THE SEAL OF BILITERACY:
EQUITY ACROSS LINES OF RACE, LANGUAGE, AND SOCIAL CLASS

by

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ABSTRACT

CHARLOTTE ROBEY HANCOCK. The Seal of Biliteracy: Equity Across Lines of Race, Language, and Social Class.
(Under the direction of DR. KRISTIN J. DAVIN)

This quantitative study examined the awarding of the Seal of Biliteracy (SoBL) in North Carolina public schools. Specifically, the study explored through a multiple logistic regression if the intersectionality of race, language, and social class was related to whether a district did or did not award students the SoBL. Additionally, within districts found to award the SoBL, this study examined through a multiple linear regression if the variables of race, language, and social class related to the rate of graduating seniors who received the SoBL recognition. Results from the multiple logistic regression revealed that total student enrollment, while controlling for language, race, and social class was related to whether a district did or did not award the SoBL. Within districts that awarded the SoBL, results from the multiple linear regression revealed that while controlling for race, language, social class and total student enrollment, class was negatively related to the rate of seniors who received the SoBL while language was positively related. Results are discussed alongside salient recommendations for the future.

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~Glory be to God, for through Him all things are possible~

DEDICATION

I would like to dedicate this dissertation to my family. You bless me beyond measure and all of my work is more meaningful because you are a part of my life. Gabriel, Grayson, and RobeyAnne—may you always dream big.

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LIST OF ABBREVIATIONS

ACTFL	American Council on the Teaching of Foreign Languages
AIC	Akaike Information Criterion
ANOVA	Analysis of Variance
AP	Advanced Placement
AAPPL	Assessment of Performance Towards Proficiency in Language
BIC	Bayesian Information Criterion
CDE	California Department of Education
CRT	Critical Race Theory
DL	Dual Language
ED	U.S. Department of Education
EH	Equity/Heritage
ELs	English Learners
ESL	English as a Second Language
FRPL	Free and Reduced-price Lunch
GHC	Global Human Capital
GLE	Global Languages Endorsement
GPA	Grade Point Average
IB	International Baccalaureate
LCTL	Less Commonly Taught Languages
MLs	Multilingual Learners
NAFTA	North American Free Trade Agreement
NCDPI	North Carolina Department of Public Instruction

NCES	National Center for Education Statistics
OCR	Office of Civil Rights
SoBL	Seal of Biliteracy
STAMP	Avant Standards-based Measure of Proficiency
VIF	Variance Inflation Factor

CHAPTER 1: INTRODUCTION

The history of language policy in U.S. schooling is complex, swaying consistently between promotive and restrictive. For example, Title VII of the Elementary and Secondary Education Amendments of 1967, commonly referred to as the Bilingual Education Act, officially recognized that students from multilingual homes needed additional services, providing funding for bilingual programs (Moore, 2021). Yet, several decades later, English-only laws in California, Arizona, and Massachusetts placed restrictions on how districts provided bilingual education (Borden, 2014; Pac, 2012). In present day, despite international movements towards a more globalized world, with intense efforts to foster globally-minded students, policies that restrict language development in languages other than English have remained in some U.S. schools.

A recent language education policy called the Seal of Biliteracy that incentivizes and prioritizes multilingualism offers a possible new wave of valuing languages other than English in schools nationwide. The Seal of Biliteracy is an award given to students at high school graduation to signify that they are proficient in reading, writing, listening, and speaking in two or more languages (Seal of Biliteracy, 2021). Such a shift towards an assets-based approach to multilingualism comes at a critical time when language diversity is at its peak, with five million students requiring support to gain sufficient proficiency in the English language to be successful in schools nationwide (National Center for Education Statistics [NCES], 2020). However, with such an intense focus on English language proficiency, multilingual learners are at risk of receiving the message that their home language is not valuable. Research suggests that the Seal of Biliteracy, on the contrary, has the potential to act as a counternarrative, sending the message that home languages other than English do matter in schools (Hancock & Davin, 2020).

As with most language education policies, the history behind the inception of the Seal of Biliteracy (SoBL) is complex in nature. Considered a grassroots initiative, the SoBL evolved in response to a restrictive language policy, Proposition 227 (1998) that spurred a heated debate in California in the 1990s (Olsen, 2020; Sanchez & Booth, 1998). Beginning in the 1980s, the English-only movement was advancing throughout the United States and sought to restrict multilingualism in political and educational systems nationwide (Pac, 2012). As a result of this political rhetoric, Californian voters passed Proposition 227: English Language in Public Schools (1998), which was a language policy that restricted instruction other than in English in schools statewide (Borden, 2014; Pac, 2012; Sanchez & Booth, 1998). There was an immediate shift away from bilingual education, in which students could be instructed in their home language, due to the heavy restrictions created by this law. However, this restriction was unevenly distributed in that the policy allowed students proficient in English to still have access to bilingual education (English Language in Public Schools: Initiative Statute, n.d.; Proposition 227: English Language in Public Schools, 1998). Within just a few years of the passing of Proposition 227, fewer than one in 12 students federally designated as English learners (ELs) were instructed in their home language in school (Olsen, 2020), despite research demonstrating that multilingual learners have better success in schools when instructed in their home language (Collier & Thomas, 2009; Steele et al., 2017).

To counter Proposition 227, a group of language advocates joined forces to combat the passing of this English-only initiative through their own campaigning (Olsen, 2020). As Olsen (2020), one of the original movement leaders, explained, the group of advocates began their counter-campaign too late to impede the successful passing of Proposition 227. In 1998, Californian voters passed Proposition 227 by a 61% majority, despite open opposition from civil

rights groups, district school boards of education, and educators (Colvin & Smith, 1998). After the passing of Proposition of 227, the group of language advocates later formalized as Californians Together, unwavering in their commitment to counter anti-bilingual sentiment, continued their efforts to change this sentiment towards one in favor of multilingualism (Olsen, 2020).

The vision of recognizing students for their multilingualism began in 1992 with the Bilingual Competency Award in the Glendale Unified School District in Los Angeles (Glendale Unified School District, 2014). This award became the guide for Californians Together's initiative of passing a statewide SoBL (Glendale Unified School District, 2014; Olsen, 2020). Californians Together worked relentlessly for a multitude of years to get the SoBL passed at the state level. While it took three times to cross the governor's desk and multiple revisions, being vetoed twice, the state SoBL officially passed in 2011 (Olsen, 2020). This shift in ideologies laid the framework for the overturning of Proposition 227 and the passing of Proposition 58—that repealed bilingual education restrictions—in 2016 (Californians Together, 2019).

Almost immediately, the SoBL gained national traction. By 2013, Texas, New York, and Illinois had adopted their own versions of the policy (Seal of Biliteracy, 2021). By the following year, 2014, four additional states and the District of Columbia joined the preceding states in the adoption of a SoBL policy (Seal of Biliteracy, 2021). Within five years of its initial passing in California, 23 additional states adopted a SoBL (Seal of Biliteracy, 2021). As of spring of 2021, 42 states and the District of Columbia had adopted a SoBL (Seal of Biliteracy, 2021). Additionally, by the end of 2020, all 50 states either had or were working towards the adoption of a SoBL, which marked a pivotal moment in the history of the national SoBL movement (Black et al., 2020).

As there is no national policy to date regarding the SoBL, the policy varies state to state. In some states, such as California, participation in the recognition is voluntary, meaning that schools and districts can individually decide if they want to award the SoBL to students. This means that students in one school could receive the recognition while students in another school a few miles away may not be eligible. Common to all states is that, to receive the award, students must demonstrate proficiency in two or more languages. All states, with the exception of Hawaii, require that one of the languages be English (Hawaii State Department of Education, n.d.). For example, in Hawaii, students can either demonstrate proficiency in the state's two official languages, English and Hawaiian, or they can demonstrate proficiency in one of the state's official languages and an additional language (Hawaii State Department of Education, n.d.). Students may meet this requirement by taking a nationally approved language assessment or by completing certain courses in high school, operationalized as *seat time* (Davin & Heineke, 2017). Acceptable forms of evidence to demonstrate language proficiency depend on the state. Specific details regarding the variations in policy are further discussed in Chapter 2.

These variations in policy may be a contributing factor to the difference between the number of students who are awarded the SoBL from state to state (Black et al., 2020; Davin & Heineke, 2017). For example, the awarding of the SoBL in 2017-2018 ranged from 114 awards in Delaware to 47,248 in California (Chou, 2019). In the 2018-2019 school year, the SoBL awards varied from 14 awards in Vermont to 48,311 in California (Black et al., 2020). Thus, disparities exist state to state in regard to the number of awards given yearly.

Statement of the Problem

While early research focused on the policy itself, understanding its varying nuances state by state (Davin & Heineke, 2017), more recently researchers have begun to question if the SoBL

could be promoting a form of *elite bilingualism* and excluding culturally and linguistically diverse students in the awarding of the SoBL, thereby increasing the opportunity gap between native English-speaking and language-minoritized students (Heineke et al., 2018; Subtirelu et al., 2019). In parallel with investigating the policy variations from state to state, researchers raised concerns regarding assessment versus seat time for ways to meet a language requirement and that the SoBL policy in some states allows schools and districts the option to participate (Davin & Heineke, 2017; Subtirelu et al., 2019). In states such as Georgia and New Jersey that only allow assessments as acceptable evidence to demonstrate proficiency in the language other than English (Georgia Department of Education, 2021; State of New Jersey Department of Education, 2019), the required costs associated with such assessments that students often must pay themselves could provide a barrier, especially for students from homes of low socioeconomic status that may be unable to afford the assessment. Further, in instances where no assessment exists for a less commonly taught language, students who speak this language in the home would be excluded from the recognition (Davin, 2020; Davin & Heineke, 2017). For states such as California, Florida, and North Carolina (California Department of Education [CDE], 2021; Florida Department of State, 2010; North Carolina Department of Public Instruction [NCDPI], 2020) that allow students to receive credit by participating in courses (i.e. seat time) rather than assessments, concerns arose around if seat time could guarantee proficiency in the language other than English (Davin, 2020). Another concern was whether this option of seat time would increase inequity in the awarding of the SoBL for students who do not attend schools that were able to provide longer sequences of language study (Davin, 2020). Regarding the option to participate or not, concerns also arose regarding whether the schools and districts that do participate privilege certain groups of students over others (Subtirelu et al., 2019).

To date, only one study (Subtirelu et al., 2019), situated in California, investigated who the recipients of the awarding of the Seal of Biliteracy are in practice through the lens of race, language, and social class. California is a state where participation is voluntary. Subtirelu et al. (2019) found that schools that opted in correlated with schools that had higher numbers of White students and fluent English-proficient speakers and lower numbers of Students of Color and students who qualified for free and reduce priced lunch. This study raised awareness that this recognition could potentially lead to inequities between groups in lieu of honoring the linguistic diversity of all students, as was the original intent of the policy writers.

The SoBL is still in many ways in its infancy and the need to analyze this policy through a lens of equity along the lines of race, language, and class is warranted due to the history of policies that have affected populations in varying and inequitable ways (Bell, 1992). Discriminatory practices that have been reinforced by the legal system (Bell, 1980, 1995) are also evident historically in language education policy, as was witnessed in the case of Proposition 227 that permitted bilingual education for native English speakers while denying it to students whose first language was not English (English Language in Public Schools: Initiative Statute, n.d.; Proposition 227: English Language in Public Schools, 1998). Thus, more research is needed surrounding the awarding of the SoBL in different contexts across the nation, especially in the South where there is a long history of discriminatory practices in schooling (Anderson, 1988).

One prime location for investigation is North Carolina, a southern state growing in linguistic diversity and the state that awarded the second largest number of SoBLs in the 2018-2019 school year, behind the leading state of California (Black et al., 2020; NCDPI, 2020). At the national level, students designated as English language learners grew from 8.1% to 10.1% of

the total student population from the fall of 2000 to the fall of 2017 (NCES, 2020). English language learners are described as students who lack the necessary proficiency in English to be successful in schools (NCES, 2019). In this article, English language learners are referred to as *multilingual learners* (MLs) to focus on these students through a lens of an asset-based perspective that values the rich linguistic repertoires students bring with them to the classroom. This is in opposition to a deficit-based lens that perceives students as having the sole goal to learn English even at the cost of subtracting their home language. By using the term *multilingual*, I aim to emphasize that designating students by proficiency in one language over another is inadequate and further denies the fluid and dynamic identity development (Paris & Alim, 2017) that students from culturally and linguistically diverse backgrounds experience.

As the number of MLs grows at a national level, North Carolina experiences similar trends. At the state level, 6.9% of students in North Carolina were labeled as English language learners in the fall of 2017 (NCES, 2020). Additionally, as of May 2020, close to 17% of students indicated that they spoke a language other than English in the home (NCDPI, 2020). The number one language spoken in the home was Spanish, with 14% of students speaking this language (NCDPI, 2020). Such growth in the Latinx population has made North Carolina part of an area nicknamed the New Latino South, characterized as a region impacted by a steady growth of Latinx members in the community and schools (Rodriguez et al., 2020).

Unique to North Carolina is that it is a state that mandates that all public school districts participate in the awarding of the SoBL and further automates the awarding through a statewide data system (Hancock et al., 2020). Thus, the combination of North Carolina being part of what many consider to be the New Latino South, the state that awards the second largest number of

SoBLs nationally, and the fact that districts do not need to opt in to participate made it an ideal location to explore the awarding of the SoBL across the lines of race, class, and language.

Purpose of the Study

The purpose of this quantitative study was to analyze, through the lens of critical race theory, whether the SoBL is awarded equitably in North Carolina along the lines of race, class, and language. According to Bell (1992), racism is entrenched in U.S. society and perhaps is a never-ending battle that nevertheless must be fought. As such, in the same vein as school curriculum, pedagogy, and practices, credentialing in U.S. schools requires scrutiny to ensure equity. Further, this study hinges on the critical race theory (CRT) tenet of intersectionality (Crenshaw, 1989) that urges the examination of racism as it intersects with other forms of discrimination. This study situates itself in the CRT tenet of intersectionality by specifically exploring the awarding of the SoBL through the lens of the intersection of race with language and social class.

Research Questions

The research questions in this study aimed to explore the SoBL in North Carolina with a specific focus on the intersectionality of this recognition with the variables of race, language, and social class. Examining this phenomenon beyond the context of California and specifically within a context where participation in the awarding of the SoBL is mandatory provides a relevant and new area to study beyond the previous literature. Further, the study considers whether removing the participatory nature of the recognition could influence outcomes. Additionally, this study addresses whether the inequitable awarding of the SoBL along the lines of race, language, and class could potentially exist in more contexts around the United States,

which would signal a troubling trend. Thus, the following three research questions specifically guided this quantitative study:

1. What are the demographic characteristics of the North Carolina Public School districts that do and do not award the Seal of Biliteracy?
2. What is the relationship between the awarding of the Seal of Biliteracy in public school districts in North Carolina and race, language, and class?
3. Within North Carolina Public School districts that award the Seal of Biliteracy, what is the relationship between the rate of graduating seniors awarded the Seal of Biliteracy and race, language, and class?

Overview of Study Design

This study included a variety of statistical analyses to answer all three research questions. Specifically, descriptive statistics aimed to answer the first research question. District demographic characteristics that were explored included racial demographics, number of MLs, and number of students who qualify for free and reduced-price lunch. For the second research question, this study utilized a multiple logistic regression to examine which variables are contributing factors to the awarding or non-awarding of the SoBL in the linguistically diverse state of North Carolina. The specific variables examined included race, language, and social class. For the variable of language, this study used English learner status. For the variable of social class, this study used free and reduced-price lunch statistics. An additional variable that was examined was total number of students, primarily because this was the number one predictor in the study by Subtirelu et al. (2019). Therefore, this variable was also important to include within this study to deepen and extend the existing literature regarding the equitable awarding of the SoBL. For the third research question, a multiple linear regression was utilized, with the rate

of graduating seniors for each district as the dependent variable and the same independent variables of race, language, social class, and total student enrollment that were used in the logistic regression.

Significance of the Study

The SoBL in many ways is still in its infancy. Therefore, understandably, the first study to emerge regarding the SoBL examined the recognition itself and the variation in policy (Davin & Heineke, 2017) to provide a clearer picture of this policy in early stages of implementation. However, with more understanding surrounding this language education policy, recent research has aimed to uncover whether inequities exist within the awarding of the SoBL in practice (Colomer & Chang-Bacon, 2020; Hancock et al., 2020; Heineke et al., 2018; Subtirelu et al., 2019). To date, only two studies have investigated by quantitative measures the awarding of the SoBL by student demographics to examine equity in its awarding (Hancock et al., 2020; Subtirelu et. al, 2019). More studies of this nature are essential to ensure that the policy is enacted in practice in the ways in which the initial visionaries of the policy aspired.

