and state (Gándara et al., 2010). Researchers describe bilingual programs as being more effective and demonstrating better long-term outcomes for ELs especially in later grades (Collier & Thomas, 2004; Steele et al., 2017; Valentino & Reardon, 2015). Most states do allow bilingual programs for ELs, and more states such as Arizona, Massachusetts, and California, have recently eradicated or flexed restrictive legislation thereby permitting ELs greater opportunity to participate. More research is needed to understand where and what types of programs are being instituted to ensure equitable access and opportunities for all ELs.

Access to Core Content. In addition to language instruction, the other major tenet of EL education is access to core content (Lhamon & Gupta, 2015). This can be done in a variety of ways in both English language instructional approaches; however, ELs face obstacles compounded by limited time and resources. One common method for providing ELs core instruction is sheltered English instruction. This is an approach to teaching English using English but done in a separate classroom with only students learning English (Rossell, 2005). Sheltered instruction provides ELs the opportunity to integrate English language acquisition with access to the needed core curriculum and courses for graduation (Markos & Himmel, 2016). The Sheltered Instruction Observation Protocol (SIOP) is one of the most common models of this type of instruction and some research supports its effectiveness (Echevarria & Short, 2010).

Researchers have examined two important issues tied to access to core content caused by when and how an EL is classified and reclassified (Callahan & Shifrer, 2016), and how they are tracked in coursework due to their EL status (Umansky, 2016).

Researchers found issues of equity that needed to be addressed, such as EL classification creating barriers to academic course-taking or delaying progress through school (Callahan et al., 2009) and ELs' exclusion from core academic content classes (Callahan & Shifrer, 2016). Many districts across the nation reported providing ELs access to core content instruction (NCES, 2016), but whether it is enough and effective for them is uncertain.

Additional Programs and Services. ELs have all different backgrounds and levels of linguistic and academic competency that are fulfilled by many different types of programs and services. The federal government has provided detailed guidance to ensure ELs have meaningful access to all curricular and extracurricular programs (Lhamon & Gupta, 2015). In the following section, I review the literature regarding some of the specialized programs and services that provide access for newly arrived immigrants (newcomers), for the use of technology to provide programs and services, and for the use of the native language and tutoring to support ELs. I will review these to define and describe their purpose.

Newcomer Programs. Newcomer programs are a specialized academic environment that serves newly arrived, immigrant English language learners for a limited period of time (Short & Boyson, 2012). These students face additional challenges as they are adapting to a new language, culture, and academic and social systems. Programs are varied in terms of models, length of time, and services provided. Short and Boyson

(2012) found the most common models were programs within a school (60%), separate site (24%), and whole school (16%). Most programs were full day (90%) and lasted for more than a year (64%); half-day programs accounted for (8%). The community types where programs existed were 52% urban, 33% suburban, and 14% rural.

Educational Technology. Federal and state funding is used for technology, and with the amount of hardware and software available for EL education, it is critical to understand how technologies are being integrated into programs and services. Technology has become integral in EL education and is used for teaching the English language and core content instruction, among other purposes (Hockly & Dudeney, 2018). One example is the use of blended learning, an approach where students spend part of their time with a live instructor and another segment of time using online programs that are adaptive for self-guided practice and learning. Ahmadi (2018) described technology for language acquisition as both prevalent and effective when used appropriately and stated that "Developing learners' knowledge and skills pertinent to computer technology provides equity of opportunity, regardless of learners' background" (p.117). Additionally, Ahmadi (2018) describes using technology to help meet ELs' needs and make them more effective as learners. Technological tools can create an effective learning environment that is cooperative, communicative, and student-centered and provides access to more authentic sources of language. Researchers found that technology is being used for providing English language instruction and improving language skills such as reading and writing (Ybarra & Green, 2003) as well as for content instruction (Ahmadi, 2018).

Native Language Support. Districts use ELs' native language to support them in a variety of ways. Beyond supporting students' native language learning, these types of

supports may benefit students academically, such as to improve student access to instruction and academic skills from a paraprofessional who speaks their language. They may also benefit ELs socially as they can help students and their families integrate into the school system (e.g., providing them with communications so they can participate in extracurriculars). Additionally, the government has mandated districts provide communications and specific supports for parents to understand the available programs and services (Lhamon & Gupta, 2015).

Researchers recommend utilizing the native language as a resource to a) assist families with lower English language proficiency and literacy skills, b) show respect and value students' primary language and home culture as resources for their education (Calderón et al., 2011), c) develop ELs' identity as an individual with a cultural heritage, d) provide a pedagogical tool for greater access to content and cooperative learning (Lucas & Katz, 1994), and e) to promote academic development by supporting students in an English instructional environment (Goldenberg, 2013). They also reported that native language is used to communicate with students and families about academic opportunities and administrative aspects of their education through written resources or interpretation services (NCES, 2016) which align with federal mandates to support parents (USDOE, 2015).

Other Support Services. Many support services and programs such as summer school, remediation classes, credit recovery, career and technical training, tutoring, and mentoring programs are available for ELs in the United States (NCES, 2016). In the NCES (2016) survey, districts reported that ELs participated in tutoring at a higher rate than all other student groups that they surveyed. Other researchers (Cohen et al., 1982)

found that tutoring had a positive impact as an intervention and as a strategy for improving educational outcomes such as test scores and attitudes towards the subject matter. ELs who are tutored in certain programs can also improve their reading (Slavin & Cheung, 2005) and literacy skills (Calderón et al., 2011). Tutoring is a widespread service and has demonstrable benefits, and additional research is needed to explore the correlation with other programs and supports.

The Role of Contextual Factors in Shaping EL Education

After explaining the background of EL education and its major components, I will now review current research on how EL programs and services in secondary education are associated with and/or influenced by their educational and social context. Researchers have found relationships between contextual factors such as community type and programs (Short & Boyson, 2012; De Cohen and Clewell, 2007), as well as how state or local policies affect EL programs (Portes & Rumbaut, 2006; Umansky, et al., 2018, López et al., 2015, Sampson, 2019). Several other researchers have studied the effects of social and contextual factors of schools and students on ELs' educational outcomes (Callahan, 2009; Hersi & Watkinson, 2012; Menken, 2013; Saunders et al., 2006; Steele et al., 2017; Suárez-Orozco et al., 2010; Tarasawa, 2013).

Portes and Rumbaut (2006) investigated the assimilation of immigrants into a new country and the societal factors that influenced their reception and outcomes in the host country. Some of the factors Portes and Rumbaut described as contributing to a context of reception are policies related to immigration, the positive or negative reception of the host community, and the attributes or characteristics of the immigrant group. Immigration policies determine the types of jobs available, the degree to which their education and

professional experience are valued, and where immigrants are likely to enter the country and reside.

Similar to the designation of "immigrant" in our country, ELs are identified, labeled, and affected by specific legislation and policy that dictates the types of services and programs available to them. According to Luthra et al. (2017), the context of reception or "modes of incorporation can both directly produce positive, negative, or even neutral effects" (pg. 2). Likewise, ELs in secondary education deal with policy, contextual factors, and a receiving community in schools that may positively, negatively, or neutrally affect their educational setting and outcomes. This framework provides a perspective for understanding how ELs are received and how contextual factors shape their education.

The Influence of Enrollment Size, EL Density, and Community Type. Some elements of the educational context I focused on that may be associated with secondary EL programs and services were district enrollment size, EL density, and community type. The three elements did have overlapping influence but varied in the impact and the reason for the impact on programs and services. Some of the relationships between these factors and EL services and programs include the a) types of EL program and resources, b) availability of resources for ELs, and c) number of trained and certified staff to teach ELs (Kreck, 2014; López et al., 2015; NCES, 2016; Tarasawa, 2013).

EL density was a factor that Ruiz-de-Velasco and Fix (2000) correlated with the resources available to ELs. They described ELs being packed into high-poverty schools with limited programs and services and poorly trained staff who were not prepared to meet their needs. This was similar to the findings of Tarasawa (2013) in urban schools,

which often have a larger enrollment size and dense EL enrollment. Ruiz-de-Velasco and Fix (2000) explained that the lack of resources was due to the fact that local officials were primarily sending resources to elementary schools while Tarasawa (2013) attributed the deficiency in teachers and programs to the competition among schools and districts. On the other hand, more bilingual programs (López et al., 2015) and newcomer programs (Short & Boyson, 2012) were found in states with higher EL concentrations. One possible explanation for the wide variation in services is the funding available as researchers (Horsford & Sampson, 2013) have found disparities in the funding across the country.

One of the factors associated with services and programs available to ELs is the community type (i.e., urban, suburban, town, rural). Kreck (2014) and NCES (2016), focused on describing the differences for EL services and programs with community type, in this case, urban and rural. In urban populations, EL students were more likely to have a formal newcomer program and English Language instruction in scheduled class periods or push-in/pull-out services (NCES, 2016). Rural and urban populations struggled with having enough resources as new waves of immigrants created a changing educational landscape (Portes & Rumbaut, 2006, Ruiz-de-Velasco & Fix, 2000) that they were unprepared to handle. On the other hand, some smaller districts were able to pivot more quickly while larger districts were slower to change to meet student needs (Kreck, 2014).

Patterns in How Services are Clustered for EL Students

The U.S. DOE (2018) has mandated ELs have access to core content and develop the academic English language to be successful in school, but state and local education

agencies decide what combinations of programs and services to deliver. Any entity receiving federal funding must comply with those requirements or risk losing valuable financial resources. Therefore, compliance becomes a top priority for serving ELs, and many have common programs, but the overall experience of ELs in school is not well known. Research is needed to determine the patterns within the services for ELs and how that differs by different contexts. The following section describes what is known about the contexts and patterns within those contexts that provide the experience of ELs.

An EL does not experience programs and services as disparate pieces but as an ecosystem of experience, and understanding that experience clarifies the impact of state and local policies and actions. One framework for understanding ELs' educational context is the comprehensive state EL policy framework developed by Umansky and Porter (2020). This framework is based on three principles of a) understanding student needs and assets, b) providing accessible, high-quality instruction, and c) establishing system conditions. Each of these principles incorporates key areas of policy and issues that are addressed through the actions of local districts and schools with varying levels of integration. Some states have already created comprehensive policy approaches that integrate these principles and key areas, such as the California English Learner Roadmap (2017) and the New York Blueprint for English Language Learner/Multilingual Learners Success (2014), that provide greater clarity to the overall experience and opportunities that ELs should have. The comprehensiveness of states' policies and the resulting patterns among programs and services is one area in need of additional research. Additionally, the focus of each state and its policies, whether on equity and being assetoriented, native language development and culturally responsive instruction, or

minimizing the time to English fluency, needs to be investigated to understand how those approaches and frameworks establish the various contexts of EL education.

Combinations of Secondary EL Programs and Services. Research on the combinations of programs and services for secondary ELs is minimal with what is known about the entire EL population. One area with research is combinations of instructional programs. While a minority of states have English-only policies, the majority allow for both English and other languages to be used for instruction. Barrow and Markman-Pithers (2016) reported that many types of Language Instruction Education Programs (LIEPs) are in use for ELs in all grades K–12. Those researchers identified 43 states that had at least one local education agency with an English and another language program and eight others that reported English-only programs. To continue exploring this research, an investigation is needed to identify how an area such as instructional quality integrates with other EL needs such as help with developing academic or technological skills.

Previous Report on Secondary EL Programs and Services

The National Center for Education Statistics (NCES) administered the first national survey of its kind, *Programs and Services for High School English Learners*, in 2015–2016 to understand how districts were addressing secondary ELs' needs generally and subgroups of the population specifically (i.e., newcomers, ELs 18 and older). This survey gathered information from a nationally representative sample of 1,700 school districts with an 89% response rate about specific services and programs offered to ELs in grades 9–12 as reported by a district-level representative. Lewis and Gray (2016) reported basic descriptive findings from the 16-item survey, including "national estimates

and bivariate relationships between the analysis variables and questionnaire variables" (p. B-6) about programs and services for ELs and district demographics such as region, enrollment size, community type (urban, rural, etc.), and EL enrollment.

The researchers' (Lewis & Gray, 2016) report explained in the rationale that the survey had the "first nationally-representative data" on services and programs for ELs at the secondary level in several key areas including native language use, instructional methods, technology, and programs for newcomers and ELs ages 18 to 21. The researchers presented their findings in a summarized bullet point list and tables with descriptive information. They did not synthesize their findings with other research nor delve into a discussion on the implications of their findings.

The researchers focused on reporting the findings as they related to the entire sample population such as 62% of districts with high school grades enrolled ELs, 58% of districts with ELs used online or computer-based programs, and 78% of districts that provided content instruction in students' native language used the most common native language for content instruction. Lewis and Gray (2016) provided tables with the percentages of districts with specific EL services and programs categorized by district enrollment size, community type, and region. They advised that the report was intended to describe the range of data from the survey and they did so through the overarching findings and numerous tables created from all survey items.