This study adds to the current research in two important ways: (1) exploring the awarding of the SoBL in practice in a context beyond California, providing insight into whether the awarding of the SoBL in an inequitable manner may be part of a national trend, and (2) exploring the awarding of the SoBL in the unique context of North Carolina. North Carolina is a prime state to investigate in more depth as it is the second leader in the nation for awarding the SoBL (Black et al., 2020) and is also noted for its growing linguistic diversity (NCDPI, 2020). Unlike California (Subtirelu et al., 2019), North Carolina does not make participation in the SoBL optional for schools and districts, but rather includes all students that qualify for the award (North Carolina State Board of Education, 2019). Thus, on the surface, it appears that North

Carolina may allow for a more equitable context for the awarding of the SoBL. However, as there is a history of inequitable policies in the U.S. (Bell, 1992, 1995), a deeper investigation is warranted as North Carolina is one of the six states (Davin & Heineke, 2017) that requires students labeled as ELs to meet an additional requirement not required by their native-English speaking counterparts to receive the recognition (NCDPI, n.d.-b). Most importantly, the further promotion of the SoBL must be balanced with critical research that illuminates whether the awarding of the SoBL is equitable.

Definition of Terms

For clarity, the following section provides a definition of terms that are used throughout Chapters 1-5:

Critical Race Theory: A theoretical framework that derives from critical legal studies and contends that racism is entrenched in U.S. society and is reinforced by the legal system through laws and policies (Bell, 1992, 1995).

Elite bilingualism: In this paper, *elite bilingualism* stems from the original definition by Gaarder (as cited in Paulston, 1978) of elitist bilingualism, and refers to the promotion of bilingualism for students who are White, middle to upper class, and native English speakers, who by choice have become bilingual. Thus, this type of bilingualism is voluntary.

Folk bilingualism: In this paper, *folk bilingualism* stems from the definition by Gaarder (as cited in Paulston, 1978), and refers to a type of bilingualism that results out of a need to survive when two different ethnic groups are within one setting (or state) and competition thus stems from this contact. This type of bilingualism is in involuntary.

Monolingualism: *Monolingualism* refers to the ability to speak in only one language.

Multilingual learners: The term *multilingual learner* is used instead of terms such as English learner (EL), limited English proficient, or English language learner. While these labels have and are still utilized in documents and databases, I chose to use the term multilingual learner (ML) to highlight that students should not be forced into an identity that revolves around the English language but rather embraces a fluid, dynamic identity (Paris & Alim, 2017) of multiple languages.

Neoliberalism: Neoliberalism stems from ideologies that believe in promoting free markets and trade, private property rights, and competition (Harvey, 2007). Through a neoliberal perspective, language is an asset in the marketplace and is therefore commodified (Heller, 2010).

Seal of Biliteracy: According to the Seal of Biliteracy (2021) website, the "Seal of Biliteracy is an award given by a school, district, or state in recognition of students who have studied and attained proficiency in two or more languages by high school graduation" ("What is the Seal?" section).

Seat time: In this paper, *seat time* stems from the use of this term in the article by Davin and Heineke (2017) and refers to course completion being permitted for the Seal of Biliteracy requirements. For example, instead of an assessment being required to demonstrate proficiency, the completion of a series of language courses is permitted.

Organization of the Study

This study includes five chapters. Chapter 1 addressed the purpose and significance of the study, the research questions and methodology, and the definition of terms. Chapter 2 presents relevant literature that pertains to the SoBL, including a detailed description of the policy, the ways in which the policy has been enacted state to state, the successes of the SoBL, and its challenges. Chapter 2 also includes a description of the theoretical framework of CRT. Chapter 3

provides a detailed explanation of the methods of this study. Chapter 4 presents the findings of the study. Chapter 5 discusses how these findings relate to previous literature as well as to discuss the findings through the lens of CRT. Additionally, Chapter 5 utilizes these findings to provide recommendations for the equitable awarding of the SoBL in the future and to suggest further studies that could aid in these efforts.

CHAPTER 2: LITERATURE REVIEW

This chapter discusses the literature to date related to the SoBL. The first section describes in depth the policy. Next, I provide what are considered the major successes of this policy, focusing specifically on students' perceived benefits of this recognition. After examining the benefits, I will discuss what have also been the challenges associated with the SoBL. Subsequently, the chapter will explore the equity concerns that have arisen in most recent years concerning the award. After discussing the equity concerns, I present the theoretical framework of CRT (Bell, 1995) that I utilized as the lens through which to analyze the results of this study. Lastly, I will specify the current gaps in the literature and conclude with a summary of the chapter.

Language Education Policy in the United States

As the global lingua franca, English is the most popular language to learn, and this extreme focus on English monolingualism in schools is intensified in Anglophone countries such as the United States (Lanvers et al., 2021). Therefore it is not surprising perhaps that there is mediocre support nationwide for world languages in schools (O'Rourke et al., 2016). Only seven states (Connecticut, Delaware, Maine, Michigan, New Jersey, New York, and Tennessee) plus the District of Columbia require students to study a world language for high school graduation (O'Rourke et al., 2016). While these state requirements vary, the longest amount of study required is two years of world language study (O'Rourke et al., 2016). Such limited time studying a world language typically produces students with a very minimal proficiency in this additional language, with students more than likely remaining at a novice level of ability (Davin et al., 2014).

Restrictive language policy, as witnessed historically in the realm of bilingual education, is politically charged, and is influenced by outside of school factors, such as waves of

immigration, world wars, and the English-only movement that has sought to prioritize English in all realms of U.S. society (Garcia, 2009; Heineke, 2017; Thomas & Collier, 2012). Title VI of the Civil Rights Act of 1964 forbade discrimination based upon race, color, or nationality and laid the foundation for the subsequent passing of Title VII of the Elementary and Secondary Education Act, commonly referred to as The Bilingual Education Act (Garcia, 2009). The Bilingual Education Act provided funding for bilingual education nationwide (Garcia, 2009). However, despite federal efforts to support MLs, restrictive language policies such as Proposition 227 in California in 1998, Proposition 203 in Arizona in 2000, and Question 2 in Massachusetts in 2002 still passed at the state level (Borden, 2014). While Proposition 227 and Question 2 have been completely overturned in California and Massachusetts, restrictive language policy remains to a certain extent in Arizona (Kaveh et al., 2021). Although there has been a reemergence of programs that aim to support multilingualism, the terminology has shifted away from that of bilingual education to that of dual language education. Even still, the success of dual language education remains dependent upon the policies that exist at the state level and the ways in which these policies are enacted (U.S. Department of Education [ED], 2015).

Description of the Seal of Biliteracy Policy

The SoBL policy varies state to state (Davin & Heineke, 2017). This is unsurprising considering that each state has adopted the policy within its own context and that there is no national SoBL policy to date. Perhaps this policy variance hinges on the purpose of the recognition in each context and how the policy actors within each context framed the SoBL. In fact, the national SoBL organization recommends that states, schools, and districts initially consider the purpose of the recognition and establish what rationale will be effective to drive this policy within that specific community or setting (Seal of Biliteracy, 2021).

Despite the fact that varying contexts frame this policy in different ways, certain aspects remain uniform throughout. Common to all states is a requirement to demonstrate proficiency in two languages. All states, except for Hawaii (Hawaii State Department of Education, n.d.), require one of the languages to be English. However, the requirements regarding how to demonstrate language proficiency vary state to state (Davin & Heineke, 2017). To demonstrate proficiency in both languages, some states use assessment, coursework, or even portfolios (Davin & Heineke, 2017).

It is worth noting that even within the individual states, the requirements for each of the languages vary. For example, while some states may require an assessment for the language other than English, they may simultaneously accept qualification to graduate as meeting the requirement for English (Davin & Heineke, 2017). This is the case in Michigan, where students meet the English requirement by qualifying for graduation but then must qualify through an assessment or an alternative process to meet the requirement for the language other than English (Michigan Department of Education, 2019). Thus, differing requirements for English and the language other than English can exist within the same context. Such inconsistency with policy within the same state could be problematic as some could argue that the requirements should be consistent between languages to ensure equity in the awarding of the SoBL.

Requirement for English

State requirements vary regarding ways to demonstrate English proficiency, including assessment, the completion of English language arts (ELA) courses, and meeting all requirements for high school graduation (Davin & Heineke, 2017). The most common way to demonstrate English proficiency is through assessment (Davin & Heineke, 2017). Davin and Heineke (2017) found that 19 states require that students take an ELA standardized assessment,

which for some included the statewide tests for ELA or for others advanced placement (AP) tests. Some states, including Georgia, Hawaii, North Carolina, and Texas, utilize the completion of the ELA requirements with a set minimum grade point average (GPA) to suffice for the demonstration of proficiency in English (Davin & Heineke, 2017). In contrast, New Mexico, New Jersey, and Michigan among others consider meeting the requirements for graduation to be sufficient in showing the mastery of the English language (Davin & Heineke, 2017). Lastly, some states including Arizona, California, Illinois, Nevada, North Carolina, Texas, and Wisconsin require that students labeled as ELs complete an additional assessment, such as the World-Class Instructional Design and Assessment, to demonstrate English proficiency (CDE, 2021; Davin & Heineke, 2017). Davin and Heineke (2017) questioned the need for this double certification of English for MLs that their native English-speaking peers did not face.

Requirement for a Language Other Than English

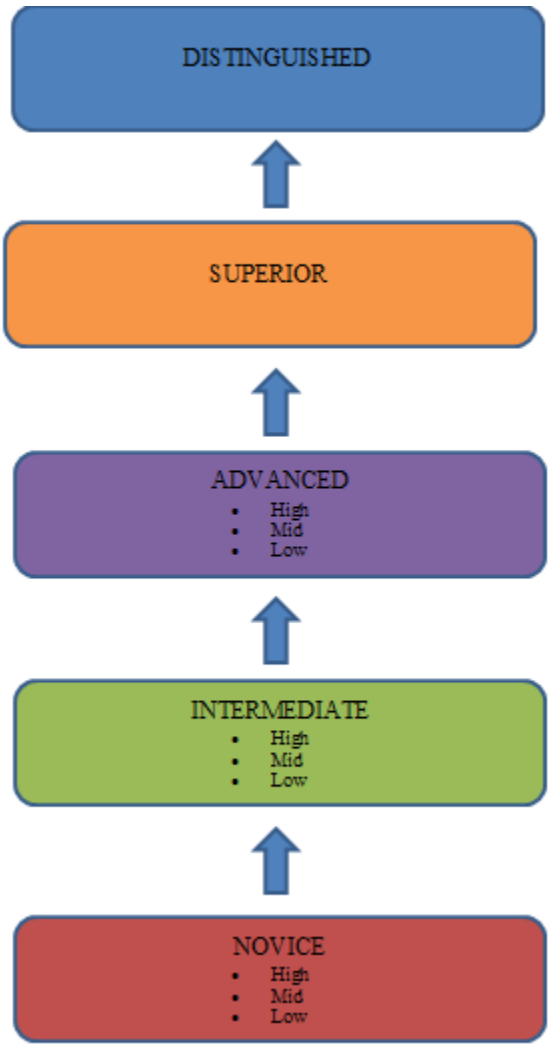
For the language other than English, the way to demonstrate proficiency and the level of proficiency required varies state to state (Black et al., 2020; Davin & Heineke, 2017). While the requirement for English varies for students based on home language status, the requirements for the language other than English are the same for both groups of students.

Proficiency Levels

The governing body of world language education in the United States, the American Council on the Teaching of Foreign Languages (ACTFL), has proficiency guidelines that describe what students are able to do in the language in the four language domains of reading, listening, speaking, and writing (ACTFL, 2012). Most states use these guidelines that describe proficiency along the lines of a continuing spectrum of language proficiency from a Novice level to a Distinguished level. Figure 1 demonstrates ACTFL's (2012) range of language proficiency.

Figure 1

ACTFL Language Proficiency Scale



Most states use these guidelines to set the proficiency requirement for SoBL attainment, although they vary in level chosen. States that use the ACTFL Proficiency Guidelines range from an Intermediate Low to an Advanced Low requirement (Black et al., 2020; Davin & Heineke, 2017). The majority (57%) of states use Intermediate Mid as the proficiency level required for the awarding of the SoBL (Black et al., 2020). The ACTFL (2012) described an Intermediate Mid level of proficiency in speaking as a person who can carry out a variety of conversations

that are predictable and uncomplicated. In writing, an Intermediate Mid level of proficiency is when individuals can communicate through simple sentences to meet needs that are practical (ACTFL, 2012). In reading, individuals can understand uncomplicated texts that are connected to topics that are basic and connected to common personal and social themes (ACTFL, 2012). For the fourth language domain, listening, individuals at an Intermediate Mid level can understand simple communication that is based around predictable themes (ACTFL, 2012). The second level of proficiency that is most common in states for the SoBL after Intermediate Mid is Intermediate High (32%), and very few states use Intermediate Low (5%) and even fewer (3%) use Advanced Low (Black et al., 2020).

Demonstrating Proficiency in the Language Other Than English

To demonstrate proficiency, states require either an assessment, the completion of coursework with a minimum GPA, portfolios, or a combination of these methods (Davin & Heineke, 2017). Similar to the English language requirement, Davin and Heineke (2017) found that the most common way to demonstrate proficiency of the language other than English was through recognized assessments. Assessments that are acceptable forms of evidence include proficiency-based exams such as the ACTFL Assessment of Performance Towards Proficiency in Language (AAPPL) and Avant Standards-based Measure of Proficiency (STAMP) 4s (Davin & Heineke, 2017). Other acceptable forms of evidence include the AP exam or the International Baccalaureate (IB) exam (Black et al., 2020; Davin & Heineke, 2017). States vary in the qualifying score required on those two types of exams (AP and IB), as is the case with the proficiency-based exams where states have indicated in SoBL policy the proficiency level (Intermediate Low to Advanced Low) needed (Black et al., 2020).

Six states (California, Colorado, Florida, Louisiana, North Carolina, and Texas) accept seat time for participating in a four year sequence of world language study in the same language with a minimum GPA as meeting the requirement for the proficiency in the language other than English (Davin & Heineke, 2017). Four states (Colorado, Illinois, New Mexico, and Oregon) allowed alternatives other than assessment and seat time, including portfolios and certification by Indigenous tribes, to provide more ways in which a student could earn the recognition if an assessment or course offering did not exist in that language (Davin & Heineke, 2017). New York may have the most flexible way to demonstrate proficiency by using a point system that allows for different forms of evidence to count varying points toward the final points needed for the recognition (Davin & Heineke, 2017; New York State Education Department, 2019).

Number of Awards

Unsurprisingly, the number of SoBLs awarded differs substantially nationwide. Some of this could be attributed to year of adoption, varying policy requirements, number of total students in the state, and differing levels of promotion and advocacy state to state. In the 2018-2019 school year, the number of SoBLs awarded varied by state, ranging from 14 in Vermont to 48,311 in California (Black et al., 2020). Following California, the state with the second highest number of SoBL earners was North Carolina with 9,584 earners and then Virginia with 7,046 earners (Black et al., 2020). Both California and North Carolina were the two top leaders in the awarding of the SoBL in the 2017-2018 school year as well (Chou, 2019). However, these two states were not the states that awarded the SoBL in the most languages. While California awarded the SoBL in 46 languages and North Carolina in 11 different languages, Washington awarded the SoBL in 69 languages (Black et al., 2020). In total, there were 108,199 SoBL

earners nationwide, an increase of 16,766 earners from the previous school year (Black et al., 2020; Chou, 2019).

Successes

To be sure, a visible success of the policy is the momentum it has gained in the last 10 years since its inception. Growing from one state to 42 plus the District of Columbia that have adopted the SoBL is an aspect of this policy that its originators can celebrate. An additional area of celebration is that "for the first time ever, all 50 states and the District of Columbia have or are working towards establishing a state Seal of Biliteracy" in the 2018-2019 school year in addition to the growing number of languages honored by the SoBL (Black et al., 2020, p. 4). States awarded the SoBL in 119 languages other than English in 2018-2019, almost doubling from the previous school year when states awarded the SoBL in 66 languages (Black et al., 2020; Chou, 2019). Beyond the sheer momentum of this policy, students have voiced the tangible and intangible benefits of this recognition.

Perceived Benefits

Another area of policy success lies in the ways in which the SoBL benefits and impacts students. To date, four studies have explored the perspectives of students as policy actors to understand what the SoBL means to them (Castro, 2020; Colomer & Chang-Bacon, 2020; Davin & Heineke, 2018; Hancock & Davin, 2020). The studies by Castro (2020), Davin and Heineke (2018), and Hancock and Davin (2020) included students currently in high school, while the study by Colomer and Chang-Bacon (2020) included students who had graduated from a dual language/immersion program and that were recipients of the SoBL. All four studies occurred in different states (i.e., California, Illinois, Minnesota, and Oregon) and included the voices of a diverse range of students. Taken collectively, these studies added greatly to the field by speaking

to students and providing a space for their stories to be heard. Before these studies, the perceived benefits of the SoBL for students were assumptions made on the part of the movement leaders, researchers, policy makers, and policy actors that did not include the important voice of students as policy actors.

Of much importance, each of these studies included diverse voices. Castro (2020) interviewed Latinx students while Colomer and Chang-Bacon (2020) interviewed both Latinx and White students. Hancock and Davin (2020) narrowed their study to only linguistically diverse students, including students with home languages such as Hmong, Arabic, and Somali. This study was important to the field as it included students who spoke languages that are less commonly taught languages (LCTL) and took place in Minnesota, a context that utilizes assessment to demonstrate world language proficiency and has worked relentlessly to increase the number of assessments available in these LCTLs, such as Hmong and Tamil, which previously did not exist before these efforts (Hancock & Davin, 2020; Okraski et al., 2020). The study by Davin and Heineke (2018) not only included linguistically diverse students like Hancock and Davin (2020) but also included dominant English speakers as well.

Across varying contexts and varying student backgrounds, students mentioned similar perceived benefits of the SoBL. In the study by Castro (2020) and the study by Davin and Heineke (2018), students perceived that the SoBL provided benefits in increasing their chances for college admissions. Set in a unique context where the SoBL affords college credit (Illinois and Minnesota), Davin and Heineke (2018) and Hancock and Davin (2020) found that students perceived a benefit of the SoBL to be college credit. These studies raised an important question for the field regarding the importance of tying college credit to the award. Students in three of the studies (Castro, 2020; Davin & Heineke, 2018; Hancock & Davin, 2020) reported a benefit

of the SoBL to be the validation it provided of their home language. Latinx students felt that the SoBL was linked to the building of family and community relationships (Castro, 2020; Colomer & Chang-Bacon, 2020). Lastly, a common finding across studies was that students perceived the SoBL as a potential future benefit for employment opportunities (Castro, 2020; Colomer & Chang-Bacon, 2020; Davin & Heineke, 2018; Hancock & Davin, 2020).

While students identified the multiple benefits that the SoBL affords, the lived experiences of the students in the study by Colomer and Chang-Bacon (2020) raised additional concerns regarding equity and the SoBL. Post-graduation, students in the study by Colomer and Chang-Bacon (2020) noted that benefit in future employment opportunities was distributed inequitably between students based on home language and ethnicity. One of the Latinx participants in Colomer and Chang-Bacon's (2020) study noted that the SoBL carried more weight for his White counterparts. Perhaps while students perceive that there will be future benefits with employment, this may not necessarily be the reality after graduation, or if it is, benefits may not be equal depending on a student's race, home language, or social class.

Challenges

To be sure, challenges exist amidst the successes of the SoBL, such as policy approval (Hancock & Davin, 2021; Heineke et al., 2018; Olsen, 2020), lack of extended sequences of study (Davin et al., 2018), the dissemination of information regarding the recognition (Davin et al., 2018), and a limited number of assessments in a multitude of languages (Davin & Heineke, 2017; Valdés, 2020).

Policy Approval

While there is a substantial number of states that adopted the policy, their paths to adoption look quite different (Heineke & Davin, 2020; Heineke et al., 2018). Approval of the

policy is not always an easy process, as witnessed in the case of California (Hancock & Davin, 2021; Olsen, 2020). Other states witnessed similar challenges and had to leave certain wording out of the policy to be sure the policy would pass, as was the case in Georgia, where policy writers left out any wording regarding MLs so that the SoBL would pass through their conservative legislature (Heineke et al., 2018). While most states approved the SoBL through the state legislature, other states did so through the state board of education that required "less political maneuvering to ensure passage" (Heineke et al., 2018, p. 4). Thus, the path to policy passage included specific efforts, depending on the context, to guarantee success.

Lack of Extended Sequences of Study

Listening to the voices of administrators and teachers, Davin et al. (2018) found that a limited access to extended sequences of world language study inhibited the number of students that could gain the proficiency level needed to earn the SoBL. In other words, many schools did not offer a sufficient number of articulated years of study in a world language for students to reach the required level of proficiency necessary to earn a SoBL. Teachers overwhelmingly felt that the lack of extended study was the biggest challenge in students earning the SoBL (Davin et al., 2018). In fact, even with extended sequences of study, if the courses are not driven by proficiency-based instruction, students may still not reach the state's desired proficiency level for the SoBL (Davin, 2020). Davin et al. (2014) found that, on average, students who participated in four consecutive years of a world language course not grounded in proficiency-based instruction did not reach an Intermediate Low level of proficiency, which is one sub level lower than the minimum required level for a SoBL in the majority of states. Further, research suggests that access to extended sequences of world language courses based on a students' ethnicity is unequal

(Anya, 2020; Baggett, 2016), which may further heighten inequities between students as related to students earning the SoBL.

Disseminating Information

Policy actors such as educators and district leaders have shared the challenges of disseminating information related to the SoBL (Davin et al., 2018). This challenge is heightened by limited dissemination of the recognition in the K-8 schooling experiences of students (Davin et al., 2018). Without earlier knowledge of the recognition, students may not plan courses accordingly when entering high school to allow for them to move through extended sequences of study. Since the majority of states (n=42) do not require world language study to graduate high school, and those that do require only two years (O'Rourke et al., 2016), students entering ninth grade need to know earlier than high school about the recognition.

Assessments in Less Commonly Taught Languages

Lastly, in states that only permit assessment as a means to demonstrate proficiency in the language other than English, concerns exist regarding the number of assessments available to students of LCTLs (Davin & Heineke, 2017). Moreover, Valdés (2020) poignantly highlighted that even if more assessments exist, the current problem of inequity will remain until these LCTLs are also taught in schools. Without formalized instruction, students of LCTLs may be at a disadvantage to develop language and literacy skills to the same extent that students in courses provided in schools are afforded. Another challenge noted by teachers in Illinois was that even in contexts where extended sequences of study existed, the courses offered were often only in Spanish (Davin et al., 2018). This leads to additional concerns regarding the prioritization of certain languages such as Spanish and French over others that are less commonly taught such as Hmong or Tamil.

Equity Concerns

Thus, arguably, the most notable challenge regarding the SoBL pertains to equitable implementation. As the SoBL gained in popularity, critiques arose in parallel with the acclaimed benefits. While the SoBL was initiated to shift ideologies from a deficit perspective of bilingualism and place value on the linguistic diversity of minoritized students (Hancock & Davin, 2021), Valdés (2020) contended that in its current form this recognition provides more benefits to native English speakers than for the group that spurred the initial grassroots movement. For example, Valdés (2020) highlighted concerns surrounding uneven implementation from state to state and limited access for students to participate in courses of LCTLs within schools.

In general, previous research that has critically examined the SoBL can be organized into two main categories: rhetorical analysis of the policy itself (Heineke et al., 2018; Schwedhelm & King, 2020) and an empirical analysis of implementation (Hancock et al., 2020; Subtirelu et al., 2019). I examine each of those in turn. I begin with the rhetorical analysis followed by the empirical analysis.

Rhetorical Analysis of Policy

Analyzing the SoBL through the perspective of MLs is critical to the field, yet only a handful of studies thus far have investigated the policy with such a purpose. Heineke et al. (2018) found that while the originators of the SoBL framed the recognition as benefiting and promoting the bilingualism and biliteracy of all students, only one third of the states that adopted the SoBL explicitly mentioned students labeled as ELs or native speakers as part of the intended purpose of this policy (Heineke et al., 2018). Heineke et al. (2018) raised the question of whether the states silent in regard to native speakers of languages other than English could be promoting

a form of elite bilingualism. In this context, Heineke et al. (2018) referred to the term *elite bilingualism* as the specific promotion of bilingualism for native English speakers but not for heritage speakers of the language other than English as it pertained to the awarding of the SoBL. The term *elite bilingualism*, first coined by Gaarder (as cited in Paulston, 1978), indicates a type of bilingualism that is by choice and pertains mostly to an elite upper class rather than *folk bilingualism*. According to Gaarder (as cited in Paulston, 1978), *folk bilingualism* describes bilingualism that is not by choice but rather out of a necessity. This necessity stems from a context in which one language may exert more power over another and an inherent struggle between ethnicities exists. While Heineke et al. (2018) focused on elite bilingualism as it pertains to native English speakers, the definition by Gaarder (as cited in Paulston, 1978) provides an additional layer of potential policy inequity by exploring how social class plays a role as well as the power struggle between languages.

To prevent the SoBL from increasing inequities between native and non-native English speakers, Heineke et al. (2018) provided critical recommendations for the field moving forward. Assessment as the sole means of demonstrating proficiency prioritizes some languages over others by legitimizing the languages in which assessments exist (Heineke et al., 2018). Thus, Heineke et al. (2018) recommended flexibility in the ways in which students can demonstrate proficiency, especially in the case of LCTLs where sequences of study in these languages do not exist in schools to prevent limiting access to the SoBL to MLs. Further, they recommended that expectations be the same for language proficiency in both English and the other language to ensure equity in the awarding of the SoBL. Subtirelu (2020) echoed similar concerns that promoters of the SoBL prioritize this recognition for native English speakers by placing a heavy focus on the connection between the SoBL and world language courses. Additionally, Subtirelu

(2020) highlighted the inequity that occurs in certain states by having less rigorous requirements for the language other than English than what is required for the English language. Lastly, Subtirelu (2020) cautioned that schools with more funding and resources are more likely to participate in the awarding of the SoBL, further privileging students along the lines of language, race, and class.

An additional critique through a conceptual lens of the SoBL is the ways in which the recognition is promoted through neoliberal discourse. Neoliberal ideologies promote free markets and trade, private property rights, and both individual and international competition (Harvey, 2007). Language, perceived as an exchangeable value and intricately linked as an asset in the marketplace, is commodified in a neoliberal environment (Heller, 2010). In a similar vein to the national findings of Subtirelu et al. (2019) regarding the ways in which the SoBL is promoted, Schwedhelm and King (2020) explored through policy documents, public discourse, and interviews how the SoBL was framed, shaped, and implemented in Minnesota. They raised concerns that policy actors, such as district administrators and educators, promoted the SoBL in Minnesota in a way that aligned with a neoliberal logic through the credentialing of language. Therefore, they concluded that the SoBL may be inflating a marketplace already overladen with credentials and individual competition.

Empirical Analysis of Implementation

To date, only two studies have examined empirically the equity of the awarding of SoBL in practice (Hancock et al., 2020; Subtirelu, 2019). In North Carolina, Hancock et al. (2020) investigated the convergence of equity in the awarding of the SoBL in conjunction with the offering of dual language programs. Dual language (DL) is a program model that instructs content through two languages and aims to encourage bilingualism, biliteracy, and sociocultural

competence (Howard et al., 2018). Thus, it represents an additive form of bilingual education in that students' first languages are not subtracted in school but instead fortified (Thomas & Collier, 2012). Hancock et al. (2020) explored whether extrinsic motivation by way of badges and awards from the state level had impacted the awarding of the SoBL and the implementation of DL programs statewide, with a specific focus on culturally and linguistically diverse students. Hancock et al. (2020) triangulated data from the linguistic diversity of districts with districts that had the highest number of DL programs and the highest number of SoBLs awarded. They found that while the state had provided varying levels of incentives that hinged on the inclusion of linguistically diverse students, districts with the highest percentage of linguistically diverse students were not the same districts that awarded the most SoBLs in combination with offering the largest number of DL programs. Thus, Hancock et al. (2020) recommended that districts with the highest number of linguistically diverse students seek ways to increase the number of DL programs offered and promotion of the SoBL among students. Of additional importance to the study by Hancock et al. (2020) was that they interviewed state officials from NCDPI who echoed the state's commitment to multilingualism. Further, the officials at the state level discussed their engagement in reflecting and brainstorming ways to increase the participation of MLs in the awarding of the SoBL.

While Hancock et al. (2020) examined the awarding of the SoBL through a language lens, Subtirelu et al. (2019) deepened their analysis to include language, race, and social class. Through a critical policy analysis, Subtirelu et al. (2019) explored the presences of Equity/Heritage and Global Human Capital discourses surrounding the SoBL. Equity/Heritage (EH) discourses focus educational language policy on eliminating the inequities that exist for marginalized students based on race, language, and class (Subtirelu et al., 2019). On the contrary,

Global Human Capital (GHC) focuses educational language policy heavily on individualized competition and language as useful in the global marketplace (Subtirelu et al., 2019). Analysis of SoBL policy and promotional materials at the national level illuminated that the awarding of the SoBL focused more on GHC discourses and thereby privileged the world language student over MLs (Subtirelu et al., 2019). This finding aligned with the analysis of the policy by Heineke et al. (2018) that questioned whether the SoBL was perhaps promoting a form of elite bilingualism.

In addition to policy and promotional discourse analysis, Subtirelu et al. (2019) also narrowed their context to the state of California and conducted a logistic regression to examine the equitable awarding of the SoBL in practice. To conduct the logistic regression, Subtirelu et al. (2019) utilized publicly available data from the California Department of Education to explore if public high schools that opted to participate in the awarding of the SoBL privileged students along the lines of race, language, and class. Subtirelu et al. (2019) used the variables of total school enrollment, percentage of students who qualified for free and reduced-price lunch, percentage of ELs, and racial demographics as predictors to conduct the logistic regression. They used the dichotomous outcome of schools opting to participate or not participate in the awarding of the SoBL. Approximately 70% of public high schools chose not to participate in the awarding of the SoBL in California in the 2015-2016 school year. However, since the schools that did participate in the awarding were schools with large numbers of students, approximately 64% of all students attended schools that opted to participate. The three variables of percentage of ELs, Indigenous, and Latinx students that were originally utilized for the logistic regression predictors were removed as they did not strengthen the model. In practice, Subtirelu et al. (2019) found that schools less likely to opt in to participate in the awarding of the SoBL were schools with higher numbers of Students of Color and from low socioeconomic households (Subtirelu et al., 2019).

The total student enrollment was the number one predictor for schools that opted in, which Subtirelu et al. (2019) explained may be the case as larger schools are more able to financially implement new programs and have more staffing available to assist with this implementation. The percentage of students who were fluent English-proficient was the second strongest predictor of whether a school participated. In that study, fluent English-proficient students were students whose primary home language was not English, but they were not classified as ELs. That is, the higher the percentage of fluent English-proficient students at the school, the more likely that school was to participate in the awarding of the SoBL. The third highest predictor was that of students who qualified for free and reduced-price lunch. This predictor was negatively associated with the awarding of the SoBL. This is to say that the higher numbers of students who qualified for free lunch, the lower the odds that a school participated. This was also the case with the percentage of students who were African American and Asian. However, the percentage of White students was positively associated with the awarding of the SoBL, meaning that the greater number of White students at the school, the higher the odds that the school participated in giving the recognition (Subtirelu et al., 2019). Thus, both Hancock et al. (2020) and Subtirelu et al. (2019) concluded that more work is needed to ensure equity in the awarding of the SoBL.

Theoretical Framework

This study is situated in the theoretical framework of CRT, which derived from critical legal studies that aimed to critique the current legal system in the United States and the proliferation of racism through the law (Bell, 1992, 1995). Bell (1992, 1995) contended that racism is entrenched in U.S. society and is reinforced by the legal system through laws and policies. Additionally, CRT asserts that racism intersects with other forms of discrimination and that property rights are central to power in the United States, with whiteness being a form of

property rights (Bell, 1995). Those dedicated to CRT move a step beyond that of critiquing to consider ways in which to ensure redemption (Bell, 1995). While there is breadth in the work done by CRT theorists (i.e. Delgado, Matsuda, Crenshaw), there are two common themes that centralize the entirety of the work (Crenshaw et al., 1995). These two commonalities are: (1) the understanding of the ways in which People of Color have been oppressed and how such oppressive behaviors have been maintained through the legal system over the course of U.S. history, and (2) the desire to change this connection between the law and racism (Crenshaw et al., 1995).

While CRT originated in the field of law, Ladson-Billings and Tate (1995) extended CRT into the field of education and provided an analytic frame through which to understand how schools work and the ways in which racism manifests itself in the institution of schooling. There are three central tenets to CRT in the field of education: (1) race is still a critical factor in equity in the United States, (2) property rights, not human rights, are the dominating force at the foundation of U.S. society, and (3) inequity in society and within schools is most visible at this intersection between race and property rights (Ladson-Billings & Tate, 1995). Education and law are products of larger societal institutions and warrant critical analysis in the ways they reinforce discrimination or work to remove it.