Although the investigators covered the breadth of the information available, they did not investigate "complex interactions and relationships" between survey items or district demographic characteristics (Lewis & Gray, 2016, p. 1). For example, they reported percentages for item responses but did not examine statistically significant

relationships, nor the similarities or differences between the services and programs provided and their contextual factors. Additionally, they did not use district EL enrollment size (EL enrollment) as a factor to analyze any of the item responses. They analyzed details of the survey data item by item but did not investigate combinations of programs and services.

In this dissertation, I expand the previous investigation by NCES (2016) and Lewis and Gray (2016) by first, analyzing statistically the relationships between contextual factors and programs and services for secondary ELs, and second, identifying the combinations of programs and services most prevalent in districts with a high concentration of ELs. Additionally, where the prior research listed the results in either bullet points or tables I described and analyzed the survey findings and the implications in the context of prior research literature. The two additional statistical analyses I conducted examined the interactions and relationships that were not a part of the previous research. I did this by using additional statistical methods and by coding new variables to look at critical components of services and programs for ELs. My purpose was to focus the research to find additional details to enhance the visibility of available programs and services, as well as relation to each other and the demographics of the participating districts.

Research Rationale and Questions

Services and programs for ELs, and the educational contexts they create, vary throughout the United States, but researchers have not conducted a study of secondary ELs' educational contexts on a national level. Previous studies on programs for ELs have focused on structural aspects (Friedlander, 1991; Short & Boyson, 2012), and described

aspects of a single setting such as rural or urban districts (Kreck, 2014; Tarasawa, 2013). Additionally, researchers have looked at related contextual factors such as EL resources (Jiménez-Castellanos & Garcia, 2017) and academic trajectories (Suárez-Orozco et al., 2010).

My purpose in this dissertation is to inform policymakers, legislators, and educators to assist their efforts to identify and understand the geographic and demographic factors that could influence programs and services for ELs. Stakeholders who serve ELs could then have additional information to stimulate policy and legislation to fulfill EL needs and ensure ELs can participate fully as equal participants in the U.S. education system, thus increasing equity and opportunity for EL students. The research questions I investigated were:

- 1. What is the relation between contextual factors such as enrollment size, region, community type (i.e., urban, rural), and EL enrollment, and the availability and types of services offered to secondary EL students?
- 2. Among districts that have a critical mass of ELs (more than 100), what are the most frequent combinations of core EL programs/services?

CHAPTER II

METHODS

In this dissertation, I explore patterns and relationships in EL programs and services for secondary EL students, drawing on nationally-representative extant data from National Center for Education Statistics survey (NCES, 2016) in the 2015–2016 school year. In my first research question (RQ1) —What is the relation between contextual factors such as enrollment size, region, community type (i.e., urban, rural), and EL enrollment, and the availability and types of services offered to secondary EL students? —I investigated the relationships between contextual factors and the services and programs available to secondary ELs through a descriptive exploratory study. To do so, I used chi-square tests to explore the relation of program and services variables to district demographic factors. For the second research question (RQ2)—Among districts that have a critical mass of ELs (more than 100), what are the most frequent combinations of core EL programs/services? —I developed or used four variables representing core aspects of EL programs and services, and then concatenated the variables and computed the frequencies and percentages of the resulting combinations. I did this for the sample of districts with more than 100 ELs (high EL districts).

Setting and Participants

The original sampling frame for the *Programs and services for high school*English learners in public school districts: 2015–16 survey (NCES, 2016) included

11,405 public school districts serving ELs in secondary education (grades 9–12) located within the 50 states and the District of Columbia. The representativeness of the sample was increased by stratifying the surveyed districts by enrollment size, percent of English

learners, and then by community type and region. The researchers sent the survey to approximately 1,700 public school districts and had an 89% response rate that resulted in an n = 1,480 districts. Respondents had the option to respond online (67%), on paper (28%), or via telephone (5%).

For this study, I analyzed the data from districts that reported serving ELs and that provided information regarding programs and services, which narrowed the total district observations to N=1,161. Table 1 shows the frequencies for districts, organized by contextual factors.

Table 1Contextual Factors by District Frequency and Percentile

Contextual Factor	Categories	Frequency $(N = 1,161)$	%
	Fewer than 2,000	244	21
Enrollment Size	2,000-4,999	382	33
(number of students)	5000+	535	46
	City	214	18
	Suburban	445	38
Community Type	Town	238	21
Community Type	Rural	264	23
	Northeast	234	20
	Southeast	266	23
Region	Central	289	25
	West	372	32
EL Enrollment	1 to 10	398	34
(number of English	11 to 100	417	36
learners)	101 to 22,000	346	30

Data Collection

The data were collected via a 16-item survey *Programs and services for high*school English learners administered using the Fast Response Survey System by NCES

in the fall of 2015 (the survey is provided in Appendix A). The survey was mailed to district superintendents with the instructions for the district-level employee most "knowledgeable about programs and services for English learners at the high school level" to respond. Respondents verified the accuracy of district demographic information to confirm the accuracy of the national databases, read instructions and definitions of terms used in the questionnaire about types of programs, instruction, and services and responded accordingly. Several survey items were binary and had check boxes for yes/no responses, or for checking all that apply; four items (10, 13, 14, and 16) used itemspecific scales. The survey was not divided into sections but did cover topics and questions such as those listed in Table 2.

District Contextual Factors

I used data on four main district contextual factors—enrollment size, community type, region, and EL enrollment. I provided the factor details in Table 3 per their categorization in the technical report. I kept the original categorization and was unable to modify these variables as the exact number of students and ELs, district names, locations, and states were not collected or shared publicly.

Program and Service Variables

I analyzed the following seven program and service variables for RQ1: (a)

English language instruction, (b) access to core content, (c) bilingual education, (d)

newcomer programs, (e) technology use, (f) native language support, and (g) tutoring services.

Table 2Program and Service Variables and Item Information for RQ1

Variable and Rationale	Items (# from Survey)	Coding
	3C - Does your district provide English as a Second Language (ESL) instruction in scheduled class periods for English learners in high school?	
English Language Instruction – the main	3D - Does your district provide English as a Second Language (ESL) push-in or pull-out instruction for English learners in high school?	L (Low) – one Yes
component of EL education that develops students' English language proficiency and is necessary	3G - Does your district provide sheltered English/content instruction for English learners in high school?	M (Mid) – two Yes's H (High) – three or more Yes's
to fulfill federal legislation and mandates for access to educational programs and services	9A - Do high school English learners work with online or computer-based programs in English language acquisition to address any of their needs as English learners in your district?	N/A (None) – zero Yes's
	9B - Do high school English learners work with online or computer-based programs in English language and literacy instruction to address any of their needs as English learners in your district?	
	3A - Does the district provide Bilingual instruction for English Learners in one or more content classes?	
Access to Core Content –	3B - Does the district provide a two-way bilingual/dual language program for English learner and English proficient students in one or more content classes?	L (Low) – one Yes
another key tenet in EL education as students must have core content classes to graduate and be prepared for	3G - Does your district provide sheltered English/content instruction for English learners in high school?	M (Mid) – two Yes's H (High) – three or more Yes's
other educational opportunities	9C - Do high school English learners work with online or computer-based programs in content area instruction to address any of their needs as English learners in your district?	N/A (None) – zero Yes's
	9D - Do high school English learners work with online or computer-based programs in native language support in content area instruction to address any of their needs as English learners in your district?	

Table 2 (continued)

Variable and Rationale	Items (# from Survey)	Coding
Bilingual Education – the main approach to providing support for learning content in English and another language; can be either a transition program where the native language is used initially and then moved to all-English or a two-way bilingual which provides instruction in English and another language and has the goal of becoming bilingual and biliterate	3A - Does the district provide Bilingual instruction for English Learners in one or more content classes? 3B - Does the district provide a two-way bilingual/dual language program for English learner and English proficient students in one or more content classes?	Y – if yes for either item N – if no for both items
Newcomer Programs – a support for recent immigrants; critical to serving ELs who have immigrated and have additional needs to be successful within a new education system	4 - Does the district have a newcomer program for English Learners in high school?	1-Yes 2-No
Technology Use – Prevalent and effective for language acquisition and accessing core content	9 - In your district, do high school English learners work with online or computer-based programs in the following areas to address any of their needs as English learners? A. English language acquisition B. English language and literacy instruction C. Content area instruction D. Native language support in content area instruction E. Organizational and study skills F. Other purpose	L (Low) – one Yes M (Mid) – two Yes's H (High) – three or more Yes's N/A (None) – zero Yes's
Tutoring Services – supports EL access to core curriculum and English language	10I - Approximately how many high school English learners participate in tutoring in your district?	-8 = Inapplicable 1 = None 2 = Few 3 = Some 4 = Most 5 = Don't know

Table 2 (continued)

Variable and Rationale	Items (# from Survey)	Coding
	3F – Does the district instructional support by a paraprofessional who speaks the student's native language?	
	9D – Do high school English learners work with online or computer-based programs in native language support in content area instruction to address any of their needs as English learners in your district?	
Native Language Support – a resource for supporting access to instruction, communication, and other needed services	12 – Which of the following materials and services does your district have available in native languages for high school English learners and their parents/guardians? A. Written information about high school academic programs in your district B. Written information about high school career and technical education programs in your district C. Translation services upon request for printed materials D. Interpreters upon request for school meetings or calls	S (Single) – one Yes M (Multiple) – two or more Yes's N/A (None) – zero Yes's
	*Item 12 – more than one yes to any part of the question resulted as only one yes in the count of supports	

Five of these variables incorporated data from more than one questionnaire item—English language instruction, access to core content, bilingual education, technology use, and native language support—while newcomer programs and tutoring services only drew from a single item. I used categorical levels found in the *coding* column of Table 2 to differentiate among districts with more or less support. These variables were representative of key components of EL education and were included based upon their fulfillment of the core rights of EL students to English language development and accessible core content.

Table 3Contextual Variables and Categorizations

Contextual Variable	Code and Categorization
	1 = Fewer than 2,000
Enrollment Size	2 = 2,000–4,999
	3 = 5,000 or more
	1 = City—Territory inside an urbanized area and inside a principal city
Community Type	2 = Suburban—Territory outside a principal city and inside an urbanized area
Community Type	3 = Town—Territory inside an urban cluster
	4 = Rural—Territory outside an urbanized area and outside an urban cluster
	1 = Northeast—Connecticut, Delaware, District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont
D	2 = Southeast—Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia
Region	3 = Central—Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin
	4 = West—Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oklahoma, Oregon, Texas, Utah, Washington, and Wyoming
	1 = 1 to 10 English learners
EL Enrollment	2 = 11 to 100 English learners
	3 = 101 or more English learners

Note. The researchers used the same regional categorizations as the Bureau of Economic

Analysis of the U.S. Department of Commerce.

Core EL Education Variables

To address RQ2, which asks—Among districts that have a critical mass of ELs (more than 100), what are the most frequent combinations of core EL programs/services? —I narrowed the set of seven variables down to four key components of secondary EL education to analyze the combinations of programs and services—English language instruction, content instruction, technology use, and native language programs and services—available in districts with more than 100 secondary ELs (hereafter called high EL districts). I include a breakdown of contextual factors for the high EL districts in Table 4. My selection of each of the four core components as a variable was based on the empirical and theoretical foundation for each being critical to overall EL education and preparation for graduation and post-secondary opportunities. Because the focus of this particular research question was the *combination* of a variety of programs and services, rather than a description of each program or service offered (the focus of RQ1), the use of fewer variables (four instead of seven) also facilitated my ability to identify patterns by metaphorically "stepping back" to gain a broader perspective on the topic. My categorization enabled me to differentiate between programs and services among the many available without having too many combinations, thereby enabling me to cluster and identify patterns. I will explain in the following paragraphs the purpose and methods for creating and categorizing each variable.

Table 4District Frequency and Percentile of Contextual Factors for High EL Districts

Contextual Factor	Categories	Frequency $(N = 346)$	%
Enrollment Size (number of students)	< 2,000	3	1
	2,000-4,999	29	8
	>4,999	314	91
Community Type	City	144	42
	Suburban	164	47
	Town	19	5
	Rural	19	5
Region	Northeast	40	12
	Southeast	82	24
	Central	57	16
	West	167	48

Core Variable 1: English Language Instruction. ESSA legislation for ELs mandates that students receive English language instruction (Every Student Succeeds Act, 2015). I used the data from survey items 3c (ESL in scheduled periods) and 3d (push-in [ESL instructor works with students within an ongoing content class] or pull-out [students move out of an ongoing class for a session] ESL instruction) to create this variable and categorize districts as ESL*M if both models were present, as ESL*C if only ESL in scheduled class periods was reported, ESL*P if only ESL push-in or pull-out instruction was offered, or N/A if neither model was reported. I differentiated among the models this way because states have legislation that requires English language instructional programs to be identified similarly. Additionally, the experience of the teachers operating in each model differs as well as the experience for the student who participates (McClure & Cahnmann-Taylor, 2010). For example, the scheduled class

period segregates students and provides a completely different instructional and learning environment than the push-in which requires two teachers to collaborate and coteach.