The examination of educational policy through CRT and its tenet of intersectionality provides a unique lens in which to understand systemic racism in schooling by establishing the ways in which language and race are inseparable. According to Valdés (2020), “ideologies of language, race, class, and identity inform the entire process of language curricularization and directly influence language education” (p. 184). Situated in North Carolina, Lopez (2007) utilized CRT and LatCrit—an offshoot of CRT that focuses specifically on the Latinx

population—to explore the lived experiences of undocumented, immigrant Latinx youth in high school and their access to higher education. Lopez (2007) concluded that due to restrictive educational policy of students having to pay out of state tuition, this limited their access to post-secondary opportunities. The lived experiences of the Latinx youth in this study illuminated that the concept of meritocracy extended to students' citizenship status, a status which would account for them earning or not earning the right to higher education. Even more disconcerting was the discovery of a district level administrator's deficit-framed perspective that equated a student's English as a second language (ESL) status to that of incapability of success in higher education. Thus, taken collectively, the findings illuminated how the intersectionality of race, language, and immigration status all played a role in the discriminatory practices that surrounded Latinx youth in North Carolina schools (Lopez, 2007).

Other researchers (Malsbary, 2014; Patel, 2013) have found similar trends in the relationship between race and language. In California, Malsbary (2014) examined the race-language relationship as it pertained to language educational policy through exploring the lived experiences of EL-designated students in high school. Malsbary (2014) emphasized that language and race are connected, arguing that language processes "do not just *evoke* race but are irrevocably bound to racialized bodies, so much that it is impossible to see where language ideologies begin and racialization ideologies end," relating this to Gramsci's notion of *hegemony* (p. 376). According to Gramsci, *hegemony* is where the dominant group proliferates its cultural and political beliefs throughout a society to the point that individuals begin to accept these ideologies as normal (Lemert, 2017). Thus, the institution of schooling normalizes the speaking of only English to the point that society as a whole fails to question why. Students labeled as ELs in Malsbary's (2014) study resounded similar sentiments of those in the study by Patel (2013).

Students expressed that they felt to be successful in U.S. society that they needed to conform to English-only policies and negate their home language and ultimately their true identity (Malsbary, 2014; Patel, 2013). Yet, the students found that assimilation did not guarantee passage into the status they sought (Patel, 2013). Malsbary (2014) argued that "inequitable language policy is a form of institutionalized racism" (p. 376).

Analysis of the SoBL through the lens of how race, language, and social class intersect in potentially complex and discriminatory ways is critical. Of importance to the current study, the linguistically diverse students in the study by Hancock and Davin (2020) revealed that the SoBL validated their home languages in the school setting and that before this policy the implicit message they received was that their home language was of no importance in school. However, while the students were relieved to have a recognition that placed value on their home language in Minnesota (Hancock & Davin, 2020), Subtirelu et al. (2019) found that the recognition was inequitably awarded in California, a state that has a long history of racialized, discriminatory language policy. Thus, as these studies illustrate, the SoBL has the potential to both liberate and to oppress depending on the policy actors at play and the context in which it is awarded that determine the rules around who and how a student qualifies. For this reason, this policy should be carefully scrutinized to ensure it lives up to its potential to liberate.

The SoBL is fitting to study through the lens of CRT and CRT's extension into education as it is simultaneously a law and an educational policy, providing a large breadth of ways to interpret how this recognition could either reinforce discrimination or emancipate students from discrimination. The field of language researchers has yet to reach an agreed upon conclusion of which side the SoBL resides. Perhaps that is because the SoBL is still in many ways in its infancy and varies by context. This study sought to understand how race intersects with language

and social class in the awarding of the SoBL in North Carolina. While the original movement leaders were dedicated to equity, this intention does not ensure that inequities in U.S. legal practices has not infiltrated a policy that was originally intended to empower MLs. To be sure, it is crucial to analyze the policy through varying lenses, including the lens of CRT.

Conclusion

In this chapter, I explored the origins and implementation to date of the SoBL. Additionally, I presented the successes and challenges of the SoBL since its initiation. Rising from the challenges, recent studies demonstrated the need to further analyze the equitable awarding of the SoBL in future research. Thus, the study sought to explore the awarding of the SoBL in North Carolina through the lens of race, language, and social class. This line of research will aid the field in the critical reflection necessary surrounding this language education policy to ensure that the SoBL does not evolve into a tool used to increase inequity between students along the lines of race, language, and social class rather than a tool used to increase equity—as was the vision of the original movement collaborators.

CHAPTER 3: METHODOLOGY

This quantitative study examined key factors related to the awarding of the SoBL in North Carolina. In this study, I focused on the intersectionality of race with other factors, such as language and social class, which can deepen the level of discrimination in the field of education (Bell, 1995; Solorzano & Yosso, 2001). Through the lens of CRT, the following research questions guided this study:

1) What are the demographic characteristics of the North Carolina Public School districts that do and do not award the Seal of Biliteracy?

2) What is the relationship between the awarding of the Seal of Biliteracy in public school districts in North Carolina and race, language, and class?

3) Within North Carolina Public School districts that award the Seal of Biliteracy, what is the relationship between the rate of graduating seniors awarded the Seal of Biliteracy and race, language, and class?

Context

I purposefully chose the location of North Carolina as the site of this study due to the increasing linguistic diversity that exists within the state (NCDPI, 2020) and the fact that it is a national leader in the awarding of the SoBL (Black et al., 2020; Chou, 2019). Unlike California where districts have the option to participate (CDE, 2021; Subtirelu et al, 2019), North Carolina is a state where policy mandates that all districts participate in the SoBL (North Carolina State Board of Education, 2019). Further, similar to California (CDE, 2021), North Carolina also has an additional requirement for MLs to earn the SoBL (NCDPI, n.d.-b). This provided a unique perspective into the awarding of the SoBL that researchers in the field have yet to investigate.

Further, state leaders in North Carolina have demonstrated a commitment to valuing and promoting linguistic diversity across the state by way of increasing DL programs and the

awarding of the SoBL (Hancock et al., 2020). However, intent may or may not be actualized in practice. Therefore, further examining the awarding of the SoBL in practice through the lens of race, language, and class provided an additional lens through which to analyze the recognition in a state that incentivizes and promotes multilingualism at the state level and whose state officials are actively seeking ways to increase equity in the awarding of the SoBL for MLs (Hancock et al., 2020).

Statewide School Demographics

There are over one million students who attend public schools in North Carolina (North Carolina State Board of Education, 2016). While the percentage of students who identify as Black/African American and White has declined since 2011 in schools across North Carolina, the percentage of students who identify as Asian and Latinx has increased (NCDPI, n.d.-a). Table 1 demonstrates the statewide student demographics for public schools in North Carolina in the 2015-2016 school year, the last date at which such data are available.

Table 1

North Carolina Statewide School Demographics

	Public Schools
Total Enrollment Grades K-8	1,008,419
Total Enrollment Grades 9-12	451,433
% Asian	3.0
% Black or African American	25.7
% Indigenous	1.3
% Latinx	16.5
% Other	3.8
% Pacific Islander	0.1
% White	49.5

Note. Data retrieved from the North Carolina State Board of Education (2016). Indigenous: American Indian. Latinx: Hispanic or Latino.

Linguistic Diversity

In the fall of 2000, North Carolina had 44,165 students labeled as English language learners (NCES, 2020). By the fall of 2017, this group of students had increased to 105,801 (NCES, 2020). Thus, this student population more than doubled, accounting for 3.4% of the total student population in 2000 versus 6.9% in 2017 (NCES, 2020). This number increased again, with 128,060 students labeled as English learners (ELs) in the fall of 2019, totaling 8% of the student population (NCDPI, 2020). Further, as of May 2020, 262,100 students, a total of 17% of the student population, spoke a language other than English in the home (NCDPI, 2020). North Carolina is a diverse state, with students reporting at least 339 languages other than English spoken in the home and with the largest percentage of students (14%) indicating this language was Spanish (NCDPI, 2020).

Nuevo New South

North Carolina is considered part of what is now known as the Nuevo New South (Mohl, 2003). While much of the country saw shifts in immigration movement in the 1990s with more Latinx immigrants extending to areas beyond California, North Carolina was affected more than most (Mohl, 2003). This is due to multiple factors, including the 1994 North American Free Trade Agreement (NAFTA) that promoted the movement of both capital and labor, the extensive growth of poultry processing plants that sought cheap labor, and the lack of unions in this state (Mohl, 2003). In 1990, the Latinx population only accounted for 1.2% of the total population in North Carolina (U.S. Census Bureau, 1993). By 2000, the Latinx population had risen to 4.7% of the total population in North Carolina, with some counties having between 6.0-24.9% of the total population being individuals of Latinx origin (U.S. Census Bureau, 2001). This was notable as North Carolina at this point was considered a non-traditional state where the Latinx population

resided (U.S. Census Bureau, 2001). Yet by 2010, the Latinx population accounted for 8.4% of the total state population, with this shift in population change being 111.1% (U.S. Census Bureau, 2011). This was the sixth largest change in the nation (U.S. Census Bureau, 2011).

North Carolina and the Seal of Biliteracy

North Carolina was the ninth state to adopt the SoBL (Seal of Biliteracy, 2021). The SoBL, termed the Global Languages Endorsement (GLE) in North Carolina, is one of five high school endorsements that the state gives to graduating seniors (NCDPI, n.d.-b). The State Board of Education approved the SoBL/GLE in January 2015, with the graduating class of 2015 being the first class eligible for the recognition (NCDPI, n.d.-b). This decision followed a Global Education Task Force Report on how to get students ready for a globalized society (NCDPI, 2013). This report gave specific recommendations for statewide commitments to meet this goal, one of which included the recognition for districts, schools, and educators that demonstrated fidelity to this vision (NCDPI, 2013). The recommendations from the Task Force in conjunction with the already existing diploma endorsements and the growing momentum of the SoBL nationwide provided a perfect moment for the introduction of the SoBL policy at the state level (Hancock et al., 2020). North Carolina utilized extrinsic motivators through the use of awards and a badging system at the student, teacher, school, and district level that were impactful in the increase of DL programs and the awarding of the SoBL/GLE statewide (Hancock et al., 2020). The number of SoBL/GLEs awarded increased by a total of 7,712, which was a 388% increase in the awarding the SoBL/GLE from the year of inception in 2015 to 2018 (Hancock et al., 2020). However, the districts with the most linguistic diversity were not necessarily the districts that offered the most DL programs or that awarded the most SoBL/GLEs (Hancock et al., 2020). State officials felt there was a need to reflect upon and make decisions that would increase the

number of culturally and linguistically diverse students that earn the SoBL/GLE (Hancock et al., 2020).

Requirements

In North Carolina, students are required to meet certain criteria to demonstrate proficiency in the world language and English. On the NCDPI (n.d.-b) SoBL/GLE website, the terminology *world language* is utilized for the languages other than English. In addition, students that are labeled EL also have a third requirement.

English Requirement. To meet the English requirement for the SoBL in North Carolina, students must complete the four required English Language Arts high school courses and maintain an unweighted grade point average (GPA) of 2.5 or higher (NCDPI, n.d.-b). Thus, in North Carolina, the English requirement is met through what Davin and Heineke (2017) referred to as *seat time*, meaning that by participating in a course, a student meets the requirement without the additional need for an assessment. North Carolina is one of six states that utilize seat time as meeting a requirement for the English proficiency nationwide (Davin & Heineke, 2017).

Multilingual Learner Requirement. Students labeled as ELs are required to complete an additional requirement to earn the SoBL (NCDPI, n.d-b). This means that MLs must meet the English requirement and world language requirement as outlined in the policy with an additional component needed on top of these two requirements. In addition to meeting the same requirements as native English speakers, the policy states that students labeled as ELs must also meet "developing" proficiency according to the proficiency scale of WIDA in all four language domains through the state-approved assessment (North Carolina State Board of Education, 2019). The State Board of Education approved the SoBL/GLE policy during the time of the WIDA 2012 version of standards. In the WIDA (2012) edition of language standards, the four

language domains included: listening, speaking, reading, and writing. Additionally, there were six levels of performance descriptions: level 1 *Entering*, level 2 *Emerging*, level 3 *Developing*, level 4 *Expanding*, level 5 *Bridging*, and level 6 *Reaching* (WIDA, 2012). To meet *developing*, a student must be able to process through listening and reading, for example, extended sentences that relate to varying content areas that exhibit grammatical complexity (WIDA, 2012). Further, to meet *developing*, a student must be able to produce in speaking and writing sentences related to content areas that are short and simple but that also exhibit some grammatical complexity, including using vocabulary that has multiple meanings (WIDA, 2012).

While the State Board of Education approved the SoBL/GLE policy during the time of the WIDA 2012 version of standards, a more recent version of WIDA now exists (WIDA, 2020). Wording of the policy is not specific to the version of WIDA, meaning now that a new WIDA version of standards exists, students earning the GLE would follow the latest version of WIDA. The WIDA (2020) elaborated on the four language domains, focusing more on interpretive and expressive modes of communication that include viewing and representing in addition to listening, reading, speaking, and writing. The newest version also describes proficiency level descriptors by grade level clusters to expand upon the differences of language use within primary and secondary settings. Despite certain changes, the newest version of WIDA (2020) remains aligned to the performance definitions from the 2012 edition.

World Language Requirement. To meet the requirement for proficiency in the world language for the SoBL, students must demonstrate proficiency at the level of Intermediate Low through either coursework or assessment (NCDPI, n.d.-b). According to the ACTFL (2012) proficiency guidelines, a student at an Intermediate Low proficiency level in speaking can communicate on a limited basis, in short sentences, and where conversation is based upon

predictable topics and more at the survival level. Further, a speaker's first language is still influential, with errors common in relation to pronunciation and syntax (ACTFL, 2012). In regard to writing, the student is still limited to short sentences based upon predictable content and personal information (ACTFL, 2012). When listening and reading, learners at the Intermediate Low level can understand at times short sentences that are related to personal or social experiences, and misunderstandings and gaps in comprehension still may occur (ACTFL, 2012). According to ACTFL (2015), certain professions align with certain proficiency levels. For example, someone with an Intermediate Mid level of proficiency could work as a receptionist or a cashier, while someone with an Advanced High proficiency would be able to function in the occupation of financial advisor or physician (ACTFL, 2015). However, the lowest levels of language proficiency (Intermediate Low, Novice High, Novice Mid, and Novice Low) do not have a profession that correlates in the workplace due to the limited ability to communicate (ACTFL, 2015).

Data Collection

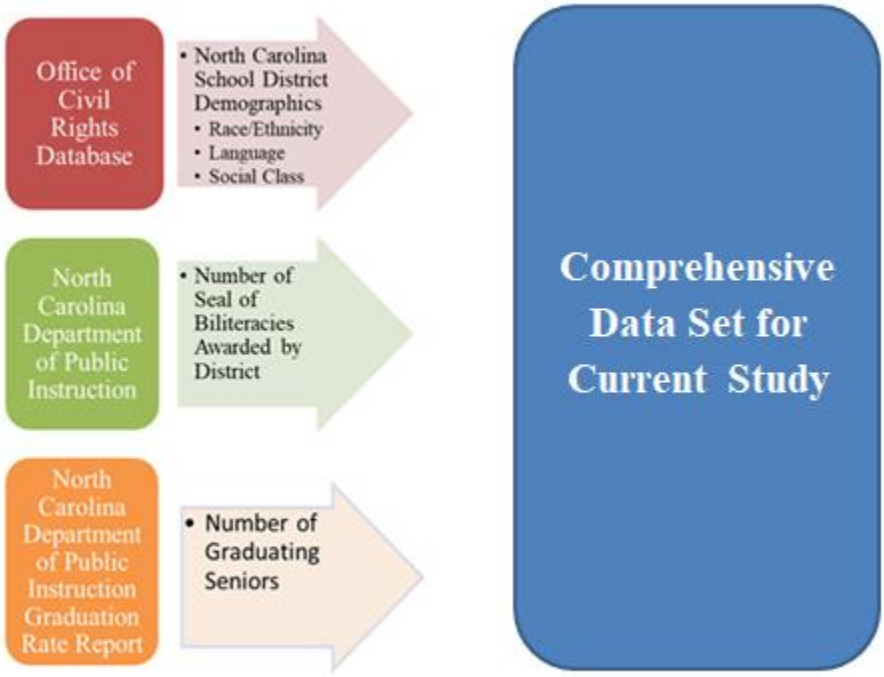
To collect the data for this study, I utilized three separate data sources. First, I used the district demographic data publicly available through the Office of Civil Rights (OCR) Database (2020). The most recent data were for the 2017-2018 school year. I specifically searched for districts in North Carolina and downloaded the data spreadsheet for the entire state of North Carolina, with demographics listed for each district. It included: district, state, total number of students, and percentage of students who are Indigenous (labeled American Indian by OCR), Asian, Hawaiian, African American or Black (labeled Black by OCR), Latinx (labeled Hispanic by OCR), White, Two or More Races, MLs (labeled EL by OCR), IDEA, and 504. As I specifically focused the study on race, language, and social class, I only utilized the racial/ethnic

and language demographics for variables and did not include the data for IDEA and 504. Additionally, I included social class as a variable in the study. Since the data regarding the percentage of students eligible for free and reduced-price lunch were not included in the data that were downloadable in the spreadsheet, I individually searched district by district in OCR (2020) to collect these data to add to the compiled dataset.

For the second dataset, I explored the NCDPI (n.d.-b) website that was dedicated to the GLE/SoBL. This site provided data on the total number of GLEs/SoBLs awarded by district for the 2015-2019 school years. Because SoBL/GLE data previously had to be inputted by hand and were not automated until the 2017-2018 school year, I focused specifically on that year, because it aligned with the most recent data available from OCR (2020), providing alignment between data sets. Additionally, selecting data from a time that the state automated the GLE increased the validity of the numbers as it included numbers that were automated by the state system and did not rely on individual input. The NCDPI GLE/SoBL website (n.d.-b) included a dataset with 115 public school districts. Thus, there were a total of 115 public school districts that were included in the original sample of this current study. For the third dataset, I also used the publicly available NCDPI Graduation Rate Report (2018) to gather the data of the number of graduating seniors for each of the 115 school districts. In conclusion, Figure 2 illustrates the steps I took to collect the data and combine into one comprehensive dataset.

Figure 2

Data Collection Steps



Research Design

Research Question 1

To answer the first research question regarding the demographic characteristics of the North Carolina Public School districts that do and do not award the SoBL, I utilized R (R Development Core Team, 2021) to produce descriptive statistics. Descriptive statistics are primarily used when a researcher wants to describe the data (Ware et al., 2013). Descriptive statistics in this study provided an overview of whether there are any key attributes that distinguish the districts that award the SoBL over those districts that do not.

I split the data set into two separate data sets for the research question. I organized all the districts that do award the SoBL into one Excel worksheet and the districts that do not award the

SoBL into another Excel worksheet. The data that I included in these two new data sets were the student demographics based on race, language, and social class. I also included the total number of students per district. Then, I converted these Excel worksheets into two comma separated values files (.csv) to import into R (R Development Core Team, 2021).

By running descriptive statistics in R (R Development Core Team, 2021), I was able to summarize the data of each set with regard to the variables of race, social class, and language. Additionally, other variables surfaced as distinguishing factors between districts that did and did not award the SoBL, such as the total number of students. In the results section, I include a table that displays the descriptive statistics of districts that did award the SoBL and those districts that did not. This provides the ability to compare the two data sets by demographics.

Research Question 2

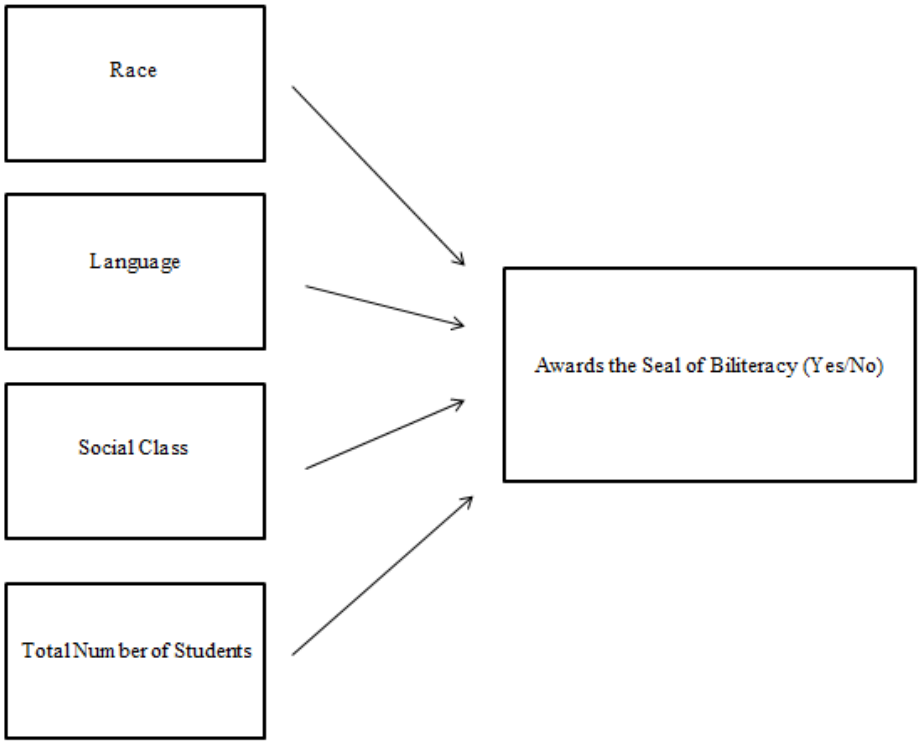
To answer the second research question regarding the equitable awarding of the SoBL, I utilized R (R Development Core Team, 2021) to conduct a logistic regression. This was the best statistical analysis to run as it specifically examined an outcome that is dichotomous and included independent variables that are both continuous and categorical (Baguley, 2012; Ware et al., 2013). For the purpose of this study, the analysis focused on whether the awarding or non-awarding of the SoBL was related to certain variables. The dependent variable was the district awarding of the SoBL (yes/no). The number of awards by district was used to construct a new dichotomous variable with one indicating a district awarded the SoBL and a zero indicating the district did not award the SoBL.

For my independent variables, I examined the variables of race, language, and socioeconomic status and determined which variables were the most related to increasing or decreasing the likelihood or probability of a school district awarding the SoBL. To analyze the

variable of race, I used the racial/ethnic demographics of students provided by OCR (2020) for each district. To analyze the variable of language, I used the percentage of students that were designated as EL by OCR (2020) in each district. To analyze the variable of socioeconomic status, I examined the percentage of students who qualified for Free and Reduced-price Lunch (FRPL) at the district level. I additionally included the variable of district total student enrollment as this was the number one predictor in a school opting to participate in the awarding of the SoBL in the study by Subtirelu et al. (2019) in California. Further, this variable contributed a possible additional point of discussion in this present study. In one perspective, schools with larger numbers of students may be localized in urban areas, which historically have received unequal funding compared to other districts in wealthier areas (Darling-Hammond, 2010; Tyack & Cuban, 1995). In another perspective, schools with larger numbers of students may be more easily able to offer extended sequences of world language study. For states that utilize seat time as an option for the awarding of the SoBL, such as North Carolina, this may inadvertently prioritize students who are enrolled in world language courses over heritage speakers of languages other than English whose home language is not offered through coursework in the schools (Davin, 2020). Figure 3 presents a conceptual model of the logistic regression analysis used for Research Question 2.

Figure 3

Analytic Model



To determine the final model of the logistic regression, fit statistics, theory, and previous literature (Subtirelu et al., 2019) drove my analysis. In the initial model, I included all race variables available from OCR (2020), the language variable of percentage of students labeled as EL in OCR (2020), the percentage of students who qualified for FRPL in OCR (2020) for the class variable, and the total number of students in the district available in OCR (2020) for my independent variables. Early in data analysis, I utilized graphical methods to examine the relationship between all the variables. Additionally, I tested model assumptions to arrive at the final model. Throughout the model identification process, I examined the p-values for coefficients of each variable, model residual deviance, the model pseudo r-squared, Bayesian

information criterion (BIC), and Akaike information criterion (AIC) to arrive at the final model. I preferred models with lower AIC, BIC, and residual deviance values. It was also important to examine which pseudo r-squared was higher. For the p-value, I analyzed which independent variable coefficients were statistically significant with a p-value of <0.05 while controlling for the other variables in the model. I used a chi-square test to examine the differences between nested models when needed.

Coefficients from the logistic regression indicate change in log odds or change in the likelihood of the outcome. For example, I examined if one of the variable coefficients increased the likelihood of a district presenting the recognition and if this variable coefficient was statistically significant. By using a logistic regression, I was also able to analyze by how much the likelihood of awarding the SoBL increased. By the same token, the logistic regression allowed me to analyze if a variable decreased the likelihood of giving the SoBL and, if so, by how much. I also was able to explain if this variable coefficient was statistically significant. The results of the logistic regression are presented in Chapter 4.

Research Question 3

To answer the third research question regarding the relationship between the rate of graduating seniors awarded the Seal of Biliteracy and the variables of race, language, and class within the North Carolina Public School districts that awarded the SoBL, I utilized R (R Development Core Team, 2021) to conduct a multiple linear regression. A multiple linear regression, or multiple regression, utilizes a model that incorporates multiple independent variables to determine if these variables are able to predict or explain the outcome of a dependent variable (Baguley, 2012; Ware et al., 2013). Thus, in this study, I examined if the independent variables of race, language, class, and total student population were related to the rate of

graduating seniors with the SoBL. Rate of graduating seniors with the SoBL was chosen for the dependent variable as it depicted a clearer picture of the awardees of the SoBL district by district over total numbers of students awarded. For example, a district may have a larger number of recipients over another district but the percentage of students receiving the recognition may be higher in the district with lower numbers. Additionally, previous literature (Davin & Heineke, 2017) has examined the rate of students earning the SoBL state to state rather than comparing by total numbers.

I utilized data from three different data sets to execute the multiple regression. To collect the data for the independent variables, I used the OCR (2020) database for the demographics of race, language, and social class, as well as the total student population. To collect the data for the dependent variable in the multiple regression, I used two different data sets: (1) the NCDPI (n.d.-b) data on the number of SoBL earners per district and (2) the NCDPI Graduation Report (2018). The 2017-2018 North Carolina 4-Year Cohort Graduation Rate Report (NCDPI, 2018) provided the percentage of graduating seniors per district, and additionally broke the data into each high school per district and provided the numerator and denominator for graduating seniors. In the data set that provided the numerator and denominator used to calculate the percentage of graduating seniors per high school, I utilized the numerator to calculate the total number of students who graduated per high school in each district. Once I had the total number of students who graduated per district, I inserted these numbers into my larger data set that included the district names, the number of SoBLs awarded, and the demographic information of each district including race, language, and social class. This data set was initially in an Excel worksheet. Once I inputted the number of graduating seniors into the Excel worksheet, I created an additional column for the rate of students awarded the SoBL per district. To accomplish this, I applied a

formula in this column to divide the number of SoBL earners per district by the overall number of graduating seniors. This formula provided me with the rate of students that were awarded the SoBL per district. I then converted the Excel worksheet into a csv file to import into R (R Development Core Team, 2021).

As with the logistic regression, model fit statistics, theory, and previous literature (Davin & Heineke, 2017) drove my model selection. Thus, at the onset, I included all the race variables, the language variable, the social class variable, and the total number of students in the district for my independent variables and the rate for my dependent variable. I began by using graphical methods to examine the relationship between all the variables. This gave a good starting point to examine if a relationship existed between any of the variables in the data set. The graphical methods demonstrated if any variable coefficients were negatively correlated, positively correlated, or if no relationship existed between variables.

During the model identification process, I examined the p-value of the variable coefficients, the residual deviance, the r-squared, the adjusted r-squared, the BIC, and the AIC. I compared which AIC, BIC, and residual deviance was lower. Examination of which r-squared and adjusted r-squared was higher was also included in model selection. For the p-value, I analyzed which independent variable coefficients were statistically significant with a p-value of <0.05 while controlling for the other variables in the model. I used a chi-square test to examine the differences between nested models when needed. I also tested model assumptions to arrive at the final model.

By running a multiple linear regression, I was able to conclude which independent variables were related to the rate of graduating seniors recognized with the SoBL and to what extent these variable coefficients related to the outcome of the rate of SoBLs awarded. The

multiple regression provided a different level of analysis as it relates to the awarding of the SoBL in North Carolina by analyzing specifically which variables relate to the increase or decrease of the rate of graduating seniors with the SoBL. The results from the multiple linear regression are presented in Chapter 4.

Conclusion

In this chapter, I gave a detailed description of the methods of this study. I provided details surrounding the context of the study, including state student demographics and the changes in linguistic diversity in the state. Additionally, I described the SoBL in the context of North Carolina, including the qualifications for the recognition. Lastly, I explained the data and methods I used for each of the three research questions.

CHAPTER 4: RESULTS

The purpose of this study was to explore the awarding of the SoBL in North Carolina, with a specific focus on how the variables of race, language, and social class relate to the awarding of the SoBL. The results section is organized around the following three research questions:

1) What are the demographic characteristics of the North Carolina Public School districts that do and do not award the Seal of Biliteracy?

2) What is the relationship between the awarding of the Seal of Biliteracy in public school districts in North Carolina and race, language, and class?

3) Within North Carolina Public School districts that award the Seal of Biliteracy, what is the relationship between the rate of graduating seniors awarded the Seal of Biliteracy and race, language, and class?

Findings and Analysis

Research Question 1

The first research question posed was: What are the demographic characteristics of the North Carolina Public School districts that do and do not award the Seal of Biliteracy? To answer this question, I ran descriptive statistics on both the districts that did and did not award the SoBL in the 2017-2018 school year. Results are displayed in Table 2.

Table 2

Descriptive Statistics for Predictors of the Awarding of the Seal of Biliteracy in North Carolina School Districts (N=115)

	Awarding the Seal of Biliteracy (*N*=92)		Not Awarding the Seal of Biliteracy (*N*=23)	
	Mean	SD	Mean	SD
Total Enrollment	15,174.66	24,607.76	2,672.43	2,230.71
# of Students Graduated	1,060.99	1,632.15	173.78	141.15
# of Students with SoBL	94.66	259.24	0.00	0.00
% Asian	1.70	2.17	0.49	0.41
% Black/African American	20.23	16.93	38.86	29.39
% Hawaiian	0.03	0.11	0.01	0.03
% Indigenous	1.14	4.76	2.92	5.77
% Latinx	16.66	8.69	10.70	9.99
% Two or More	4.54	1.68	3.54	1.94
% White	55.61	20.39	43.41	26.23
% FRPL	62.69	20.31	81.41	20.98
% MLs	5.82	3.52	3.73	3.86

Note. Data retrieved from the North Carolina Department of Public Instruction (2018, 2019) and the Office of Civil Rights Data Collection (2020). FRPL: Free and Reduced-price Lunch. Indigenous: American Indian. Latinx: Hispanic or Latino. MLs: Multilingual learners, students labeled as English Learners.

Student Enrollment and Number of Students Graduating

On preliminary analysis, using descriptive statistics, the most notable difference between the districts that did and did not award the SoBL appeared to be in regard to total students. There appeared to be a substantial difference in the total number of students enrolled and the total number of students who graduated in the districts that awarded the SoBL in comparison to those that did not. For example, the mean total enrollment for districts that awarded the SoBL was 15,175 students while the mean total enrollment for districts that did not award the SoBL was 2,672, creating a difference of 12,503 in the mean of total enrollment.

Figure 4 provides a histogram of the total number of students enrolled in the districts that did award the SoBL. To better visualize the deviation in the total student enrollment across districts, Figure 4 shows both the mean and the median. While the mean for the districts that

awarded the SoBL was 15,175 students, the median was 8,140. In Figure 4, the histogram is divided into bins of 5,000. The histogram demonstrates that the majority of the districts had fewer than 50,000 students, with five districts being extremely large in comparison to the others. The district with the least number of students had a total student enrollment of 630, while the largest district had a total student enrollment of 162,339.