Core Variable 2: Sheltered Content Instruction. According to federal law, districts must also provide ELs with equitable access to grade-appropriate academic content. A predominant model that is designed to provide that access is sheltered English/content instruction. ESL and sheltered English instruction have different intended purposes and outcomes (see rationale in Table 2). Thus, it was important to me to separate them, as doing so allowed me to identify districts that were serving ELs through various forms of instruction. Per NCES (2016), sheltered content instruction "refers to regular grade-level instruction in core content areas that is provided in English through instructional strategies that make the academic content accessible to English learner students while also assisting them to acquire academic English" (p. 2). The survey asked in question 3g whether or not the district provides sheltered instruction. The alternative is the absence of sheltered classes. While this could be interpreted in different ways by different districts—a limitation of this study—it is likely that most districts reporting no sheltered instruction place EL students into general education classes. It is further unknown whether the teachers in these non-sheltered classes have the training to work with ELs in their classes, although it is likely that few have specialized training as the proportion of general education teachers with EL-specific training is low (Snyder et al., 2019). I coded the variable *sheltered content instruction* as a dichotomous variable (Yes/No) due to the data being reported similarly.

Core Variable 3: Technology Use. The U.S. continues to push the integration and accessibility of technology in secondary education through legislation such as ESSA

(Crossland et al., 2018). The impact of accessibility—or the lack thereof—became even more visible with the COVID-19 pandemic and the expanded need for virtual instruction in 2020–2021. For that reason, I have included technology use as a variable to indicate the availability of technology to ELs for supporting their academic progress. I maintained the same coding for this variable as I used for RQ1 (see Table 2), with districts that had three or more programs coded as *high*, two as *medium*, one as *low*, and none as *N/A* to have the same level of differentiation between districts' levels of use. Examples of technology use included computer programs for English language acquisition, core content instruction, and organization and study skills.

Core Variable 4: Native Language Programs and Services. One element of culturally responsive teaching is acknowledging and utilizing students' culture, including their language, as part of their educational experience (Ladson-Billings, 1995). ELs, by definition, come to school with a different language and need support to learn English and access content. Districts use native language programs and services as one method for being culturally responsive and inclusive of students and building on students' identity and academic knowledge and skills. The degree to which native language support is offered to students may reflect not only the community demographics and density of the EL enrollment, but also different community emphases and cultural norms. I developed this variable to identify whether districts (a) provided core content instruction in students' native language (i.e., had a bilingual program in place), and/or (b) provided additional native language support(s) to students and families. These native language supports included services such as instructional support by a paraprofessional, technology programs, and written information about academic programs and services. All districts in

the sample reported either providing bilingual education and/or other native language supports. This is not surprising since, by federal law, parents must be provided important school-related information in a language that they understand (USDOE, 2015). Thus, I coded this variable to reflect the increasing use of native language: 1 – single native language support, 2 – multiple native language supports, or 3 – bilingual education and native language support. I present in Table 5 basic descriptive statistics on these four core variables of EL education among the 346 high EL districts.

Table 5Disaggregated Core EL Education Variables for High EL Districts

Core EL Education Variable	Variable Categories	% and Count of High EL Districts (<i>N</i> =346)	% and Count of All Districts (<i>N</i> =1,161)
	Scheduled Classes Only	40% (139)	30% (342)
English Language	Push-in and/or Pull-out Only	3% (9)	15% (175)
Instruction	Scheduled Classes and push-in and/or pull-out	56% (195)	47% (546)
	N/A	1% (3)	8% (98)
Sheltered Content	Yes	86% (296)	56% (655)
Instruction	No	14% (50)	44% (506)
	N/A	12% (40)	21% (243)
m 1 1 7 1	Low	16% (54)	13% (156)
Technology Level	Medium	23% (80)	24% (280)
	High	50% (172)	42% (482)
	Single Program or Service	28% (95)	45% (517)
Native Language	Multiple Programs or Services	52% (181)	42% (491)
Support Programs and Services	Bilingual Education and Programs or Services	20% (70)	11% (125)
	N/A	0% (0)	2% (28)

Data Analysis

Due to the categorical nature of the variables, the analysis for RQ1—What is the relation between contextual factors such as enrollment size, region, community type (i.e., urban, rural), and EL enrollment, and the availability and types of services offered to secondary EL students? —was conducted using Pearson chi-square tests. Additionally, I analyzed patterns between region, community type, and enrollment within the selected variables using frequencies and percentages. I used chi-square analyses to investigate observed versus expected occurrences, determine if significant relationships existed, and evaluate the strength of the associations between the four contextual factors and the identified programs and services variables. I analyzed each variable to determine the chisquare value, the p-value - or two-tailed significance value, the adjusted residual for each cell, and Cramer's V to determine the strength of the association. I selected Cramer's V to look at magnitude because all tables were larger than 2x2 (Kotrlik et al., 2011). I examined one contextual factor with one program and service variable at a time to improve the reliability of the results. The values from the tests for the program and service variables provided data to analyze potential relationships with contextual factors and to determine if the null hypothesis was void. A null hypothesis would indicate that no relationship existed between a contextual factor and the programs and services variables. I set the significance level at p < .05 a priori.

The first step to complete the analysis was to remove all cases of districts that did not have any ELs from the dataset, as I wanted to compare services for only those that served ELs. Then, I ran tests for each contextual factor and service variable so I could calculate the chi-square value, the *p* value, and the adjusted residual for each cell. Next, I

analyzed the values from the conducted tests for each program and service variable to determine whether relationships with contextual factors existed and if the null hypothesis was void. Additionally, I looked at the reliability of the results to ensure the chi-square assumptions of (a) at least 80% of cells with a count greater than five, and (b) no expected counts less than two for all factors (McHugh, 2013) were met.

One example of my analysis was to investigate the variation in the presence of newcomer programs by contextual factors. Item 4 of the questionnaire contains the data related to this variable (see Appendix A). I ran four chi-square tests for this item, one for each contextual factor. I then used the results to determine if there were significant contextual differences based on the p values. Next, I used the adjusted residual—a statistic of significance that indicates the likelihood that variation is or is not random—to understand the direction of effects and the expected and actual counts in order to analyze the magnitude for specific cells. Specifically, residual values that are greater than 1.96 in absolute value indicate a significant relationship between the program/service and the contextual factor. Negative residual values indicate that the program/service is less prevalent than expected for the contextual factor while positive residual values indicate that the program/service is more prevalent than expected. Finally, I calculated the Cramer's V to determine the magnitude of the associated relationship, if any, and whether any specific contextual factor has stronger associations with program and service variables (Kotrlik et al., 2011).

An example would be the adjusted residual for newcomer programs and small districts, which was -4.5. This is above the significance level of -1.96 (Sharpe, 2015) and indicates that small districts were significantly less likely to have a newcomer program

than would be expected with a proportionate distribution. Finally, I used the significant relationships to identify and summarize the interaction between newcomer programs and contextual factors so I could state that newcomer programs did have a relationship with enrollment size, community type, region, and EL enrollment, which was described as being less likely in small, medium, rural, low and medium EL districts and more likely in large, city, western, and high EL districts. The Cramer's *V* indicated that enrollment size (.221), community (.225), and EL enrollment (.359) had a moderate association (between .20 and .40) with newcomer programs, while region (.140) had a weak association (between .10 and .20) per the interpretation guidance of Kotrlik et al. (2011, p. 138). This analysis allowed me to describe and understand how EL service variables were related to district contextual factors.

I analyzed RQ2—Among districts that have a critical mass of ELs (more than 100), what are the most frequent combinations of core EL programs/services? —by concatenating the four core EL instructional variables described above and then calculating the frequencies and percentages of the combinations for high EL districts. I analyzed the combinations from most frequent to least overall, then by each of the core EL education variables. Additionally, I examined the combinations and factors for high EL districts by the three district contextual factors of enrollment size, community type, and region. I used this method of analysis so I could report the range of combinations of key EL instructional services in high EL districts as well as what combinations are most and least frequent.

An additional component of the analysis was the categorization of districts based on set criteria for the core EL programs and services they provided. The first category,

comprehensive service districts (CSDs), is influenced by the work of Umansky and Porter (2020) who identified a multi-faceted approach to EL policy for providing a holistic experience for ELs. Therefore, the criteria for a CSD include a robust offering of programs and services that fulfill core aspects of EL education to provide access to English language instruction, core content, and additional critical supports for full participation within the education system. This means they include one or more forms of English language instruction (push-in/pull-out and scheduled class periods), sheltered content instruction, bilingual education and/or multiple forms of native language support, and high or medium technology use. The second category I use is *compliance-only* service districts (COSDs); this refers to districts that met all the necessary service needs per U.S. DOE (2015) but without any additional services to extend opportunities or potentially meet other EL needs. COSDs provide one or more forms of English language instruction, multiple forms of native language support, and may have sheltered instruction or bilingual education to provide access to core content. The final categorization was restrictive service districts (RSDs) and was developed from the description of restrictive policies described by Sampson (2019) as creating barriers for ELs. RSDs lack elements that could support critical components of EL education such as no sheltered content instruction or English language instruction and have reduced availability of services such as a single form of English language instruction and little native language support. A summary of the categorizations and criteria is found in Table 6.

Table 6Categorization and Criteria of Programs and Services in High EL Districts

Categorization		Criteria
Comprehensive Service Districts –	1.	English language instruction in multiple forms or a single form of English language instruction and bilingual instruction
provide robust programs and services designed to meet students' diverse	2.	Sheltered content instruction
needs (Umansky & Porter, 2020)	3.	Bilingual instruction and/or multiple native language supports
	4.	High or medium technology use
Categorization		Criteria
Compliance-only Service Districts –	1.	English language instruction in one or more forms
provide required programs and services to meet federal guidelines	2.	Some form of native language support
but without extension and additional opportunities (USDOE, 2015)	3.	Bilingual instruction or sheltered content to provide access to core content
	4.	Some form of technology use
Restrictive Service Districts – provide some core components but may be missing programs or services	1.	No English language instruction and/or no sheltered content instruction
that create barriers to English learners' full participation	2.	Reduced native language support
(Sampson, 2019)	3.	Some or no technology use

CHAPTER III

RESULTS

In this chapter, I report the results of my study, organized by research question. I report the relationships between EL programs/services and contextual factors that were found to reject the null hypothesis indicating that the EL support varies systematically by the contextual factor. I also share findings regarding the patterns and prevalence of combinations of EL programs/services in high-population EL districts.

Research Question 1: Contextual Factors and Programs and Services

I ran chi-square analyses to address RQ1 What is the relation between contextual factors such as enrollment size, region, community type (i.e., urban, rural), and EL enrollment, and the availability and types of services offered to secondary EL students? I presented the χ^2 and p values, and the degrees of freedom (df) for each dependent variable (e.g., newcomer programs, bilingual instruction) by independent variables (e.g., enrollment size, region) in Table 7. I examined the results after running the chi-square analyses to ensure assumptions were met; results were reliable as all cells had at least five responses, with cell counts ranging from five to 73 for all factors.

The chi-square analyses indicated statistically significant relations between all program and service variables and contextual factors, except for the relationship between community type and technology $\chi^2(9, N=1161)=10.57$, p=.306. In summary, the results from nearly all chi-square tests indicated that the null hypothesis must be rejected and that relationships existed between all program and service variables and all the demographic factors of enrollment size, community type, region, and EL enrollment except community type and technology level.

Table 7Chi-square Analysis Results

Dependent Variable	Independent Variable	p value	χ^2	df	Cramer's V
	Enrollment	.000**	56.609	2	.221
Newcomer	Community	.000**	58.872	3	.225
Programs	Region	.000**	22.871	3	.140
	EL Size	.000**	149.901	2	.359
	Enrollment	.000**	16.822	2	.120
Bilingual	Community	.000**	30.877	3	.163
Instruction	Region	.003**	14.284	3	.111
	EL	.000**	48.362	2	.204
	Enrollment	.000**	143.909	6	.249
English	Community	.000**	100.667	9	.170
Language Instruction	Region	.000**	48.045	9	.117
	EL	.000**	188.284	6	.285
	Enrollment	.000**	67.296	6	.170
Access to	Community	.000**	43.864	9	.112
Core Content	Region	.000**	45.389	9	.114
	EL	.000**	117.475	6	.225
	Enrollment	.000**	108.833	8	.216
	Community	.000**	90.624	12	.161
Tutoring	Region	.000**	103.656	12	.173
	EL	.000**	197.810	8	.292

Table 7 (continued)

Dependent Variable	Independent Variable	p value	χ²	df	Cramer's V
	Enrollment	.000**	81.649	4	.188
Native	Community	.000**	55.118	6	.154
Language Support	Region	.000**	24.848	6	.103
Support	EL	.000**	121.452	4	.229
	Enrollment	.000**	35.272	6	.123
Technology	Community	.306	10.57	9	.055
Use	Region	.000**	36.328	9	.102
	EL	.000**	40.494	6	.132

^{**} Indicates a *p* value less than .001 significance threshold. *EL* represents EL enrollment. *Enrollment* represents enrollment size of the district. *Community* represents community type.