Figure 4

Histogram of Total Number of Students in Districts that Award the Seal of Biliteracy

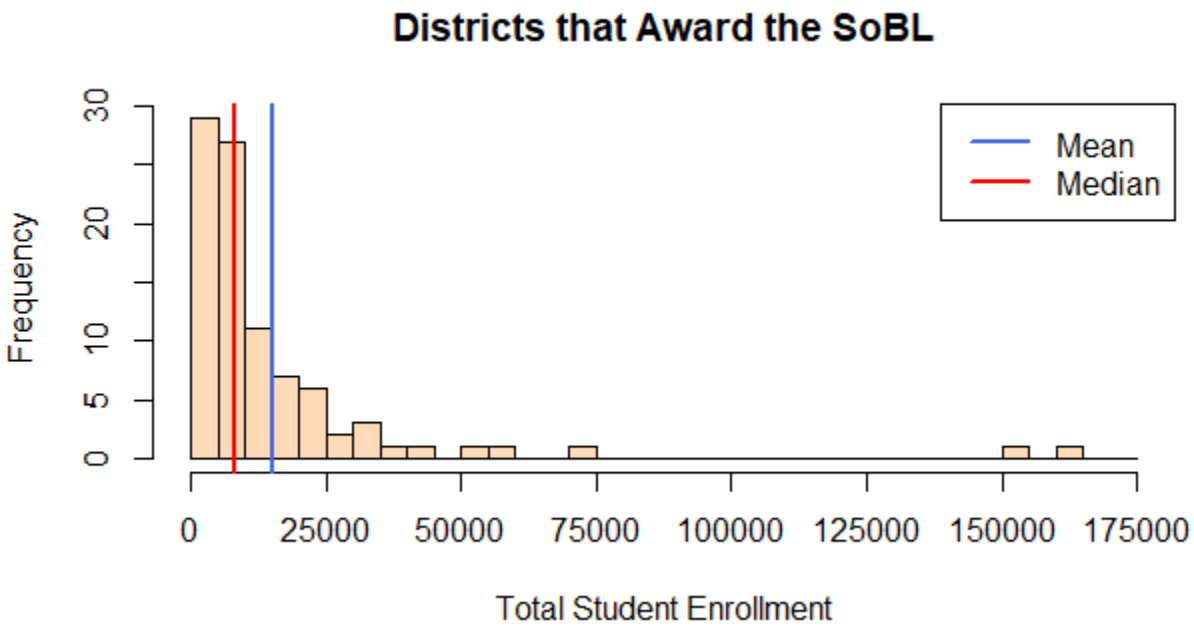
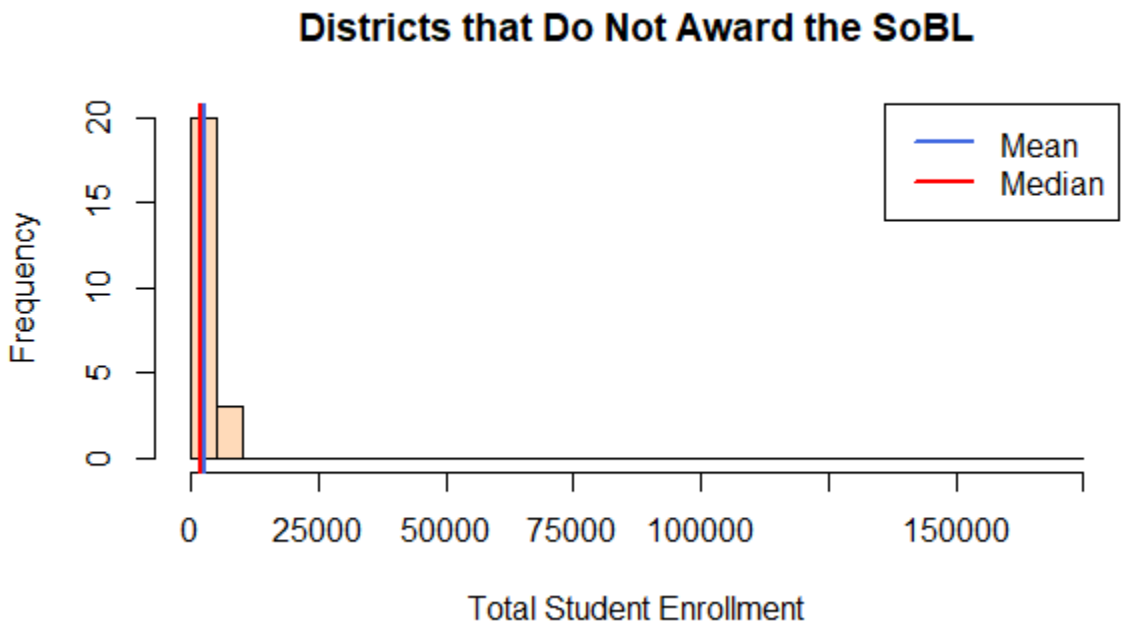


Figure 5 provides a histogram of the total number of students enrolled in the districts that did not award the SoBL. As with Figure 4, Figure 5 displays both the mean and the median, and the histogram is divided into bins of 5,000. In the districts that did not award the SoBL, the median and the mean were almost identical. The mean was 2,672 and the median was 2,074. The range for total student enrollment was 602 as the lowest student enrollment and 9,955 as the highest student enrollment. Figure 4 and Figure 5 have histograms on the same x-axis and with

the same bins to provide a better visualization of the differences between districts that do and do not award the district.

Figure 5

Histogram of Total Number of Students in Districts that Do Not Award the Seal of Biliteracy



This apparent difference also existed in the area of the number of students who graduated in the districts. For example, in the districts that awarded the SoBL, the mean total number of students that graduated was 1,061, while the mean total number of students who graduated was 174 in the districts that did not award the SoBL. This is a difference of 887 in the mean total number of students who graduated. When examining the median of the number of students that graduated in both types of districts, the difference was not as extreme; however, there was still a notable difference. For example, the median for the number of students that graduated in districts that awarded the SoBL was 563 and the median in districts that did not award the SoBL was 120. This was still a difference of 443 students. Figure 6 displays the total number of students that graduated from districts that did award the SoBL, including both the mean and median. Figure 7

displays the total number of students that graduated from districts that did not award the SoBL, also including the mean and median. Both figures are on the same x-axis with the same number of bins to aid in visualizing the differences in the spread of the number of students that graduated. In Figure 6 and Figure 7, the bins are in increments of 200.

Figure 6

Histogram of Total Number of Students that Graduated from Districts that Did Award the Seal of Biliteracy

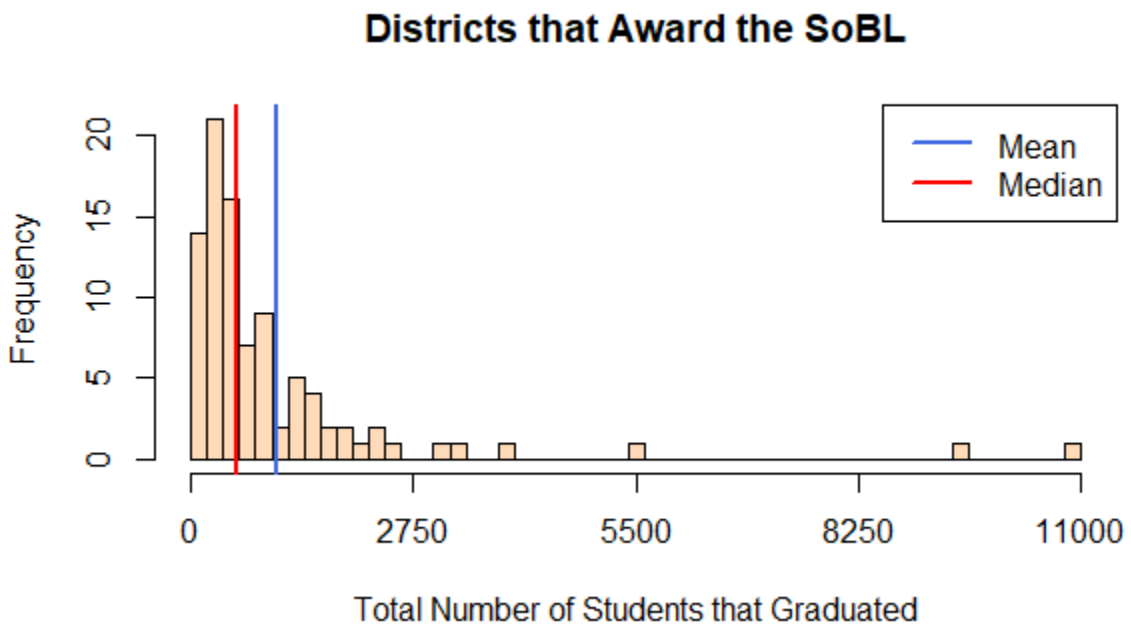
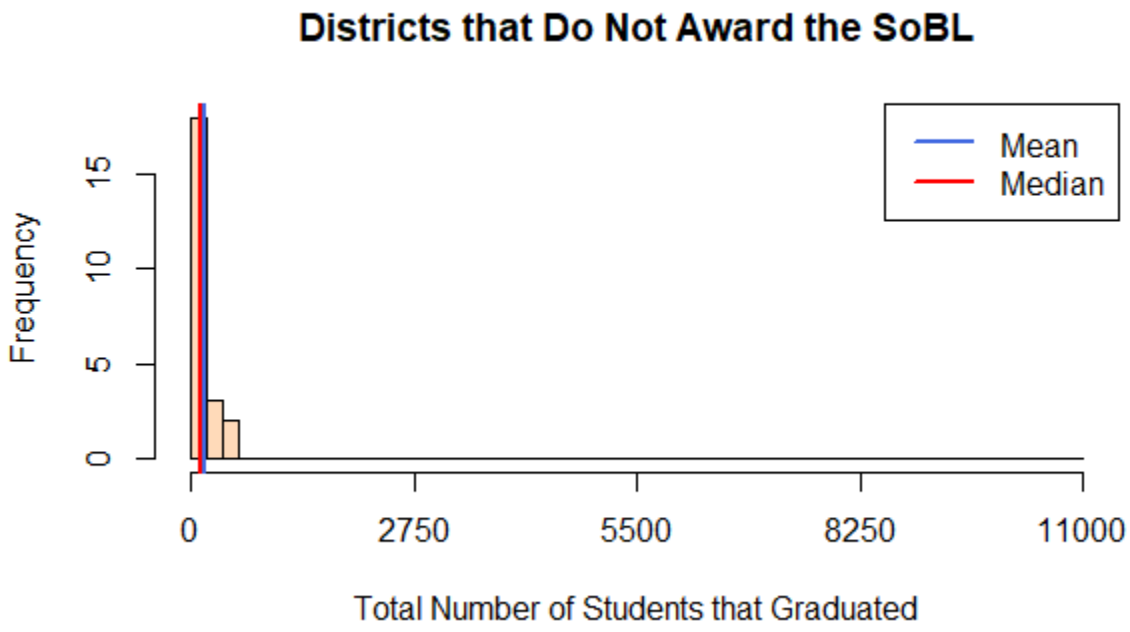


Figure 7

Histogram of Total Number of Students that Graduated from Districts that Did Not Award the Seal of Biliteracy

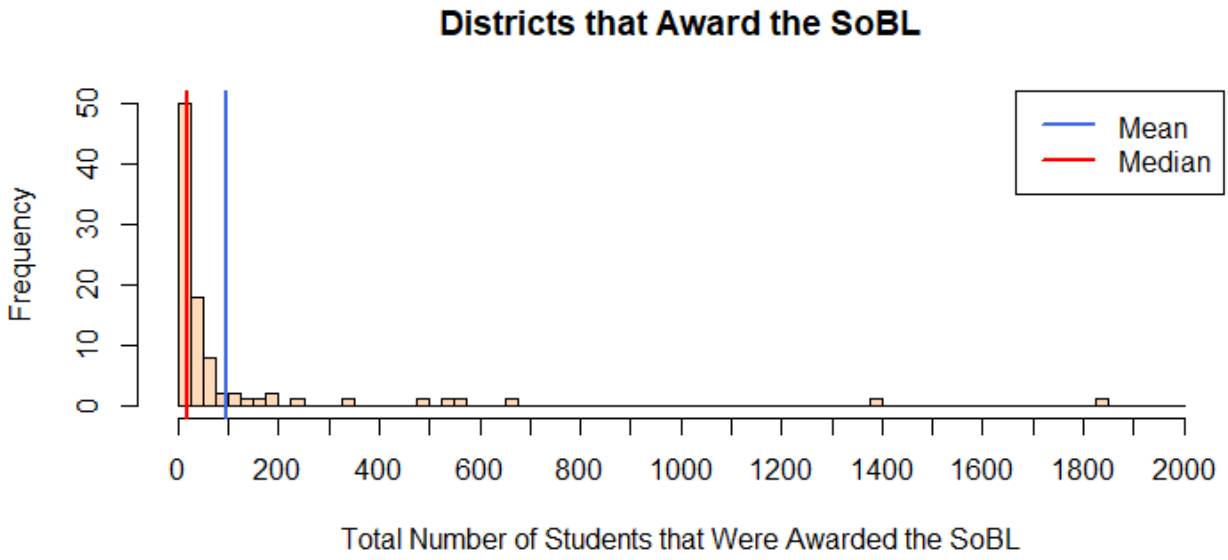


All districts that did not award the SoBL had fewer than 10,000 students enrolled district-wide and fewer than 600 students graduating in 2018. The five largest districts in the state, which are notable in Figure 4, all awarded the SoBL and all had over 50,000 total students enrolled. These results indicate that the size of the district is important in the awarding of the SoBL in North Carolina. Additionally, in those five largest districts, the percentage of students who were White was less than 46% of the total student population, meaning that the majority population of the largest districts in the state consisted of Students of Color. This may imply that as the total student enrollment increases in a district, the percentage of Students of Color may also increase. These results indicate that the combination of the variables of race and total student enrollment may potentially relate to the awarding or non-awarding of the SoBL in North Carolina.

Lastly, within the districts that awarded the SoBL, the number of students who received the SoBL also varied substantially. Figure 8 provides a visual representation of this variation with a histogram of the number of students awarded the SoBL within the districts that did give the award. The figure is in bins of 25 and includes the mean (95) and the median (19).

Figure 8

Histogram of Number of Students Awarded the Seal of Biliteracy in Districts that Award the Seal of Biliteracy



These results indicate that there is a large variation in the number of awards given district by district across the state.

Race

Differences existed between the racial demographics of students who are in the districts that awarded the SoBL and those that did not. Most notably, there were differences regarding the racial/ethnic demographics of the percentage of students who were Asian, Black/African American, Indigenous, and White. More than triple a larger percentage of students who are Asian and almost a 10% larger population of White students were enrolled in the districts that

awarded the SoBL. As displayed in Table 2, the mean of the total percentage of students who are Asian is 1.70, while it is much smaller in the districts that do not award the SoBL (0.49%). In the districts that awarded the SoBL, the percentage of White students is 56% in comparison to 43% in the districts that did not award the SoBL. In districts that did not award the SoBL, there are almost 20% more Black/African American students (39% in comparison to 20%) and almost triple the percentage of students who are Indigenous (3% in comparison to 1%).

Class

Another notable difference related to the percentage of students who qualified for Free and Reduced-price Lunch (FRPL). In the districts that did award the SoBL, the mean percentage of students that qualified for FRPL was 63%, which was much closer to the statewide FRPL mean of 66%. This was in sharp contrast to the districts that did not award the SoBL. As displayed in Table 2, the mean percentage of students who qualified for FRPL in the districts that did not award the SoBL was 81%. This was almost a 20% difference in the mean of students that qualified for FRPL, with a much lower percentage of this variable in the districts that did award the SoBL. Additionally, over half of the districts that did not award the SoBL had over 90% of students that qualified for FRPL. These results indicate that the socioeconomic status of the district may be important in the awarding of the SoBL.

Language

A difference existed between the percentage of students that are MLs in districts that did award the SoBL and those that did not. More MLs were present in the districts that awarded the SoBL. As shown in Table 2, districts that awarded the SoBL had 5.82% MLs in comparison to 3.73 % MLs in the districts that did not award the SoBL. Thus, there were two percent more

students on average in the districts that awarded the SoBL than those that did not. This difference in percentage of students could be important considering the mean for MLs statewide was 5%.

Research Question 2

The second research question explored: What is the relationship between the awarding of the Seal of Biliteracy in public school districts in North Carolina and race, language, and class? To best explore this question, I ran a logistic regression utilizing the district awarding of the SoBL (yes/no) as my dependent variable. I utilized the variables of race, language, socioeconomic status, and district total student population for my independent variables to examine which variable coefficients were related to the increased or decreased likelihood of the awarding the SoBL.

In the beginning, as theory and previous literature (Subtirelu et al., 2019) drove data analysis, I included all of the racial/ethnic variables, the language variable, the class variable, and total student enrollment in the model. However, when inspecting closely the variables, I removed the race/ethnic variable of Hawaiian due to the large number of districts that had zero for the percentage of students that were Hawaiian. Additionally due to multicollinearity, I removed the race/ethnic variables of Latinx and White. Multicollinearity is when a correlation exists between two or more independent variables and where issues more than likely arise when the correlation is above 0.7 (Baguley, 2012).

The assumption of no multicollinearity was violated in the model that included all racial/ethnic variables (with the exception of the Hawaiian variable that had been removed due to the large number of zero percentages). Table 3 displays this violation with the variance inflation factor (VIF) being over 10 for seven of the nine variables (Baguley, 2012).

Table 3

Logistic Regression: Multicollinearity of Model with All Variables Included

Variable	Variance Inflation Factor (VIF)
Total Student Enrollment	1.25
Asian	27.43
Black/African American	51528.92
Indigenous	2115.99
Latinx	7633.73
Two or More	345.29
White	53731.07
FRPL	3.08
ML	10.80

Note. FRPL: Free and Reduced-price Lunch. MLs: Multilingual Learners

Thus, I examined which coefficients were highly correlated and could be the cause for the multicollinearity issues. Latinx was strongly correlated with the ML variable. The variables of Latinx and ML had a Pearson correlation coefficient of 0.92, and this correlation was statistically significant. This means that as the percentage of Latinx students increased, the percentage of MLs also increased. This is not surprising considering that 81.1% of students labeled as ELs were Latinx in 2018 (OCR, 2018). Since the ML variable was the only variable that represented the language portion of the model, I left ML in as a variable and removed Latinx as a variable to ensure I avoided multicollinearity issues. Additionally, the variables of White and African American/Black and White and FRPL were highly correlated and led to multicollinearity issues. The variables of African American/Black and White had a Pearson correlation coefficient of -0.88, with this correlation being statistically significant. This is to say that as the percentage of White students increased in a district, the percentage of African American/Black students decreased and vice versa. The variables of FRPL and White had a Pearson correlation coefficient of -0.65, with this correlation being statistically significant. This is to say that as the percentage of White students increased in a district, the percentage of students eligible for FRPL decreased

and vice versa. Since the White variable was highly correlated with two other variables, I removed the White variable to avoid issues with multicollinearity. Table 4 illustrates how the assumption of no multicollinearity was now met with the VIF being below 10 for all of the variables (Baguley, 2012).