The data from the adjusted residual calculations also indicated many relationships between the categories of contextual factors and program and service variables. For example, newcomer programs had significantly more than expected observations for large, city, western districts with a large (>100) EL enrollment and less than expected for small, medium, rural, southeastern districts, and districts with few (1–10) to moderate (11–100) EL enrollment. Bilingual education was observed significantly more than expected in large, urban districts and significantly less in medium, rural, and Southeastern districts. English language instruction, access to core instruction, and language support all had a similar pattern of greater than expected frequencies in large, city districts with high EL enrollment and the inverse for small, rural districts. Table 8 provides all residuals and designates those that were significant.

I evaluated the Cramer's *V* values using the criteria from Kotrlik et al. (2011) and found that most contextual factors had a weak (.10–.19) or moderate association (.20–.39) with program and service variables, except for technology use in the community, which had a negligible association (under .10) at .055. EL enrollment consistently had the strongest association across all variables, ranging from .132 for technology use to .359 for newcomer programs, while region more often than not had the weakest association, ranging from .102 with technology use to .173 with tutoring. Most Cramer's *V* values for enrollment size and community type were weak except with newcomer programs, and English language instruction and tutoring had a moderate association with enrollment size.

Research Question 2: Patterns in the Combinations of Core EL Services and Programs in High EL Districts

I concatenated the combinations of four core EL services in the 346 high EL districts and found 50 unique combinations (see Appendix B for all combinations). The combinations were disaggregated by core variables in Table 5. Half or more of the districts had multiple ESL models and high technology levels, and more than three quarters had access to sheltered instruction and provided other native language supports.

I first analyzed the eleven most frequently occurring combinations accounting for 60% of the total combinations/districts looking for patterns (see Table 9). One pattern I found was that all eleven of the most frequent combinations included sheltered instruction. Another couple of patterns I discovered were that only one of the most frequent combinations (combination 7) had *low technology use* while the four least frequent (combinations 8-11) had a *single native language support*.

Table 8Adjusted Residuals for Contextual Factors and Program and Service Variables

Dependent Variable	%	E	nrollment Siz	xe		Comm	unity Type	e		Reg	gion			EL Enrollm	ent
		Small	Medium	Large	Rural	Town	Suburb	City	NE	SE	С	W	Low	Medium	High
Newcomer Programs (Yes)	21	-4.5*	-4.0*	7.4*	-5.0*	-1.7	.3	6.8*	5	-3.1*	-1.4	4.5*	-9.0*	-2.1*	11.6*
Bilingual Instruction (Yes)	11	-1.5	-3.0*	4.1*	-2.6*	-1.6	8	5.4*	.7	-3.7*	1.1	1.8	-4.6*	-2.0*	6.8*
Technology (High Use)	42	-1.7	-1.5	2.7*	5	9	.3	1.1	8	4.3*	-3.0*	4	-4.2*	.6	3.7*
Technology (Medium Use)	24	6	7	1.2	4	.1	3	.8	8	-1.7	1.5	.8	.6	1	5
Technology (Low Use)	13	-1.6	.1	1.2	3	.6	.0	.9	5	1.1	6	.0	3	-1.1	1.4
Technology (N/A)	21	4.1*	2.5*	-5.6*	1.3	1.5	.0	-2.9*	2.2*	-4.4*	2.6*	3	4.7*	.3	-5.1*
Native Language Supports (Multiple)	50	-4.1*	-3.2*	6.3*	-2.0*	-1.4	-1.2	5.1*	-3.1*	-1.7	.6	3.7*	-8.6*	.4	8.5*
Native Language Support (Single)	47	1.9	3.9*	-5.2*	.3	1.6	2.0*	-4.5*	3.2*	1.7	-1.2	-3.2*	6.7*	.4	-7.4*
Native Language Support (N/A)	3	6.9*	-2.2*	-3.5*	5.6*	9	-2.4*	-2.1*	4	.2	2.1*	-1.7	6.0*	-2.5*	-3.6*
Access to Core (High)	12	-2.3*	-1.7	3.5*	-2.0*	-2.0*	.0	4.2*	1.1	9	-2.0*	1.8	-5.2*	.0	5.4*
Access to Core (Medium)	22	-1.1	-2.7*	3.5*	9	1.0	7	.9	-1.4	1.7	-1.4	.9	-2.6*	-1.1	3.8*
Access to Core (Low)	36	-1.8	1.2	.3	-1.0	3	1.2	2	-1.7	2	8	2.5*	3	.7	4

Table 8 (continued)

Dependent Variable	%	Е	nrollment Siz	ze		Comm	unity Type	e		Reg	gion		I	EL Enrollm	ent
		Small	Medium	Large	Rural	Town	Suburb	City	NE	SE	C	W	Low	Medium	High
Access to Core (N/A)	30	5.4*	3.1*	-7.3*	4.0*	1.1	7	-4.6*	2.5*	7	4.3*	-5.5*	7.9*	.4	-8.6*
English Language Instruction (High)	65	-8.6*	-3.0*	9.9*	-6.2*	-2.9*	2.7*	6.3*	1	2.3*	-4.0*	1.8	-11.1*	2.0*	9.4*
English Language Instruction (Medium)	20	2.7*	1.8	-3.8*	2.5*	.4	.1	-3.3*	1.9	-2.0*	.6	3	3.3*	.8	-4.2*
English Language Instruction (Low)	12	6.8*	1.8	-7.2*	3.1*	3.4*	-2.4*	-3.9*	4	.0	2.2*	-1.8	8.6*	-2.0*	-6.8*
English Language Instruction (N/A)	3	5.2*	1.1	-5.3*	5.6*	1.1	-3.4*	-2.9*	-3.1*	-1.7	5.5*	9	7.4*	-3.5*	-4.0*
Tutoring (Most)	31	.5	7	.2	7	.2	.3	.1	-4.3*	-1.3	-1.1	5.8*	-2.4*	1.1	1.3
Tutoring (Some)	39	-5.6*	-3.8*	8.1*	-5.9*	-2.3*	3.1*	4.9*	9	1.7	-3.6*	2.6*	-9.4*	1	9.8*
Tutoring (Few)	20	1.5	3.6*	-4.6*	4.5*	1.8	-2.4*	-3.7*	1.5	1.3	2.0*	-4.2*	6.5*	.1	-6.9*
Tutoring (none)	4	6.2*	1.4	-6.4*	4.0*	1.0	-1.2	-3.9*	5.0*	-3.2*	3.6*	-4.8*	8.3*	-1.9	-6.6*

Note. Enrollment size (# of students): small = <2,000, medium = 2000-4,999, and large = >4,999. Region: NE – Northeast, SE –

Southeast, C – Central, W – West. EL enrollment: Low = 1-10, medium = 11-100, high = 101-22,000. * Indicates a significant value of >1.96 or <-1.96.

I also looked for patterns of what was not available and found that the only categories of a variable not represented in the eleven highest frequency combinations were *push-in or pull-out ESL instruction*, *N/A* for English language instruction, and *N/A* for technology use.

I found among these variable categories that the highest frequency count for a combination with only push-in or pull-out instruction was three (combined with sheltered English/content instruction, medium technology use, and other language supports), and the highest count for a combination with no English language instruction was two (combined with sheltered English/content instruction, medium technology use, and other language supports).

The most frequent combination (combination 1— see Table 9) represented 61 districts—a little less than one in five districts and more than twice the representation of any other combination— and included *multiple ESL models* (push-in and pull-out ESL instruction and ESL in scheduled class periods), *sheltered instruction*, *high technology use*, and *multiple native language supports* with no bilingual education. This combination fits the criteria of *comprehensive service districts* (CSDs). The second most frequent combination only described 8% (27 districts) or about one in 14 districts and had English language instruction in scheduled class periods, sheltered content instruction, high technology use, and multiple native language supports. These districts were categorized as *compliance-only service districts* (COSDs) as they did not provide multiple forms of English language instruction or bilingual instruction but did provide programs and services in all core EL areas. The third most frequent combination represented 20 districts (6% of sample) and had multiple forms of English language instruction, sheltered content

instruction, bilingual instruction, and high technology use. These districts also met the criteria of being CSDs. After observing and analyzing the highest frequency combinations, I considered how other combinations of services could be categorized as CSDs, COSDs, and *restrictive service districts* (RSDs), as described next.

Comprehensive, Compliance-only, and Restrictive Service Districts. From the investigation of all combinations, I was able to categorize all districts as either CSDs, COSDs, or RSDs. Combinations 1, 3, 4, 6, 16, 19, and 38 (see Appendix B) represented about one-third of the high EL districts and were categorized as CSDs as they all provided English language instruction in one or more forms, provided access to sheltered instruction, had high or medium technology use, and either provided multiple native language supports or bilingual education and native language support. COSDs represented three out of five high EL districts with the following combinations: 2, 5, 7-15, 17-18, 20-21, 24-26, 28-33, 37, 40-42, 44, 47, and 49-50. I also found several combinations that fit the criteria of RSDs (see Appendix B) and are combinations 22, 23, 27, 34, 35, 36, 39, 43, 45, 46, and 48, and they represent 7%, or one out of 14, high EL districts. These districts had either one or no form of ESL instruction (either push-in/pull-out or scheduled class periods) or sheltered instruction and did not have bilingual education.

Several other interesting patterns appeared in the data that confirm findings from RQ1. Technology use in RSDs followed a similar pattern to the technology use overall of high EL districts and could indicate that a specific level of technology use is substantial in all types of districts regardless of the number of ELs or other services provided.

Table 9High-Frequency Combinations of Core EL Programs and Services for High EL Districts

Frequency Order	English Language Instruction	Content Instruction	Tech Use	Native Language Supports	Count (<i>n</i> =346)	%	Service Categorization
Combo 1	Multiple	Yes	High	Multiple	61	17.6	CSD
Combo 2	Class	Yes	High	Multiple	27	7.8	COSD
Combo 3	Multiple	Yes	High	Bilingual Ed	20	5.8	CSD
Frequency Order	English Language Instruction	Content Instruction	Tech Use	Native Language Supports	Count	%	Service Categorization
Combo 4	Multiple	Yes	Mid	Multiple	15	4.3	CSD
Combo 5	Class	Yes	Mid	Multiple	14	4.0	COSD
Combo 6	Class	Yes	High	Bilingual Ed	13	3.8	CSD
Combo 7	Multiple	Yes	Low	Multiple	12	3.5	COSD
Combo 8	Multiple	Yes	High	Single	12	3.5	COSD
Combo 9	Class	Yes	Mid	Single	11	3.2	COSD
Combo 10	Class	Yes	High	Single	11	3.2	COSD
Combo 11	Multiple	Yes	Mid	Single	11	3.2	COSD

Note. English language instruction: multiple = ESL was provided through both scheduled class periods and push-in and/or pull-out instruction; class = ESL in scheduled class periods. Content instruction: yes = sheltered content model was reported. Tech use: low = one program; mid = two programs; high = three or more programs. Language supports: multiple = more than one service/program; single = one service/program; bilingual ed = bilingual instruction and one or more native language supports. Service Categorization:

CSD – comprehensive service district; COSD – compliance-only service district; RSD – restrictive service district.

I also found that districts with combinations that had low or no reported use of technology did not have reduced or limited types of instruction. To this point, about two-thirds of districts with low or no technology use had multiple forms of English language instruction and sheltered instruction or multiple forms of English language instruction, sheltered instruction, and bilingual education.

I also analyzed combinations by contextual factors as seen in Table 10. I focused on the categories that had the highest percentage of combinations and included them in the table to be able to compare the top categories for different contextual factors and categories. I utilized this analysis so I could describe what core EL programs the majority of districts with specific contextual aspects have. For example, all districts with fewer than 2,000 students had English language instruction only in scheduled class periods, 67% had sheltered content instruction, 67% had multiple native language supports and 67% had no reported technology use for EL students. I found that multiple models of English language instruction were in most districts except those with fewer than 5,000 students, in towns, and in the western region. Another finding was that 80% or more of districts had access to sheltered/content instruction if they had more than 2,000 students, and were in city, suburban, or rural districts. All regions had similar access to sheltered instruction except the Southeast region. The Northeast region was the only one to provide bilingual education as a language support more often than not. Additionally, technology support was used at a high level in over half of large districts (5,000+), in city districts, in rural districts, and in the Southeast region. Two-thirds of small districts did not report using technology.

Another comparison I made was between the percentage of available programs and services for districts with high ELs and the national averages (see Table 5). I found that high EL districts have a much higher percentage of most programs and services available than the national average. For example, they were more than twice as likely to report offering sheltered content instruction and bilingual programs and close to a third more likely to report using other instructional programs like ESL in scheduled class periods. Technology use in high EL districts was also 10% more in the *high use* category and 10% lower in the *N/A* (no) *use* category. Communication in these districts was also more likely to be done in students' native languages. These findings demonstrate the more robust programs and services available in many high EL districts, including those previously discussed as being *comprehensive service districts*.

The results from RQ2 also provide evidence that EL enrollment has the strongest correlation of the contextual factors analyzed with access to programs and services. To illustrate, high EL rural districts were more likely than city, suburban, and town districts to offer multiple forms of English language instruction, multiple native language supports, and high levels of technology, and nearly as likely to have sheltered content instruction. A second illustration is the percentage of high EL mid-sized districts (2,000 – 4,999 students) that provided core instruction through sheltered classes was similar to large-sized districts (>5,000), and the mid-size districts were more likely to have multiple native language supports and higher levels of technology use. These examples demonstrate that the number of ELs is a powerful predictor of EL programs and services, perhaps more powerful than other contextual factors.