Table 4

Logistic Regression: No Multicollinearity with Variables of Latinx and White Removed

Variable	Variance Inflation Factor (VIF)
Total Student Enrollment	1.16
Asian	1.22
Black/African American	2.64
Indigenous	1.26
Two or More	1.12
FRPL	2.82
ML	1.60

Note. FRPL: Free and Reduced-price Lunch. MLs: Multilingual Learners

Thus, the final model included the variables of race/ethnicity (Asian, Black/African American, Indigenous, and Two or More), the variable of language (ML), the variable of class (FRPL), and the variable of total student enrollment. The assumption of no multicollinearity was met with this final model, as were the other assumptions for a logistic regression, including no extreme outliers or missing data. The p-value for the model chi-square statistic revealed that the model significantly differed from the null model. This indicates a meaningful relationship between the combination of the variables of race, language, class, and total student enrollment and the awarding of the SoBL. The extent of this relationship is captured using McFadden's pseudo-R^2 which was 0.48. McFadden's pseudo-R^2 describes the improvement of the current model over the null model (Hemmert et al., 2018). The use of McFadden's pseudo-R^2 is appropriate as the sample size is under 200, and further, a McFadden's pseudo-R^2 value of 0.48 indicates that this is an excellent model fit (Hemmert et al., 2018).

The results of the logistic regression are displayed in Table 5.

Table 5

Logistic Regression Predicting Probability of District Awarding the Seal of Biliteracy

	Coefficient	Std. Error	z	*p*
Intercept	-0.018	1.502	-0.012	0.990
Asian	1.286	0.720	1.786	0.074
Black/African American	-0.030	0.023	-1.324	0.185
Indigenous	-0.143	0.082	-1.732	0.083
Two or More	0.028	0.185	0.152	0.880
FRPL	-0.009	0.025	-0.337	0.736
MLs	-0.062	0.121	-0.516	0.606
Total Enrollment	0.001	0.000	3.219	0.001 *

Note. Data retrieved from the North Carolina Department of Public Instruction (2019) and the Office of Civil Rights Data Collection (2020). FRPL: Free and Reduced-price Lunch. MLs: Multilingual Learners. *p < 0.05

The model results demonstrated that after controlling for total student enrollment, that race, class, and language were not significant predictors of whether districts did or did not award the SoBL in North Carolina. The variable of student enrollment was positively and significantly related to the awarding of the SoBL. This is to say that the larger the total student population, the more likely a district was to award the SoBL. This relationship between total student enrollment and the awarding of the SoBL was statistically significant.

Research Question 3

The third research question was: Within North Carolina Public School districts that award the Seal of Biliteracy, what is the relationship between the rate of graduating seniors awarded the Seal of Biliteracy and race, language, and class? To answer this question, I ran a multiple linear regression to examine the relationship between the rate of students graduating with the SoBL and the variables of race, language, and class. The original data set only included the districts that awarded the SoBL (*n=92*). The dependent variable utilized in the multiple linear regression was

the rate of graduating seniors who received the SoBL recognition. The independent variables analyzed included the variables of race, language, class, and total student enrollment.

As with the logistic regression, previous literature (Davin & Heineke, 2017; Subtirelu et al., 2019) and theory drove data analysis in the multiple linear regression. Therefore, at the onset of data analysis, I included all race/ethnic variables, the language variable, the class variable and total student enrollment. When examining more closely the data, as with the logistic regression model, it was necessary to remove the race variable of Hawaiian due to many districts having a zero percentage of Hawaiian students.

To ensure that the assumptions were met for a multiple linear regression, it became necessary to remove the race variables of Latinx and White to avoid issues with multicollinearity. Like the logistic regression analysis in the second research question, multicollinearity was a problem in the multiple linear regression model as well. Table 6 displays how the VIF was over 10 for six of the nine variables (Baguley, 2012).

Table 6

Multiple Linear Regression: Multicollinearity with All Variables Included

Variable	Variance Inflation Factor (VIF)
Total Student Enrollment	1.63
Asian	327.02
Black/African American	20424.95
Indigenous	1621.62
Latinx	5362.54
Two or More	214.06
White	29594.91
FRPL	2.19
ML	9.67

Note. FRPL: Free and Reduced-price Lunch. MLs: Multilingual Learners.

The variables of Latinx and ML were positively and strongly correlated with a statistically significant Pearson correlation coefficient of 0.92. That is to say that as the percentage of Latinx students increased, the percentage of MLs also increased. Again, this was not surprising considering that 81.1% of students labeled as ELs were Latinx in 2018 (OCR, 2018). Just as with the logistic regression model, I kept the ML variable in the model as it was the only variable that represented the language portion of the model and removed the Latinx variable to avoid issues with multicollinearity. As was the case with the logistic regression model, the variables of White and African American/Black were negatively and strongly correlated with a statistically significant Pearson correlation coefficient of -0.86. In other words, as the percentage of White students increased in a district, the percentage of African American/Black students decreased and vice versa. Therefore, the race variable of White was removed from the multiple linear regression model just as in the logistic regression model to avoid issues with multicollinearity and to additionally maintain consistency between which variables were included in both research question number two and research question number three. Table 7 illustrates how the assumption of no multicollinearity was now met with the VIF being below 10 for all of the variables (Baguley, 2012).

Table 7

Multiple Linear Regression: No Multicollinearity with Variables of Latinx and White Removed

Variable	Variance Inflation Factor (VIF)
Total Student Enrollment	2.05
Asian	2.18
Black/African American	1.73
Indigenous	1.12
Two or More	1.14
FRPL	2.06
ML	1.32

Note. FRPL: Free and Reduced-price Lunch. MLs: Multilingual Learners

Additionally, to meet the assumptions of multiple linear regression, it was important to remove one district from the data set to eliminate extreme and influential outliers. During data analysis and checking of assumptions, one district stood out as an extreme and influential outlier. Two distinct characteristics made the district unique—the rate of the awarding of the SoBL was 64% and the percentage of Asian students was 14%. Both of these percentages were much larger than the mean of those two variables in other districts. The outlier district had a Cook's Distance of 5.88, which was considerably larger than all other Cook's Distances, with the next closed value being 0.13. The Cook's Distance value of 5.88 and the sizeable difference between this value and the other values indicated that this district had a considerable influence on the results (Ware et al., 2013). Due to the extent of influence on the model performance, it was necessary to remove this district from the data set to provide a more accurate analysis of the variables that influenced the rate of the awarding of the SoBL. By removing the outlier district, all Cook's Distances were well below 1.0 and within similar ranges. Thus, once this district was removed from the data set, the assumption of no extreme and influential outliers was met. All other assumptions such as normality and homoscedasticity were also met.

The results of the final model indicated that the multiple regression model was significantly better than the null model at predicting the rate of graduating seniors recognized with the SoBL. The adjusted R^2 value of the model, which is less biased than R^2 in a multiple linear regression and a better estimate for the population (Baguley, 2012; Montgomery et al., 2012), was 0.28. This means that this model is able to explain about 28% of variance in the rate of the awarding of the SoBL using language, race, class, and total student enrollment.

Table 8 displays the results of the multiple linear regression.

Table 8

Multiple Linear Regression Results of Rate of Students Awarded the Seal of Biliteracy

	B	*SE*	*t*	*p*
Intercept	6.48	2.03	3.20	0.00*
Asian	0.41	0.35	1.16	0.25
Black/African American	0.00	0.32	0.13	0.90
Indigenous	-0.07	0.09	-0.73	0.47
Two or More	0.02	0.26	0.08	0.94
FRPL	-0.07	0.03	-2.43	0.02*
MLs	0.27	0.13	2.02	0.05*
Total Enrollment	0.00	0.00	1.67	0.10

Note. Data retrieved from the North Carolina Department of Public Instruction (2018, 2019) and the Office of Civil Rights Data Collection (2020). Indigenous: American Indian. FRPL: Free and Reduced-price Lunch. MLs: Multilingual Learners. *$p < 0.05$

The multiple linear regression revealed that class and language, while controlling for race (i.e. Asian, Black/African American, Indigenous, Two or More) and total student enrollment, were related to the rate of students that received the SoBL in North Carolina. Conversely, the multiple linear regression showed that race and total student enrollment were not significantly related to the rate of students awarded the SoBL while controlling for the variables of language and class. The results demonstrated that while controlling for the variables of race, language, and total student enrollment that the rate of the awarding of the SoBL related to the percentage of students that qualified for FRPL. The relationship was statistically significant as well as negatively related. In other words, as the percentage of students who qualified for FRPL increased in a district that awarded the SoBL, the rate of the students awarded the SoBL decreased. The results also demonstrated that while controlling for the variables of race, class, and total student enrollment that the rate of the awarding of the SoBL related to the percentage of ML students. The relationship was statistically significant as well as positively related. In other

words, as the percentage of ML students increased in a district that awarded the SoBL, the rate of the students awarded the SoBL also increased.

Conclusion

The purpose of this study was to determine if the variables of race, language, class, and total student enrollment influenced the awarding of the SoBL in North Carolina. This chapter presented the results from the study. Results from the logistic regression demonstrated that race, language, and class were not significantly related to whether a district awarded the SoBL or not. The results did reveal, however, that total student enrollment was significantly related. Results showed that the larger the size of the district, the more likely that this district awarded the SoBL. Within the districts that did award the SoBL, race was not significantly related to the rate of seniors awarded the SoBL. This was the case with total student enrollment as well. However, the multiple linear regression did show that language and class were significantly related to the rate of seniors awarded the SoBL. The results showed that the rate of seniors awarded the SoBL increased when the percentage of students who qualified for FRPL decreased in the district and the percentage of ML students increased. Discussion surrounding these findings is presented in Chapter 5.

CHAPTER 5: DISCUSSION

This study aimed to explore the awarding of the SoBL in North Carolina through the theoretical perspective of CRT. Specifically, the study explored equity in the awarding of the SoBL through the intersectionality of race, language, and class. This chapter discusses the findings related to the research questions:

1) What are the demographic characteristics of the North Carolina Public School districts that do and do not award the Seal of Biliteracy?

2) What is the relationship between the awarding of the Seal of Biliteracy in public school districts in North Carolina and race, language, and class?

3) Within North Carolina Public School districts that award the Seal of Biliteracy, what is the relationship between the rate of graduating seniors awarded the Seal of Biliteracy and race, language, and class?

The major findings are discussed through the viewpoint of CRT and how these findings relate to the previous literature surrounding the SoBL topic. This chapter begins by discussing the key findings from research question one and research question two that both described and analyzed the differences between the districts that do and do not award the SoBL. Next, the chapter discusses the findings of research question three that specifically examined what variables influenced the rate of awarding the SoBL within the districts that do award the SoBL. After discussing the findings, I describe the limitations of the current study and detail what future research should explore. Finally, this chapter concludes with recommendations for the future.

Awarding vs. Non-Awarding Districts

The results of the first research question revealed that demographic differences did exist between the districts that did and did not award the SoBL while the results of the second research question revealed that student total enrollment was a uniquely important factor in this outcome.

Guided by the tenet of intersectionality in CRT, the second research question specifically examined if the combination of language, race, and class related to the awarding of the SoBL. While controlling for race, language, and class, total student enrollment was significantly related to whether a district awarded the SoBL in North Carolina. The results involving total student enrollment mirror the findings of Subtirelu et al. (2019) who found total student enrollment to be the number one predictor for whether a district opted to participate in the awarding of the SoBL or not in California.

The finding that total student enrollment has a significant amount of unique predictive power as to whether a district was able to award the SoBL is perhaps unsurprising because North Carolina allows for seat time to meet the world language requirement for earning the SoBL. This pathway could prioritize districts with larger student enrollment. Despite the fact that there are three pathways available, 93% of students earn the SoBL through coursework (NCDPI, 2021). This is in contrast to the national trend that utilizes assessment as the most common form of meeting the world language requirement for the SoBL (Davin & Heineke, 2017). Larger schools have more students, giving them a greater ability to offer extended sequences of world language coursework. If there are not enough students enrolled in a course, smaller schools may not be able to offer upper-level courses. This is due to the possibility of overcrowding other courses and that schools may set a minimum student enrollment for a course to be offered. This may explain why 20% of districts were still not able to award the SoBL, despite the fact that the policy was written in a way to provide access to all. This possible barrier of not having higher level courses available aligns with Davin et al. (2018) who found that teachers perceived that the lack of extended world language study was the biggest challenge in students being awarded the SoBL.

Unlike total student enrollment, race, language, and class, while controlling for the combination of these variables, were not uniquely related to whether a district awarded the SoBL in North Carolina. This finding contrasts with the study of Subtirelu et al. (2019) who found that the intersection of race, language, and class had an impact on students' access to the awarding of the SoBL in California. In the study by Subtirelu et al. (2019), schools that opted to participate in the SoBL had higher numbers of White students and lower numbers of Students of Color.

While findings from research question two showed that race when controlling for language, class, and total student enrollment was not uniquely related to whether a district awarded the SoBL, it is worth noting that research question one did uncover that the five largest districts in the state for student enrollment were racially diverse. These large districts also awarded the SoBL. Additionally, each of these five school districts had less than 46% of students who were White enrolled in the school. This may imply that as student population increases in large districts, diversity of non-White students also increases. This may also imply that diverse students have greater access to the SoBL and extended sequences of study by way of attending schools with large student enrollment.

The results from the current study were surprising considering both the findings from research question one and that previous scholars have noted that race can intersect with other factors that can enhance oppression (Bell, 1995) and that the intersection of race, language, and class could be influential in the realm of language education (Valdés, 2020). Further, race was a factor in the awarding of the SoBL in California (Subtirelu et al., 2019). Through the lens of CRT, this finding could be due to the wording of the SoBL policy in regard to district choice in North Carolina. There is a noteworthy difference between the contexts of California and North Carolina as it pertains to the SoBL policy itself. This difference is critical as it relates to CRT,

which asserts that discrimination has been maintained and reinforced by the law (Bell, 1995; Crenshaw et. al, 1995). In California, due to policy, participation in the awarding of the SoBL is voluntary (CDE, 2021), allowing for some districts to award the SoBL while others choose to not. In fact, almost 70% of high schools did not participate in the awarding of the SoBL in California in the 2015-2016 school year at the time of the previous study by Subtirelu et al. (2019). California is not the only state policy to dictate that the awarding of the SoBL is voluntary (Davin & Heineke, 2017). Davin and Heineke (2017) reported that out of the 26 contexts that were part of their study, that 25 of those contexts had policies that made participating in the SoBL optional. Yet, North Carolina attempts to provide access to all students across the state to receive the recognition by requiring SoBL implementation in all districts (North Carolina State Board of Education, 2019). Through the lens of CRT, by way of policy, access has been denied from the onset to some students while it has been granted to others. In essence, through the viewpoint of CRT, North Carolina may be removing barriers to equity and access by mandating that all students eligible for the SoBL receive the endorsement across the state.

Within Districts that Award the SoBL

In response to the third research question, findings in the study revealed that, within districts that awarded the SoBL, class and language were significantly related to the rate of seniors graduating with the SoBL. This is important because it provides a deeper layer of analysis regarding the variation of the rate of seniors who receive the recognition within the districts that do award the SoBL.

Race

There is no evidence from the current study that race, while controlling for the variables of language, class, and total student enrollment, is uniquely predictive of the rate of seniors awarded the SoBL in North Carolina. This finding was surprising as race was a predictor in the awarding of the SoBL in California, specifically that districts with a higher percentage of Students of Color were less likely to participate in the awarding of the SoBL (Subtirelu et al., 2019). Therefore, it is promising that in the current study that race was not found to be significantly related to the awarding of the SoBL in North Carolina. This may imply that inequity in the awarding of the SoBL may not be a nationwide trend.

However, through the lens of CRT, these results and possible implications should be reported with caution. While the findings are promising, a deeper analysis is warranted at the school level in future studies. Historically race has shaped education in the South (Anderson, 1988) and continues to play a fundamental role in schooling today (Ladson-Billings & Tate, 1995). In the perspective of CRT, property rights are at the core of power in the United States, and whiteness is a form of property rights (Bell, 1995). In the realm of education, Ladson-Billings and Tate (1995) asserted that this has most recently manifested in the form of "the absolute right to exclude" Black students from honors and advanced placement courses (p. 60). In North Carolina, world language courses beginning at Level 3 and on are considered honors courses (NCDPI, 2019), and Baggett (2016) found that race was a factor in which students were enrolled in higher level world language classes in North Carolina.