 Table 10

 Contextual Factors by Core EL Education Variables for High EL Districts

Contextual Factor	Contextual Category	English Language Instruction	Sheltered Instruction	Native Language Supports	Tech Support
Enrollment Size (number of students)	< 2,000 (<i>n</i> =3)	Class - 100%	Yes - 67%	Multiple - 67%	N/A - 67%
	2,000-4,999 (<i>n</i> =29)	Class, Multiple - 48%	Yes - 86%	Multiple - 55%	High - 45%
	>4,999 (<i>n</i> =314)	Multiple - 58%	Yes - 86%	Multiple - 52%	High - 50%
Community Type	City (<i>n</i> =144)	Multiple - 58%	Yes - 92%	Multiple - 48%	High - 51%
	Suburban (n=164)	Multiple - 56%	Yes - 82%	Multiple - 55%	High - 48%
	Town (<i>n</i> =19)	Class - 74%	Yes - 74%	Multiple - 53%	High - 47%
	Rural (<i>n</i> =19)	Multiple - 74%	Yes - 84%	Multiple - 63%	High - 53%
Region	Northeast (<i>n</i> =40)	Multiple 58%	Yes - 88%	Bilingual Ed - 55%	High - 38%
	Southeast (n=82)	Multiple 63%	Yes - 67%	Single, Multiple - 48%	High - 65%
	Central (<i>n</i> =57)	Multiple 72%	Yes - 89%	Multiple - 58%	High - 47%
	West (<i>n</i> =167)	Class 49%	Yes - 93%	Multiple - 58%	High - 46%

Note. The category or categories (a comma was used if more than one category had the highest percentage) for core EL education variables with the highest percentage was reported.

These findings suggest that high EL districts follow some patterns similar to the national sample of districts. A few of the similarities are (a) bilingual education is limited in its availability to most secondary ELs; (b) technology in the form of online and computer-based programs is reportedly used in the majority of school districts (Ahmadi, 2018); and (c) most districts are in compliance with providing mandated English

language instruction, access to sheltered content instruction, and some native language supports such as interpretation and translation. These similarities may be the result of the national agenda that has been pushed to integrate technology, provide English language instruction, and offer accessible core content to all students through programs that are familiar to the public and politically viable.

Summary of Findings

In summary, the analysis of the chi-square tests for RQ1 indicated all but one contextual factor was related to all program and service variables (not community and technology use). I identified among the adjusted residual values a common pattern of larger, city, and EL dense districts providing programs and services at significantly higher rates than a normal distribution (given no relationship were present—null hypothesis) and smaller, rural districts with fewer ELs having lower than expected observances of programs. I also found that the observed counts for region were often the least likely to be the cause for a relationship between programs and services and district contextual factors, while EL enrollment contributed significantly more often than other factors. Cramer's V supports my analysis of the observed counts and indicates that EL density has the strongest associations with the availability of programs and services (mostly moderate associations), with region often having the weakest association (mostly weak associations).

The 50 concatenated combinations for RQ2 provide additional evidence that EL enrollment is a leading factor in determining programs and services available to students and that high EL districts have more robust offerings. I did find among the high EL districts that there was a subset of *comprehensive service districts* that were more likely

to provide more instructional supports through multiple ESL models, sheltered English, bilingual education, high technology use, and other native language supports. In contrast, other districts categorized as *restrictive service districts* did not have sheltered English instruction or a reported English language instruction model; they also offered fewer native language supports such as bilingual education opportunities.

The most prevalent combination of core EL programs and services represented 18% of high EL districts and had multiple forms of English language instruction, sheltered content, high technology use, and multiple native language supports—all criteria that meet the definition of a *comprehensive service district*. The category of *compliance-only service districts* accounted for over half of the districts, while *comprehensive service districts* represented a third, and *restrictive service districts* 7%. Of the four core EL education variables, high EL districts were most likely to have multiple forms of English language instruction (56%), sheltered content classes (86%), high tech use (50%), and multiple native language supports or bilingual education with native language support (72%). They were least likely to have no English language instruction or push-in or pull-out ESL only (4%), no or low technology use (28%), and no or a single native language support (28%). I also found that contextual factors influenced the highest frequency programs and services such as *bilingual education* in the northeast region, and ESL in scheduled classes in the west region, in towns and in small districts.

CHAPTER IV

DISCUSSION

This research aimed to explore how high school English learner (EL) students are served and supported in schools. In the dissertation, I explored both how district contextual factors are related to the services and programs available to high school ELs from districts across the country and what the most frequent combinations of supports are for EL students' districts with large numbers (>100 ELs). I find that programs and services vary significantly based on district enrollment size, community type, region, and EL enrollment. Another key finding is that the number of EL students in a given district's population, regardless of other contextual factors, accounts for a majority of differences related to ELs' educational context of reception. However, because of the relationships between these contextual factors and the fact that this is not a multivariate analysis, I cannot say that EL size is the driving force of all factors analyzed. Among the patterns in high EL districts, I found less than a fifth were comprehensive service districts with robust programs and services for serving ELs and a minority of high EL districts were restrictive service districts. In this chapter, I synthesize the findings, discuss how they relate to prior research and theory, frame the implications of the findings for policy and practice, and describe the limitations of my study as well as recommendations for future research.

Research Question 1: Relationships between Contextual Factors and Program and Service Variables

Portes and Rumbaut (2006) described how the lives and opportunities of immigrants are impacted by host communities' views and acceptance of immigrants and

the legislation and policies in effect. Similar to the work of Portes and Rumbaut (2006), my findings indicate that contextual factors—enrollment size, community type, region, and EL enrollment—all have a significant relationship with the educational opportunities of secondary ELs. In fact, every single program and service variable in this study varied significantly by all four contextual factors. This suggests that contexts may fundamentally shape the experiences of EL students in high school. This also indicates that one EL's educational context varies greatly from another. For example, an EL in a highly-populated EL district may receive comprehensive services that support core needs, such as English language instruction and access to core content through sheltered instruction. Furthermore, if they are a newcomer who lives in the western region, they are significantly more likely to have a program designed for their needs, multiple native language supports and the opportunity for bilingual education to improve their native language skills and learn English through content coursework.

Previous research indicates that ELs need access to good English and core instruction (Goldenberg, 2013); if they can simultaneously develop two languages (Valentino & Reardon, 2015) and be supported with programs designed for their needs (Short & Boyson, 2012), they have positive long-term outcomes. Therefore, policymakers and educators need to understand and account for the contextual factors that are influencing programs and services to evaluate whether they are encouraging local education agencies to implement models that provide students the opportunities and access to the English language and core content that best support them.

The patterns among the relationships between enrollment size, community type, and available programs and services align with previous research such as De Cohen and

Clewell (2007), who reported that schools with high EL enrollment tend to be large and urban and offer more support and additional programs for remediation. Similar to Jiménez-Castellanos and García (2017) and Tarasawa (2013), I found that enrollment size and EL enrollment were related to the resources available to EL students, such as multiple approaches and models for instruction, native language supports, newcomer programs, and access to core content. This finding is not surprising in that funding for these programs is tied to EL status, and, therefore, districts with more ELs can afford to have more programs and have enough students to ensure the programs are viable.

One report on rural EL education by Kreck (2014) described the unique challenges that rural districts face in trying to serve secondary ELs. Several results from my study relate to Kreck's, as I found that rural districts had significantly less than expected newcomer programs, bilingual and English language instruction, access to sheltered instruction, tutoring services, and native language supports. Coady (2020) attributes ELs context to federal policies but Sampson (2019) suggests that local policies also factor heavily into the equation and both researchers recommend additional research to understand the impact of policy at all levels on programs and services available to ELs. As did Coady (2020), I also recommend future is needed to determine how the context of rural education for ELs and increase the offerings and their effectiveness for ELs attending school in small rural districts.

Sampson (2019) found that state-level policies influenced the educational experiences of ELs and the districts that served them. Similarly, my results show variation in programs and services available to EL students related to geographical boundaries. In my case, I was unable to look at states specifically, and so I do not know

about specific policies in place in different locales. That said, region is correlated with state policy, with states in the Western region having more newcomer programs and multiple native language supports than expected; Northeastern states having fewer native language supports, technology programs, and access to core content or English language instruction than expected; states in the Southeastern region with fewer than expected newcomer programs and bilingual instruction, and more than expected technology use and English language instruction; and Central states with less technology use, native language supports, and access to core and English language instruction programs.

Although it is beyond the scope of my study to determine the causes of variation by region, I propose this variation may be related to state-level policy and legislation in areas such as bilingual education, native language use, English language instruction, and technology use. I found, for example, that districts in the southeast were less likely to offer bilingual instruction and more likely to provide English language instruction, compared to other regions. Many of the states in the southeast region—Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, Tennessee, and Virginia—established English-only legislation in the 1980s with varied impacts on EL education (Crawford, 2012). Legislation, such as the state statute in Tennessee requiring that "instruction in public schools…shall be conducted in English" (Dale & Gurevitz, 1995) and the prohibition of bilingual education in Arkansas statute (Arkansas Code, 2010), might provide important context for understanding the lack of bilingual support.

Another finding of this dissertation is that the concentration of ELs in districts was consistently related to EL services and programs. Special programs and services can only be offered if there is sufficient funding for materials and qualified staff, and federal

and state funding distribution for such specialized programs and services depends on EL enrollment (Gándara & Rumberger, 2006). For example, bilingual education programs require materials, curriculum, and training for teachers as do other programs like sheltered instruction. Funding for ELs is allocated per student as well as through concentration grants and other state- and local-level mechanisms, although some states provide no additional funding for ELs (Horsford & Sampson, 2013). This suggests the power of policymakers and legislators at all levels as they consider funding for the current and the future ELs in a given area and seek funding to provide equitable education and opportunities. Although I cannot identify causes of the variation related to EL enrollment, knowledge of how EL funding works and the policies and legislation to which it is tied offer an area for future research.

While many of the relationships between services and contextual features supported prior research, theory, and understanding, others were more surprising. For example, although English language instruction is a core element of EL education and federally mandated there was significant variation in how English language instruction was provided based on enrollment size, community type, region, and EL enrollment. This indicates a more heterogeneous execution of English language development support than I anticipated. Another unexpected finding was the moderate influence of the middle categories—medium-sized (overall enrollment and EL enrollment) suburban, and town districts with moderate EL enrollments—on the variance in the χ^2 value. For example, town and suburban districts only had three and five residual values, respectively, that were significant, whereas rural and city districts had 10 and 12 significant residuals—more than double the quantity of significant residual values. These data are evidence that

districts on either end of the spectrum, big or small, rural or urban, are less likely to have the expected number of programs, while the "average" districts that are mid-sized and suburban tend to have the expected programs available.

Research Question 2: High EL Districts and Core EL Education Variables

The findings from RQ2 corroborate those of RQ1 – EL population has a greater influence on core EL education components than does community type, enrollment size, and region – and supports research that indicates that the overall secondary English learner experience is shaped by *comprehensive service districts* (CSDs; Umansky & Porter, 2020), *compliance-only service districts* (COSDs; USDOE, 2015), and *restrictive service districts* (RSDs; Sampson, 2019). These findings also agree with many of those from a decade-earlier study from De Cohen and Clewell (2007) who found correlations between districts with high concentrations of ELs and additional programs to remediate learning, extend additional growth opportunities, and support ELs academically.

Similar to De Cohen and Clewell (2007), I compared the availability of programs and services for high EL districts with those with moderate and small populations. The results indicate that high EL districts are much more likely to have all programs and services. I took this one step further by disaggregating data for high EL districts by other contextual factors such as community type, region, and enrollment size, and still found that EL enrollment equalized in many aspects the availability of programs and services. This substantiates the claim that a critical mass of ELs can be beneficial to the overall availability of resources (De Cohen & Clewell, 2007), but I cannot determine the participation, effectiveness, or overall experience with the sample and data I have. I also agree with their conclusion that supplemental services need to be re-examined as over

two-thirds of high EL districts provided compliance-only or restrictive services that do not engage ELs as fully in an educational environment that fosters meaningful participation, especially in areas such as becoming bilingual, biliterate, and bicultural.

Another researcher, Coady (2020), discusses the compliance mentality as an influence in rural areas, but my research suggests the phenomena is more widespread. This broad influence of a compliance mentality may be related to the dynamic population shifts that Horsford and Sampson (2013) and López et al. (2015) describe and the lack of planning and preparation for providing funding that can support such shifts like Gándara and Rumberger (2006) suggest. Another reason that compliance may be so prevalent is that most states still do not have a comprehensive policy framework that they use to provide access to an equitable experience for ELs (Umansky & Porter, 2020). A few states such as New York, California, and Hawaii have provided a road map for other states with rising EL populations who wish to foster an asset-oriented and wholistic approach but more could utilize a framework such as Umansky and Porter's (2020) to understand EL students' needs and assets, provide quality instruction, and create the systems that can support an equitable ELs educational experience.

The categorization of high EL districts from my research also suggests that programs and services for ELs overall may provide some secondary ELs a more *comprehensive* or *restrictive* experience. In a study on restrictive state policy, Sampson (2019) found that districts such as Tucson Unified in Arizona could not offer programs because of the barrier created by English-only legislation that limited the types of instruction and native language supports available to ELs. Inversely, López et al. (2015) identified high EL states that provided more options such as bilingual instructional

programs that were more comprehensive and even correlated those programs with positive academic achievement. Although the number of states with restrictive language policies may be dwindling, whether RSDs dwindle remains to be seen as the funding and infrastructure for EL education is not keeping pace with the shifting populations (Horsford & Sampson, 2013). Another unknown is whether or not states that are seeing major shifts will recognize the need before they reach a "threshold" of ELs, such as López et al. (2015) describes, to take action sufficiently in advance to provide the comprehensive supports ELs need now and in the future.

Limitations

This study was limited to certain statistical analyses due to the categorical nature of the data and is consequently descriptive and correlational, not causal. The extent of regional or geographic analysis is limited in its generalizability because the categorization of regions varies from other educational studies. Additionally, I found it difficult to determine from the available data whether the researchers took a representative sample from regions, as certain states have greater EL concentrations. The generalizability of the results for the analysis of how contextual factors influence combinations for districts with high ELs is limited because there was not a large enough sample to be representative of categories such as rural and town communities, nor districts with less than 2,000 students.

Another limitation was the type of information collected and the reliability of the respondents. The survey was intended to quickly gather a broad scope of data and therefore covered several topics to a limited degree related to the overall purpose. One example of the limitation of the survey instrument is that it did not separate push-in and

pull-out ESL instruction and instead combined it on the same survey question. This made disaggregating and analyzing the differences in additional models for English language instruction less precise. Another limitation of the instrument was that no data were collected about EL perspectives on the programs and services, nor those administering the programs or services. Furthermore, the sensitivity to and reflection of students' language and culture in the programs and services was not explored. The survey also lacked open-ended questions, so it was difficult to interpret how services were provided, what programs and services looked like, and how students interacted with them. Lastly, the respondents were district-level employees who may have had a different perspective and understanding of the program and services than how they were being implemented at the schools with a bias toward making the district look good.

Implications

Although limited in generalizability and its descriptive nature, this research has important implications for district leaders across the nation who seek a clear picture of the landscape of programs and services available to secondary ELs. As EL populations continue to grow and disperse to districts of all shapes and sizes, district and site administrators need models of strong and comprehensive programs and services for secondary ELs. Additionally, recent legislation such as ESSA, along with guidance, including joint Dear Colleague letters from the Department of Education and Department of Justice (Lhamon & Gupta, 2015), now protects and guides educating secondary ELs, and policymakers must have clarity about how their current policies and priorities are driving the programs and services available and the relationship with district contextual

factors. The implications of the findings for decision and policymakers at all levels will be discussed in the following section.

One implication of this study is that ELs in smaller rural districts, especially those with few ELs, may be at an unfair disadvantage due to limitations in programs and services. If the programs and services that rural districts provide are absent or are of lesser quality, then I propose states provide access to higher-quality programs and the appropriate opportunities through innovative solutions that break down the barriers caused by distance and size. Kreck (2014) recommended one method for improving programs was increasing the quality of instruction and methods used by *all* teachers (including general education teachers) serving ELs. Others, such as Sugarman and Lazarín (2020), have provided recommendations to have state education agencies "coordinate a systemic and equity-focused response" to increase access to programs and services for ELs.

An implication of the strong relationships between EL programs/services and contextual factors is that districts should consider their contexts and how they have shaped ELs' opportunities. They should then identify the strengths and weaknesses of the programs and services that they offer. Two methods for doing this are through a purposefully designed program evaluation— "the systematic assessment of programs designed to improve social conditions and our individual and collective well-being" (Rossi et al., 2018) —and through a thorough evaluation of policies affecting key areas such as classification, assessment, instruction, and access to core content, aligned to current research (Robinson-Cimpian et al., 2016). Then district leaders can identify how they might offer additional opportunities that would remove barriers for ELs to fully and

equally participate regardless of their enrollment size, region, or community type. This would be a step on the path to equity for ELs. Policymakers and educators at the local, state, and national levels might consider how this information could be used to improve EL access to an equitable education.

The results from the Williams et al., study (2007) indicated that better access to resources or "availability of resources" and coherent instruction is key to EL achievement. López et al. (2015) also suggest that types of policies such as a state's bilingual emphasis in areas of high EL concentration correlated with achievement. The data from my study suggest that in districts with large EL enrollment, the traditional programs and services are more entrenched but also more robust, providing greater access to resources and types of instruction that could lead to greater achievement. This has important implications because these are the districts that serve the most ELs, and, if properly structured, can provide the greatest opportunity for success. Another important point of Williams et al., (2007) was that although these were similar students, they were being served differently due to available resources and how they were utilized. This is critical to understand as I do not propose that all districts need all services and programs; however, local leaders must understand what is available and effective for ELs in similar districts that may benefit ELs and how those resources are organized and implemented that return the best results.

Conclusion

These findings provide policymakers and practitioners contextualized profiles of secondary EL services and programs in districts at a time when the EL population is increasing and expanding at a momentous rate. Secondary English learners may have

more challenges than traditional non-English students that they must overcome within a narrow window of opportunity all while being forgotten and underserved. This research provides valuable information to those in power to identify additional resources that can improve access and infuse secondary EL educational contexts with life-giving supports. We also know that when shifts in EL populations occur and new programs or services are needed, the first questions district leaders often ask are: "What is a similar district doing? What does it look like? How does their context compare to mine?" Therefore, knowing how programs and services relate to districts based on region, community type, enrollment size and EL enrollment can help stakeholders make comparisons to determine what may best fit their context. So also can understanding patterns and combinations of services, as students do not experience services in isolation but instead as, hopefully, coherent programs that support their trajectories and development.

Administrators and policymakers can also use this research to identify how their specific district may differ from the status quo and the associated benefits and disadvantages for their EL population. The analyses provide initial information about the national, state, and local services and programs available for EL students. Future research must examine the implications of this variation for secondary ELs. The more the contexts of programs and services for ELs are understood and analyzed, the more likely the needed changes to policy and practice can improve outcomes for secondary ELs.

APPENDIX A – SURVEY INSTRUMENT

U.S. DEPARTMENT OF EDUCATION NATIONAL CENTER FOR EDUCATION STATISTICS WASHINGTON, D.C. 20006–5651

FORM APPROVED O.M.B. No.: 1850-0733 EXPIRATION DATE: 02/2018

PROGRAMS AND SERVICES FOR HIGH SCHOOL ENGLISH LEARNERS

FAST RESPONSE SURVEY SYSTEM

This survey is authorized by law (Education Sciences Reform Act of 2002, 20 U.S.C. § 9543). While participation in this survey is voluntary, your cooperation is critical to make the results of this survey comprehensive, accurate, and timely. Your answers may be used only for statistical purposes and may not be disclosed, or used, in identifiable form for any other purpose except as required by law (Education Sciences Reform Act of 2002, 20 U.S.C. § 9573).

Please answer the survey about programs and services in your district for high school English learners during the current 2015-16 school year.

This survey is designed to be completed by the person(s) in the district most knowledgeable about programs and services for English learners at the high school level.

F ABOVE DISTRICT INFORMATION IS INC	ORRECT, PLEASE	UPDATE DIRECTLY	ON LABEL.
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Name of person completing this f	rm:
Title/position:	
Telephone number:	E-mail:
Best days and times to reach you	(in case of questions):

THANK YOU. PLEASE KEEP A COPY OF THIS SURVEY FOR YOUR RECORDS.

PLEASE RETURN COMPLETED FORM TO: Mail: Laurie Lewis (6197.02.01.02) Westat IF YOU HAVE ANY QUESTIONS OR COMMENTS, CONTACT: Laurie Lewis at Westat 800-937-8281, ext. 8284 or 301-251-8284

1600 Research Boulevard E-mail: HighSchool EnglishLearners@westat.com Rockville, Maryland 20850-3129

Fax: 800-254-0984

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 1850-0733. The time required to complete this information collection is estimated to average 30 minutes per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collection. If you have any comments concerning the accuracy of the time estimate, suggestions for improving this form, or any comments or concerns regarding the status of your individual submission of this form, please write directly to: National Center for Education Statistics, Quick Response Information System (QRIS), 1990 K Street, NW, 9th floor, Washington, DC 20006.

FRSS Form No. 107, 09/2015

Instructions and Definitions

Please answer the survey about programs and services in your district for high school English learners during the current 2015-16 school year.

Definitions for question 3

Bilingual education/instruction provided to English learner students only: An educational program/instructional approach in which two languages, English and the students' native language, are used to provide content instruction to classes of English learner students. Bilingual programs may promote proficiency in both languages with the goal of students' becoming fully bilingual, or the students' native language is used initially to assist in students' transition to all-English instruction and then decreased over time.

Two-way bilingual education/dual-language program: Also known as two-way immersion programs, two-way or dual language programs provide instruction using both English and a non-English language to classes that include both English learner and English proficient students. The program goals are for all students to become bilingual and biliterate, to succeed academically, and to develop cross-cultural awareness.

English as a Second Language (ESL) instruction: ESL programs (also known as English language development (ELD)) provide instruction that focuses on the structure and use of the English language, using carefully articulated English language instruction designed to meet the needs of students at various levels of English proficiency. The instruction may also include use of content materials related to the students' curriculum, and typically involves little or no use of the native language. ESL instruction is provided in one or more regularly scheduled class periods or, in some cases, as push-in instruction (the ESL instructor works with students within an ongoing content class) or as pull-out instruction (students move out of an ongoing class for an ESL session).

Instructional support by a paraprofessional: Paraprofessionals (also referred to as instructional aides or teachers' aides) provide assistance to English learner students in the classroom. They do not provide instruction, but provide additional support and help clarify material for students. Some paraprofessionals are bilingual in English and the students' native language and in these cases they may provide translation or explanation in the native language.

Sheltered English/content instruction: Sheltered instruction refers to regular grade-level instruction in core content areas that is provided in English through instructional strategies that make the academic content accessible to English learner students while also assisting them to acquire academic English. Sheltered instruction may be provided by a teacher trained to shelter instruction, by a teacher dually certified in the content area and ESL, or through a co-teaching model, in which instruction is presented by a content area teacher and a certified EL specialist teacher.

Definition for questions 4 through 8

Newcomer program: A specialized academic environment that serves newly arrived, immigrant English learner students for a limited period of time. Newcomer programs typically focus on developing basic English language and literacy skills, instruction in core content, and acculturation to U.S. schooling. Students transition to a school's regular language support program for English learners after they have participated in the newcomer program.

Definitions for question 13

Use of the native language for content instruction: The student's native language is used as the language for presenting new academic concepts and introducing new academic skills.

Use of the native language for instructional support: The student's native language is used to provide clarification of instruction in contexts where the teacher uses English as the primary language for presenting new academic concepts and introducing new academic skills.

Respond about English learners at the high school level.

1.	Does your district currently enroll English learners at the high school level? (Check one.)	
	Yes ☐ (Continue with question 2.) No ☐ (Stop. Complete respondent section on front and retu	ım survey.)
2.	What is the current total number of high school English learners enrolled in your school district?	
3.	In your district, which of the following English learner instructional programs/approaches are currently pro English learners in high school? (Check one on each line.)	
	a. Bilingual instruction for English learners in one or more content classes	No □
	b. Two-way bilingual/dual language program for English learner and English proficient students in one or more content classes	П
	c. English as a Second Language (ESL) instruction in scheduled class periods	ī
	d. English as a Second Language (ESL) push-in or pull-out instruction	
	e. Instructional support by a paraprofessional who does not speak the student's native language	П
	f. Instructional support by a paraprofessional who speaks the student's native language	H
	a Sheltered English/content instruction	H
	g. Sheltered English/content instruction	H
4.	Does your district have a newcomer program for English learners in high school? (Check one.)	
	Yes	
5.	Is your district's newcomer program for high school students designed to serve a specific group of newly students? (Check one.)	arrived
	Yes (Continue with question 6.) No (Skip to question 7.)	
6.	What is the group of newly arrived students that your high school newcomer program is specifically desig serve? (Check one.)	ned to
	English learner students with limited or interrupted education	
	Other (please specify):	
7.	What is the structure of the high school newcomer program? (Check all that apply.)	
	a. Full-day program	
	b. Half-day program	
	c. Class periods that total less than half a day	
	d. After-school program	
	e. Other (please specify):	
8.	What is the typical length of time a high school student spends in the newcomer program? (Check one.)	
	1 semester or less 2 semesters 3–4 semesters More than 4 semesters Don't know	v
9.	In your district, do high school English learners work with online or computer-based programs in the follow	wing areas
	to address any of their needs as English learners? (Check one on each line.)	
	Yes No	
	a. English language acquisition	
	b. English language and literacy instruction	
	c. Content area instruction	
	d. Native language support in content area instruction	
	e. Organizational and study skills	
	f. Other purpose (please specify):	

Respond about English learners at the high school level.

 In your district, approximately how many high school English learners participate in the following programs and services? (Check one on each line.)

a. Summer sknool	10.	services? (Check one on each line.)	SCI IOCI L	inglion learn	ero partic	фав ш и	io ioio	wing program	no and
b. Remediation classes		Program or service	No	ne l	Few	Some		Most	Don't know
C. Credit recovery course/program	a.	Summer school							
d. Flexible scheduling (e.g., shortened day, evening classes, Saturday classes) e. Alternative school/program for at-risk students. f. Career and technical training g. Distance education course/program. h. District-administered GED® courses h. Other (please specify): 11. Does your district have the following programs or services designed specifically for English learners in high school? (Check one on each line.) a. Tutoring b. Summer school c. Credit recovery course/program d. Mentoring program e. Distance education course/program f. Other (please specify): 12. Which of the following materials and services does your district have available in native languages for high school English learners and their parents/guardians? • In part 1, check one on each line to Indigate whether the district has that material or service available in the most common native language of EEs in the district. • In part 2, check one on each line to Indigate whether the district has that material or service available in other native languages of EEs in the district. • In part 2, check one on each line to Indigate whether the district has that material or service available in other native languages of EEs in the district. • In part 2, check one on each line to Indigate whether the district has that material or service available in other native languages of EEs in the district. • In part 1, check one on each line to Indigate whether the district has and services available in other native languages of EEs in the district. • In part 2, check one on each line to Indigate whether the district has and services available in other native languages of EEs in the district has only one native language for high school ELs, check here and leave part 2 blank. Part 1. Materials and services available in the most common native languages of EEs in the district than the most common native languages of EEs in the district than the most common native languages of EEs in the district than the most common native languages of EEs in the di	b.	Remediation classes]					
evening classes, Saturday classes) e. Alternative school/program for at-risk students.	Ç.	Credit recovery course/program]					
f. Career and technical training	d.	3, 3,]				₩.	
g. District-administered GED® courses	θ.	Alternative school/program for at-risk students.]			2	*	
h. District-administered GED® courses	f.	Career and technical training]			1		
i. Tutoring	g.	Distance education course/program]		/~	Q		
j. Mentoring program	h.	District-administered GED® courses]		_ <u> </u>)		
11. Does your district have the following programs or services designed specifically for English learners in high school? (Check one on each line.) 2	i.	Tutoring]		Ž			
11. Does your district have the following programs or services designed specifically for English learners in high school? (Check one on each line.) Yes No a. Tutoring	j.	Mentoring program]					
school? (Check one on each line.) a. Tutoring	k.	Other (please specify):]	_ <				
Materials and services available in the most common native language of ELs in the district Materials and services available in the most common native language of ELs in the district Yes, Yes, for all for some languages languages No		a. Tutoring	pes your	district have the district has	e availabl as that m	Yes	No	ages for hig available in available in or high scho	h school the
available in the most common native language of ELs in the district Authorized									
A Written information about high school career and technical education programs in your district.							Mate		
a. Written information about high school career and technical education programs in your district		ζO'					other		
a. Written information about high school academic programs in your district		Materials/services							
a. Written information about high school academic programs in your district			[
a. Written information about high school academic programs in your district				V					N-
b. Written information about high school career and technical education programs in your district	а	Written information about high school academic		Tes	NO	lang	uages	ianguages	NO
technical education programs in your district	.								
c. Translation services upon request for printed materials .	b.	Written information about high school career and	d t				_		
		technical education programs in your district							
	Ç.	Translation services upon request for printed ma	aterials.						
d. Interpreters upon request for school meetings or calls	d.	Interpreters upon request for school meetings or	calls						

Respond about English learners at the high school level.

 In your district, what is the a content instruction (part 1 support only (part 2)? 								
■ In row a, provide informat	ion for the r	most comm	non native	language of	high school	ol ELs in the	district.	
 In row b, provide informat only one native language in 							rict. If your	district has
	Part	1. Native la	nguage use	d for	Part	2. Native lan	guage used	for
III-barbard Frank I.			nstruction			structional		
High school English learners whose native language is:	No students	Few students	Some students	Most or all students	No students	Few students	Some students	Most or all students
a. the most common native						-0		
language in the district						J□		
 another non-English language in the district 					-X		п	
language in the district					(0)			
14. In your district, about how o	ften in the l	ast 12 mon	ths have E	nglish learr	ners ages 1	18 to 21 nev	wly enrolle	d in your
district as a high school stud	dent? (Che	ck one.)		()			
Never Ra	rely	Son	netimes	□	Often	Do	n't know	
15. Does your district provide E	nglish lear	ners ages	18 to 21 s	eekingito n	ewly enrol	I in your put	olic school o	listrict with
information about the follow	ing educati	onal progra	ams or servi	ices? (Chec	k one on ea	ach line.)		
		_	. 0	0		trict provide		
Educations	al program (or service	2	' -	Yes	bout program		n't know
a. Academic programs at the re-	gular high s	chool						T T T
b. Alternative school or program	for at-risk	students	_/				İ	
c. District-administered newcom	District-administered newcomer program							
d. Career and technical training	offered by	your public	school dist	rict				
e. Career and technical training		_ ` /						
 f. GED[®] or adult education prog 								
g. GED[®] or adult education prog	rams offer	ed by other	entities					
 Free or low-cost English class 	506							□
 Other (please specify): 	$\dot{\mathcal{Q}}$							
 To what extent does your di programs or services availa district? (Check one on each 	ble to Engl							
	Factor				Not at all	Minor extent	Moderate extent	Major extent
 English proficiency level 								
 b. Literacy in their native language 	age							
 c. Limited or interrupted formal 	education.				🗖			
 Length of time needed to acc 			-					
e. Whether the student will be a		-	-					
f. Whether the student will be a						H	H	H
g. Age of student at time of enr					_	H	H	H
h. Other (please specify):	-and R				··· 📙	H	Ħ	Ħ
,								

APPENDIX B – HIGH EL DISTRICT COMBINATIONS OF CORE VARIABLES

High-Frequency Combinations of Core EL Programs and Services for High EL Districts

Frequency Order	English Language Instruction	Content Instruction	Tech Use	Native Language Supports	Count	%	Service Categorization
Combo 1	Multiple	Yes	High	Multiple	61	17.6	CSD
Combo 2	Class	Yes	High	Multiple	27	7.8	COSD
Combo 3	Multiple	Yes	High	Bilingual Ed	20	5.8	CSD
Combo 4	Multiple	Yes	Mid	Multiple	15	4.3	CSD
Combo 5	Class	Yes	Mid	Multiple	14	4.0	COSD
Combo 6	Class	Yes	High	Bilingual Ed	13	3.8	CSD
Combo 7	Multiple	Yes	Low	Multiple	12	3.5	COSD
Combo 8	Multiple	Yes	High	Single	12	3.5	COSD
Combo 9	Class	Yes	Mid	Single	11	3.2	COSD
Combo 10	Class	Yes	High	Single	11	3.2	COSD
Combo 11	Multiple	Yes	Mid	Single	11	3.2	COSD
Combo 12	Multiple	Yes	Low	Single	9	2.6	COSD
Combo 13	Multiple	Yes	N/A	Multiple	9	2.6	COSD
Combo 14	Multiple	No	High	Multiple	9	2.6	COSD
Combo 15	Class	Yes	N/A	Multiple	8	2.3	COSD
Combo 16	Class	Yes	Mid	Bilingual Ed	8	2.3	CSD
Combo 17	Multiple	Yes	Low	Bilingual Ed	7	2.0	COSD
Combo 18	Class	Yes	N/A	Single	7	2.0	COSD
Combo 19	Multiple	Yes	Mid	Bilingual Ed	6	1.7	CSD
Combo 20	Class	Yes	Low	Multiple	6	1.7	COSD
Combo 21	Multiple	No	High	Single	6	1.7	COSD
Combo 22	Class	No	High	Multiple	6	1.7	RSD
Combo 23	Class	No	Mid	Multiple	5	1.4	RSD
Combo 24	Class	Yes	Low	Bilingual Ed	5	1.4	COSD

Frequency Order	English Language Instruction	Content Instruction	Tech Use	Native Language Supports	Count	%	Service Categorization
Combo 25	Class	Yes	Low	Single	5	1.4	COSD
Combo 26	Multiple	Yes	N/A	Bilingual Ed	4	1.2	COSD
Combo 27	Class	No	Low	Single	4	1.2	RSD
Combo 28	Multiple	Yes	N/A	Single	4	1.2	COSD
Combo 29	Multiple	No	Low	Single	4	1.2	COSD
Combo 30	Multiple	No	N/A	Single	2	0.6	COSD
Combo 31	Push/Pull	Yes	N/A	Single	2	0.6	COSD
Combo 32	Push/Pull	Yes	Mid	Multiple	2	0.6	COSD
Combo 33	Class	No	Mid	Bilingual Ed	2	0.6	COSD
Combo 34	Class	No	High	Single	2	0.6	RSD
Combo 35	N/A	Yes	Mid	Multiple	2	0.6	RSD
Combo 36	Push/Pull	No	N/A	Multiple	1	0.3	RSD
Combo 37	Class	No	High	Bilingual Ed	1	0.3	COSD
Combo 38	Push/Pull	Yes	High	Bilingual Ed	1	0.3	CSD
Combo 39	Class	No	Mid	Single	1	0.3	RSD
Combo 40	Multiple	No	High	Bilingual Ed	1	0.3	COSD
Combo 41	Multiple	No	Low	Multiple	1	0.3	COSD
Combo 42	Push/Pull	Yes	High	Multiple	1	0.3	COSD
Combo 43	N/A	Yes	Low	Multiple	1	0.3	RSD
Combo 44	Push/Pull	Yes	Mid	Single	1	0.3	COSD
Combo 45	Class	No	N/A	Single	1	0.3	RSD
Combo 46	Class	No	N/A	Multiple	1	0.3	RSD
Combo 47	Class	Yes	N/A	Bilingual Ed	1	0.3	COSD
Combo 48	Push/Pull	No	High	Single	1	0.3	RSD
Combo 49	Multiple	No	Mid	Single	1	0.3	COSD
Combo 50	Multiple	No	Mid	Bilingual Ed	1	0.3	COSD

Note. English language instruction: multiple = ESL was provided through both scheduled class periods and push-in/pull-out instruction; class = ESL in scheduled class periods; push/pull – push-in/pull-out instruction; N/A – none reported. Content instruction: yes = sheltered content model was reported. Tech use: low = one program; mid = two programs; high = three or more programs. Language supports: multiple = more than one service/program; single = one service/program; bilingual ed = bilingual instruction and one or more native language supports. Service Categorization: CSD – comprehensive service district; COSD – compliance-only service district; RSD – restrictive service district.

REFERENCES CITED

- Arkansas Code. Title 6 Education § 6-16-104 Basic language of instruction (2010). Retrieved from https://law.justia.com/codes/arkansas/2010/title-6/subtitle-2/chapter-16/subchapter-1/6-16-104.
- Ahmadi, D., & Reza, M. (2018). The use of technology in English language learning: A literature review. *International Journal of Research in English Education*, *3*, 115-125.
- Barrow, L., & Markman-Pithers, L. (2016). Supporting young English learners in the United States. *The Future of Children*, 159-183.
- Calderón, M., Slavin, R., & Sanchez, M. (2011). Effective instruction for English learners. *The Future of Children*, 103-127.
- California Department of Education. (2017). California English learner roadmap state board of education policy: Educational programs and services for English learners. Sacramento, CA: Author.
- Callahan, R. M., & Shifrer, D. (2016). Equitable access for secondary English learner students: Course taking as evidence of EL program effectiveness. *Educational Administration Quarterly*, 52(3), 463-496.
- Callahan, R., Wilkinson, L., Muller, C., & Frisco, M. (2009). ESL placement and schools: Effects on immigrant achievement. *Educational Policy*, 23, 355-384.
- Castañeda v. Pickard, 648 F.2d 989 (5th Cir. 1981).
- Coady, M. R. (2020). Rural English learner education: A review of research and call for a national agenda. *Educational Researcher*, 49, 524-532.
- Cohen, P. A., Kulik, J. A., & Kulik, C. L. C. (1982). Educational outcomes of tutoring: A meta-analysis of findings. *American Educational Research Journal*, 19, 237-248.
- Collier, V. P., & Thomas, W. P. (2004). The astounding effectiveness of dual language education for all. *NABE Journal of Research and Practice*, 2(1), 1-20.
- Crawford, J. (2012). *Language Legislation in the U.S.A.* Issues in U.S. Language Policy. http://www.languagepolicy.net/archives/langleg.htm.
- Crosnoe, R., & Turley, R. (2011). K–12 educational outcomes of immigrant youth. *The Future of Children*, 21, 129-152. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5555844/

- Crossland, A., Gray, T., & Reynolds, J. (2018). ESSA and digital learning: Closing the digital accessibility gap. The 10. *American Institutes for Research*.
- Dale, C. V., & Gurevitz, M. (1995). Legal analysis of proposals to make English the official language of the United States. *Washington, DC: Congressional Research Service*.
- De Cohen, C. C., & Clewell, B. C. (2007). Putting English language learners on the educational map: The No Child Left Behind Act implemented. Education in Focus: Urban Institute Policy Brief. *Urban Institute (NJ1)*.
- Echevarria, J., & Short, D. (2010). Programs and practices for effective sheltered content instruction. *Improving education for English learners: Research-based approaches*, 250-321.
- Every Student Succeeds Act, 20 U.S.C. § 6301 (2015). https://www.congress.gov/bill/114th-congress/senate-bill/1177
- Faulkner-Bond, M., Waring, S., Forte, E., Crenshaw, R. L., Tindle, K., & Belknap, B. (2012). Language instruction educational programs (LIEPs): A review of the foundational literature. *Office of Planning, Evaluation and Policy Development, U.S. Department of Education*.
- Fredericks, D. E., & S. Warriner, D. (2016). "We speak English in here and English only!": Teacher and ELL youth perspectives on restrictive language education. *Bilingual Research Journal*, 39, 309-323.
- Friedlander, M. (1991). *The newcomer program: Helping immigrant students succeed in U.S. schools* (Program information series guide, No. 8.). Washington, DC: National Clearinghouse for Bilingual Education. Retrieved from: https://files.eric.ed.gov/fulltext/ ED339230.pdf
- Gándara, P.C., Losen, D., August, D., Uriarte, M., Gómez, M. C., & Hopkins, M. (2010). Forbidden language: A brief history of U.S. language policy. In P. Gándara & M. Hopkins (Eds.), *Forbidden language: English learners and restrictive language policies* (pp. 20–33). New York, NY: Teachers College Press.
- Gándara, P. C., & Rumberger, R. W. (2006). Resource needs for California's English learners. Governor's Committee on Education Excellence.
- Goldenberg, C. (2013). Unlocking the research on English learners: What we know--and don't yet know--about effective instruction. *American Educator*, *37*(2), 4.
- Hersi, A. A., & Watkinson, J. S. (2012). Supporting immigrant students in a newcomer high school: A case study. *Bilingual Research Journal*, 35(1), 98-111.

- Hockly, N., & Dudeney, G. (2018). Current and future digital trends in ELT. *Relc Journal*, 49, 164-178.
- Horsford, S. D., & Sampson, C. (2013). High-ELL-Growth States: Expanding Funding Equity and Opportunity for English Language Learners. *Voices in Urban Education*, *37*, 47-54.
- Hos, R. (2016a). Caring is not enough: Teachers' enactment of ethical care for adolescent students with limited or interrupted formal education (SLIFE) in a newcomer classroom. *Education and Urban Society*, 48, 479-503.
- Hos, R. (2016b). The lives, aspirations, and needs of refugee and immigrant students with interrupted formal education (SIFE) in a secondary newcomer program. *Urban Education*, 1, 1-24. doi:10.1177/0042085916666932
- Jiménez-Castellanos, O. H., & García, D. (2017). School expenditures and academic achievement differences between high-ELL-performing and low-ELL-performing high schools. *Bilingual Research Journal*, 40, 318-330.
- Kotrlik, J. W., Williams, H. A., & Jabor, M. K. (2011). Reporting and Interpreting Effect Size in Quantitative Agricultural Education Research. *Journal of Agricultural Education*, 52(1), 132-142.
- Kreck, C. (2014). *Learning English in rural America*. Denver, Colorado: Education Commission of the States. Retrieved from https://files.eric.ed.gov/fulltext/ED561937.pdf
- Ladson-Billings, G. (1995). Toward a theory of culturally relevant pedagogy. *American Educational Research Journal*, *32*, 465-491.
- Lau v. Nichols, 414 U.S. 563, 94 S. Ct. 786, 39 L. Ed. 2d 1 (1974).
- Lewis, L., & Gray, L. (2016). *Programs and services for high school English learners in public school districts: 2015-16. First look* (NCES 2016-150). Washington, DC: National Center for Education Statistics. Retrieved from https://files.eric.ed.gov/fulltext/ ED569187.pdf
- Lhamon, C. E., & Gupta, V. (2015). Dear colleague letter: English learner students and limited English proficient parents. *Washington, DC: US Department of Justice and US Department of Education*. Retrieved from https://www2.ed.gov/about/offices/list/ocr/letters/colleague-el-201501.pdf
- López, F., McEneaney, E., & Nieswandt, M. (2015). Language instruction educational programs and academic achievement of Latino English learners: Considerations for states with changing demographics. *American Journal of Education*, 121, 417-450.

- Lucas, T., & Katz, A. (1994). Reframing the debate: The roles of native languages in English-only programs for language minority students. *Tesol Quarterly*, 28, 537-561.
- Marchand-Martella, N. E., Martella, R. C., Modderman, S. L., Petersen, H. M., & Pan, S. (2013). Key areas of effective adolescent literacy programs. *Education and Treatment of Children*, *36*, 161-184.
- Markos, A., & Himmel, J. (2016). Using sheltered instruction to support English learners. *Center for Applied Linguistics*.
- Maxwell-Jolly, J., Gándara, P., & Méndez Benavídez, L. (2007). *Promoting academic literacy among secondary English language learners: A synthesis of research and practice*. University of California Linguistic Minority Research Institute. Retrieved from https://escholarship.org/content/qt5m14j4vp/qt5m14j4vp.pdf
- McCallumore, K. M., & Sparapani, E. F. (2010). The importance of the ninth grade on high school graduation rates and student success in high school. *Education*, 130(3).
- McFarland, J., Cui, J., Rathbun, A., and Holmes, J. (2018). *Trends in High School Dropout and Completion Rates in the United States: 2018* (NCES 2019-117). U.S. Department of Education. Washington, DC: National Center for Education Statistics. Retrieved April 2021 from http://nces.ed.gov/pubsearch.
- McClure, G., & Cahnmann-Taylor, M. (2010). Pushing back against push-in: ESOL teacher resistance and the complexities of coteaching. *TESOL Journal*, *1*(1), 101-129.
- McHugh, M. L. (2013). The chi-square test of independence. *Biochemia Medica*, 23, 143-149.
- Menken, K., Kleyn, T., & Chae, N. (2012). Spotlight on "long-term English language learners": Characteristics and prior schooling experiences of an invisible population. *International Multilingual Research Journal*, 6, 121-142. Retrieved from https://katemenken.files. wordpress.com/2011/10/menken-kleyn-chae-2012-spotlight-on-e2809clong-term-english-languagelearnerse2809d-imrj1.pdf
- Menken, K. (2013). Emergent bilingual students in secondary school: Along the academic language and literacy continuum. *Language Teaching: Surveys and Studies*, 46, 438-476.
- National Academies of Sciences, Engineering, and Medicine. (2017). *Promoting the educational success of children and youth learning English: Promising futures*. National Academies Press.

- National Center for Education Statistics. (2016). *Programs and services for high school English learners in public school districts: 2015-16.*
- National Center for Education Statistics. (2018). *English language learners in public schools*. Retrieved from https://nces.ed.gov/programs/coe/indicator_cgf.asp
- National Research Council. (2011). *Allocating federal funds for state programs for English language learners*. National Academies Press. https://doi.org/10.17226/13090
- New York State Education Department. (2014). *Blueprint for English language learner/Multilingual learner success*. Albany, NY: Author.
- Pitoniak, M. J., Young, J. W., Martiniello, M., King, T. C., Buteux, A., & Ginsburgh, M. (2009). *Guidelines for the assessment of English language learners*. Educational Testing Service (ETS). Retrieved from Educational Testing Services https://www.ets.org/s/about/pdf/ell_guidelines.pdf
- Portes, A., & Rumbaut, R. G. (2006). *Immigrant America: A Portrait*. Oakland, California: University of California Press.
- Reyes, R., & Her, L. (2010). Creating powerful high schools for immigrant and English language learning populations: Using past and present ideas in today's schooling paradigm. *National Society for the Study of Education*, 109, 529-536.
- Rossi, P. H., Lipsey, M. W., & Henry, G. T. (2018). *Evaluation: A systematic approach*. Sage publications.
- Robinson-Cimpian, J. P., Thompson, K. D., & Umansky, I. M. (2016). Research and policy considerations for English learner equity. *Policy Insights from the Behavioral and Brain Sciences*, 3, 129-137.
- Rossell, C. (2005). Teaching English through English. *Educational Leadership*, 62, 32-36.
- Ruiz-de-Velasco, J., & Fix, M. (2000). *Overlooked & Underserved: Immigrant Students in US Secondary Schools*. Washington, DC: Urban Institute. Retrieved from https://files.eric.ed.gov/fulltext/ED449275.pdf
- Sampson, C. (2019). "The state pulled a fast one on us": A critical policy analysis of state-level policies affecting English learners from district-level perspectives. *Educational Policy*, *33*(1), 158-180.
- Saunders, W. M., Foorman, B. R., & Carlson, C. D. (2006). Is a separate block of time for oral English language development in programs for English learners needed? *The Elementary School Journal*, 107, 181–198.

- Sharpe, D. (2015). Chi-square test is statistically significant: Now what?. *Practical Assessment, Research, and Evaluation*, 20, 8.
- Short, D. J. (2002). Newcomer programs: An educational alternative for secondary immigrant students. *Education and Urban Society*, *34*, 173-198.
- Short, D. J., & Boyson, B. A. (2012). *Helping newcomer students succeed in secondary schools and beyond*. Washington, DC: Center for Applied Linguistics. Retrieved from https://www.carnegie.org/media/filer_public/ff/fd/fffda48e-4211-44c5-b4ef-86e8b50929d6/ccny_report_2012_helping.pdf
- Slavin, R. E., & Cheung, A. (2005). A synthesis of research on language of reading instruction for English language learners. *Review of Educational Research*, 75, 247-284.
- Snyder, T. D., De Brey, C., & Dillow, S. A. (2019). Digest of Education Statistics 2017, NCES 2018-070. *National Center for Education Statistics*.
- Steele, J. L., Slater, R. O., Zamarro, G., Miller, T., Li, J., Burkhauser, S., & Bacon, M. (2017). Effects of dual-language immersion programs on student achievement: Evidence from lottery data. *American Educational Research Journal*, *54*, 282-306.
- Suárez-Orozco, C., Gaytán, F., Bang, H., Pakes, J., O'Connor, E., Rhodes, J., & Fuller, B. (2010). Academic trajectories of newcomer immigrant youth. *Developmental Psychology*, 46, 602-618.
- Sugarman, J., & Lazarín, M. (2020). Educating English Learners during the COVID-19 Pandemic. Retrieved from https://www.migrationpolicy.org/sites/default/files/publications/mpi-english-learners-covid-19-final.pdf
- Tarasawa, B. (2013). Fight or flight? Immigration, competition, and language assistance resources in metropolitan Atlanta. *Journal of Latinos and Education*, *12*, 186-201.
- Umansky, I. M., Hopkins, M., Dabach, D. B., Porter, L., Thompson, K., & Pompa, D. (2018). *Understanding and supporting the educational needs of recently arrived immigrant English learner students: Lessons for state and local education agencies*. Washington, DC: Council of Chief State School Officers.
- Umansky, I. M., & Porter, L. (2020). State English learner education policy: A conceptual framework to guide comprehensive policy action. *Education Policy Analysis Archives*, 28 (17). https://doi.org/10.14507/epaa.28.4594
- Umansky, I. M., & Reardon, S. F. (2014). Reclassification patterns among Latino English learner students in bilingual, dual immersion, and English immersion classrooms. *American Educational Research Journal*, *51*, 879-912.

- U.S. Department of Education. (2015). Fact Sheet, Information for Limited English Proficient Parents and for Schools and School Districts that Communicate with Them. Washington, DC: United States Department of Education. Retrieved from https://www2.ed.gov/about/ offices/list/ocr/docs/dcl-factsheet-lep-parents-201501.pdf
- U.S. Department of Education, Office of English Language Acquisition. (2016). *English Learner Tool Kit (Rev. ed.)*. Washington, DC: Author.
- U.S. Department of Education. (2018). *Ensuring English Learner Students Can Participate Meaningfully and Equally in Educational Programs*. Washington, DC: United States Department of Education. Retrieved from https://www2.ed.gov/about/ offices/list/ocr/docs/dcl-factsheet-el-students-201501.pdf
- U.S. Department of Education. (2020). *Academic Performance and Outcomes for English Learners*. Retrieved fromhttps://www2.ed.gov/ datastory/eloutcomes/index.html#one
- Valentino, R. A., & Reardon, S. F. (2015). Effectiveness of four instructional programs designed to serve English learners: Variation by ethnicity and initial English proficiency. *Educational Evaluation and Policy Analysis*, *37*, 612-637.
- Williams, T., Perry, M., Oregon, I., Brazil, N., Hakuta, K., Haertel, E., Kirst, M., & Levin, J. (2007). Similar English learner students, different results: Why do some schools do better? A follow-up analysis based upon a large-scale survey of California elementary schools serving high proportions of low-income and EL students. Report of Findings. *EdSource*.
- Ybarra, R., & Green, T. (2003). Using technology to help ESL/EFL students develop language skills. *The Internet TESL Journal*, 9(3), 1-5.