Thus, it becomes essential that future studies investigate which students are actually receiving the recognition. As 93% of students currently receive the recognition by way of coursework (NCDPI, 2021), it is crucial to examine which students are actually enrolled in and have access to higher level world language courses in high schools across the state presently. It is

critical to consider both access and enrollment because even if diverse students have access to higher level courses, this does not guarantee that they are indeed enrolled in these courses (Anya, 2020; Baggett, 2016). This deeper level of examination was beyond the scope of the current study yet is needed in future research.

Class

Class was negatively related to the awarding of the SoBL in North Carolina. Within districts that awarded the SoBL, the rate of seniors earning a SoBL decreased as the percentage of students qualifying for FRPL increased. The awarding of the SoBL was also negatively associated with FRPL in the study by Subtirelu et al. (2019) and thus confirms previous findings.

This finding is perhaps not surprising considering that financial disparities in schools across the state continue to widen between counties (Public School Forum of North Carolina, 2020). Subtirelu (2020) noted that schools with more funding and resources may be connected with the increased ability to award the SoBL. Through the lens of CRT, the assertion that property rights are central to power and affect inequities in schooling (Bell, 1995; Ladson-Billings & Tate, 1995) is reaffirmed with class being significant in the awarding of the SoBL. Ladson-Billings and Tate (1995) explained that "property relates to education in explicit and implicit ways" (p. 53). Implicitly property rights have manifested into the curriculum through an assumed right to "intellectual property" where certain students have the right to certain classes and tracks while others do not (Ladson-Billings & Tate, 1995, p. 54). Explicitly, property taxes are linked to the local funding of schools and have further led to the perception that "those with 'better' property are entitled to 'better' schools" (Ladson-Billings & Tate, 1995, pp. 53-54).

The wealth gap in schools across North Carolina could be a critical factor in the rate of awarding of the SoBL in North Carolina, and the findings from this study reaffirm the assertion

by Ladson-Billings and Tate (1995) that property rights affect schooling. In North Carolina, public education is funded both at the state level (e.g. instructional types of expenses) and at the local level (e.g. capital forms of expenses) (Public School Forum of North Carolina, 2020). However, budget cuts that occurred during the Great Recession at the state level have remained, leading local agencies to have to find more funding for schools in regard to expenses that relate to instruction (Public School Forum of North Carolina, 2020). As a result, inequities have deepened between districts in recent years (Public School Forum of North Carolina, 2020). This is due to two key factors: (1) a wealth gap is widening between counties and (2) counties with higher levels of wealth have more resources that can be taxed at lower rates allowing for the wealthier districts to provide more resources to their schools with less burden than those in districts with less taxable resources (Public School Forum of North Carolina, 2020). Further, districts with greater wealth are able to offer more diverse course offerings (Public School Forum of North Carolina, 2020). As a result, wealthier districts are perhaps able to offer longer sequences of world language study in more languages, opening greater pathways to SoBL attainment while simultaneously widening the gap of who attains the SoBL due to social class. In the same vein as total student enrollment, this finding relates back to the study by Davin et al. (2018) where teachers voiced that the lack of extended sequences of studies created barriers to SoBL attainment. Further, the results imply that the seat time policy could be inadvertently prioritizing districts that have more ability to offer extended sequences of study, whether this is a result of total student enrollment or financial capability. This would explain why some districts may have an increased rate of awarding the SoBL among their graduating seniors.

Language

Findings revealed that within the districts that awarded the SoBL, the percentage of MLs was related to the rate of seniors receiving the award. This relationship was positively related, meaning that districts with higher percentages of MLs had a higher percentage of students earning the recognition. In the current study, the variable of MLs was highly correlated with the percentage of Latinx students, and 81.1% of MLs are Latinx in North Carolina (OCR, 2018). Thus, this finding also implies that districts with higher rates of students earning the SoBL in North Carolina may also have higher percentages of Latinx students.

In this study, language was found to intersect with class in the awarding of the SoBL. However, this intersection was with class being negatively related and language being positively related to the rate of seniors receiving the SoBL in North Carolina. The results from this study that demonstrated a negative relationship between class and the rate of seniors awarded the SoBL exists reaffirms Gaarder's (as cited in Paulston, 1978) version of elite bilingualism that includes the additional layer of class, where bilingualism may be associated with an elite upper class. However, the findings from the current study do not align with additional concerns that the SoBL may prioritize a form of elite bilingualism in the way in which the term was used by Heineke et al. (2018), where the recognition may possibly prioritize native English speakers. On the contrary, this study showed that the percentage of MLs in a district was positively related to the awarding of the SoBL. Thus, in North Carolina, socioeconomic status was the largest concern within the districts that award the SoBL as it relates to the rate of seniors who receive the award.

It is promising to find that, within the districts that award the SoBL, higher percentages of MLs are positively related to higher percentages of SoBL earners. This is extremely important through the lens of CRT considering language has intersected with race and immigration status to heighten discrimination in the lives of students across the nation (Malsbary, 2014; Patel, 2013)

and specifically in North Carolina (Lopez, 2007). The original purpose of the SoBL was to shift the deficit-minded language ideologies that were reinforced through restrictive bilingual education policies at the turn of the twenty-first century (Hancock & Davin, 2021; Olsen, 2020). The voice of students and their shared stories that relate their lived experiences in education are critical through the lens of CRT in education (Ladson-Billings & Tate, 1995). Through the voices of students, previous research in varying contexts have found that MLs expressed that the SoBL validated their home languages and gave these languages space within school settings (Castro, 2020; Davin & Heineke, 2018; Hancock & Davin, 2020). Moreover, previous research found that Latinx students perceived that the SoBL was connected to the building of relationships within families and the community (Castro, 2020; Colomer & Chang-Bacon, 2020). As the Latinx population increases in the South (Mohl, 2003; U.S. Census Bureau, 2011), it is with hope that the SoBL is sending the message that multilingualism is valued and shifting mindsets in schools in North Carolina by way of the SoBL.

With this hope comes a word of caution as the results were surprising considering the way that the policy is written in North Carolina. North Carolina is one of few states that has an additional requirement for students labeled as ELs written into policy for SoBL attainment; that is, that students labeled as ELs must take an additional English assessment (Davin & Heineke, 2017). Through the lens of CRT, discrimination is reinforced by the law and adding an additional requirement to MLs should be met with scrutiny. Thus, it must be considered why there is a need for MLs to provide additional evidence of multilingualism that is not required of their native English-speaking peers. The CRT assertion of interest convergence (Bell, 1995) may very well have contributed to the passing of the SoBL in certain contexts. Interest convergence (Bell, 1980) is the idea that policies change when the interests of the dominant group align with the

interests of non-dominant groups and only change insofar as the dominant group still benefits to a certain extent from this change. Previous research (Heineke et al., 2018) has noted that the majority of states left out wording specifically related to MLs in the passing of the SoBL policy. Through the lens of CRT, it then becomes important to consider if interest convergence (Bell, 1980) played a role in the additional requirement for MLs in certain states across the nation. Removing this barrier should be a consideration. This also means that future research that examines which students are actually receiving the recognition is critical.

Limitations and Future Research

While this study illuminated how the awarding of the SoBL related to race, language, and class, findings did not allow for identification of SoBL recipients at the student level. Future research should specifically analyze at the school level which students are and are not receiving the award. For example, although the current study revealed that language is positively related to the percentage of graduates earning a SoBL, this study cannot determine whether those earners are indeed MLs. Thus, future research with students as the unit of analysis would reveal exactly which students receive the recognition and would be an additional aid in striving for equity in the awarding of the SoBL in all schools. This future research should include analyzing which specific students receive the recognition through the lens of the intersectionality of race, language, class, gender, and immigration status.

Additionally, future research should include qualitative studies at the district and school level, specifically in the districts that have high rates of SoBL earners and others that have low to none. This could assist in better understanding what strategies work to increase the rate of graduating seniors with the SoBL and what barriers exist to prevent the awarding. Adding qualitative studies to quantitative studies can add breadth to the exploration of the SoBL policy

in North Carolina. Previous work (Castro, 2020; Colomer & Chang-Bacon, 2020; Davin & Heineke, 2018; Hancock & Davin, 2020) that has included the voices of students has been instrumental in understanding the benefits and limitations of this policy, yet no research to date has focused on students in North Carolina regarding what the SoBL means to them and if benefits post-graduation are being reaped equally (Colomer & Chang-Bacon, 2020). Providing voice and student narratives to the SoBL is critical through the lens of CRT (Ladson-Billings & Tate, 1995). An interesting context to explore more deeply would be the influential outlier district that was removed from the current study as this specific context may add greatly to the field of study.

Considering the large number of DL programs that exist statewide, future research should examine more in depth the connection between DL and the SoBL. Previous research (Hancock et al., 2020) has examined the relationship between extrinsic state motivation and the impact on DL programs and the SoBL in linguistically diverse districts. This current study adds depth to examining the intersectionality of DL programs and the SoBL in that 91% of the districts that did not award the SoBL also did not offer DL programs in the 2017-2018 school year. Thus, future research should examine the relationship between the offering of DL programs and access to the SoBL. This type of research would be interesting, as the history of restrictive bilingual education policy is inextricably tied to the SoBL policy (Hancock & Davin, 2021; Olsen, 2020).

Recommendations for the Future

At the National Level

Policy

District Choice. The current study showed the benefit of having a SoBL policy written in a way that participation in the awarding of the SoBL was mandatory. Other states should

consider changing policy in contexts that rely on district choice to participate in the awarding. With that being said, writing policy in a way that provides access to all students does not in essence guarantee access. For example, while the policy in North Carolina is written in such a way to provide access to all, this study demonstrated that 20% of districts still do not award the SoBL, with total student enrollment being the number one factor in this outcome. Thus, changing policy to remove participation in the SoBL as voluntary is the first step in moving towards more equitable environments for the awarding of the SoBL, but it cannot be the only step as other factors such as the pathways in which students demonstrate proficiency are also important.

Multiple Pathways. Multiple pathways are important in the requirements for earning a SoBL. Providing only one option could limit equity and access in the awarding of the SoBL. The combination of pathways gives students a variety of options to best meet their current situation and context. Students lived experiences are not the same and this recognition should provide as many different ways as possible for students to earn this recognition.

The importance of options is evidenced in the awarding of the SoBL in North Carolina. While seat time is the most common way to earn the SoBL in North Carolina, students still have earned the SoBL in the other two pathways (i.e. assessment and credit by demonstrated mastery), demonstrating that it is useful to have more than one pathway (NCDPI, 2021). Other options allowed for 7% of SoBL earners statewide (NCDPI, 2021) to receive the SoBL, which would have been impossible without the additional options beyond seat time. This equated to approximately 650 students earning the SoBL that year through assessment or credit by demonstrated mastery, which is a higher number than some states were able to report for statewide SoBL recipients that same year (Chou, 2019).

All states should revisit SoBL policy and critically assess if multiple pathways are available to students. To be sure, a debate exists surrounding acceptable pathways to demonstrate proficiency for the SoBL (Davin & Heineke, 2017; Subtirelu, 2020; Valdés, 2020). This is due to differing perspectives as well as the advantages and drawbacks that come with each option. For example, students may not be able to afford the required cost that is associated with assessments. Further, assessments are still not available in all languages. However, seat time provides a similar limitation in that not all languages are offered as courses in schools. Thus, assessments provide options for students to earn a SoBL in languages not offered in schools. Additional concerns exist revolving around seat time being an option for the SoBL (Davin & Heineke, 2017) considering that previous research (Davin et al., 2014) has shown that students can complete four years of world language study and still not be at the intermediate low level of proficiency—the minimum level required in North Carolina. On the other hand, an advantage to seat time at the state level is that it may increase the number of students earning the SoBL (Davin et al., 2022). It is plausible that the option of seat time may have been influential in North Carolina being a national leader in awarding the SoBL. Thus, there are obvious pros and cons with each type of requirement, yet the best way to aim towards equity and access in the awarding of the SoBL would be to allow multiple pathways.

Automation

Additionally, other states could consider how to automate the awarding of the SoBL if they are not already doing so. This could aid in lessening the burden on individuals to manually input the awarding, which in turn could lead to not having accurate numbers at the state level as to how many students receive the recognition. While it may be easier to implement automation of the award in states with seat time options, states should consider if there could be a way to

automate other pathways as well, such as assessment. Automation in the SoBL by way of coursework was important in North Carolina. Before the automation began in 2018 (Hancock et al., 2020), and districts had to manually report the awarding of the SoBL to the state, only 2.5% of students statewide were reported to receive the recognition in 2016 (Davin & Heineke, 2018; NCDPI, 2021). However, in 2018, when automation began through the statewide data system, 9% of students were reported to that state for earning the SoBL (NCDPI, 2021), leading North Carolina to be recognized as a national leader in awarding the SoBL (Black et al., 2020; Chou, 2019). When states have more accurate data on the awarding of the SoBL, a deeper and more valid analysis on equity in the awarding of the SoBL can take place. However, while automating the recognition may ease the burden on individuals to manually input the recognition, it is still essential that the recognition be publicized at the state, district, and local levels to ensure student awareness of the recognition.

At the State Level

A recommendation for policymakers at the state level in North Carolina is to remove the additional requirement for MLs to earn the SoBL. North Carolina is one of only a few states nationally that has this additional barrier for MLs in the SoBL policy (Davin & Heineke, 2017). It is promising that the percentage of MLs in a district is positively related to the rate of seniors receiving the SoBL. Thus, we know that districts with large numbers of MLs are able to provide opportunities at high rates to students across the district as it relates to the SoBL, making their school environments conducive to the earning of the SoBL. We also know that efforts are already underway at the state level to increase MLs in the SoBL (Hancock et al., 2020). However, this current study is limited in knowing if large numbers of MLs are the actual

students earning the SoBL in those districts. Removing the additional barrier could be key in ensuring that MLs are part of this number or increase within these numbers.

Another recommendation is that policymakers should consider the current policy that does not require the study of a world language for high school graduation (O'Rourke et al., 2016). It is possible that even in areas that do offer extended sequences of world language study that some students opt out of taking higher levels due to the courses not being a requirement. As a commitment to global education exists at the state level (NCDPI, 2013), the state could consider reinforcing this commitment by implementing a policy similar to those in other states such as Michigan and New York that do require students to study a world language for high school graduation (O'Rourke et al., 2016). This may in turn increase the number of students taking world language courses across the state and lead to motivation to taking higher level courses.

At the District and School Level

Extended Sequences of Study

Districts and schools should seek ways to increase the levels and varieties of world language instruction districtwide and within schools. This is especially important in smaller districts. This study has demonstrated that total student enrollment is important in whether districts award the SoBL or not. Virtual classes could be a viable option to include a few students from multiple high schools to combine into one larger class if there are not sufficient students enrolled in higher levels at small high schools. Another option would be for certain teachers to rotate schools on block scheduling mid-year. This would alleviate the challenge of when there are not enough students enrolled in higher level world language courses to warrant an entire teacher position for the entire school year. Thus, a world language teacher could spend the first

semester at one high school to teach a high level language course at that location and then switch locations to a different high school in the district second semester to offer and teach a high level language course there. Focusing on the variety of languages that are instructed and seeking ways to diversify the languages offered are critical in the attempt to provide equity in the awarding of the SoBL (Davin et al., 2018; Valdés, 2020).

Proficiency-based Learning

Since North Carolina allows for seat time in a world language classroom to meet the requirement for demonstrating proficiency in this language, it is essential that world language instruction in schools follows a proficiency-based style of instruction. Otherwise students may not meet the minimum proficiency level needed for the recognition (Davin et al., 2014). As the SoBL is a symbol for proficiency in two languages, it is important that students are in learning environments where there is a focus on reading, listening, speaking, and writing or on the modes that are applicable to the specific language.

Collaboration

This study revealed that there are still some districts that have been unable to recognize students with the SoBL. Thus, collaboration between districts could be critical. Districts that have been able to recognize students with the SoBL should share their experiences with the recognition and provide possible ways of support to aid the districts that have yet to give the recognition. This could aid in statewide SoBL recognition for students in all districts.

Dual Language

An additional consideration is that districts should analyze access to DL programs. Only two of the 23 districts that did not award the SoBL had DL programs. This implies that DL programming could be beneficial in increasing access to the awarding of the SoBL. This would

support students in having longer sequences of language study before high school, higher proficiency levels, and perhaps aid in increasing numbers in higher level courses at the high school level. This in turn, could also increase the number of linguistically diverse students that graduate from high schools across the state that could eventually feed back into the teacher pipeline to aid in teacher shortages in high need areas.

As considerations for DL begin, it is important to explore best locale and program model. It is critical that all districts implement and increase DL programs statewide. Previous research (Hancock et al., 2020) has indicated that the districts with the highest percentage of linguistic diversity were not necessarily the districts that had the largest number of DL programs. Two-way, 90:10 DL programs have shown great benefits for all types of learners, especially for MLs (Collier & Thomas, 2009; Thomas & Collier, 2012). Thus, districts should consider how DL locale can best serve all learners, especially placing the programs in areas that could help close the opportunity gap. Further, districts should consider the benefits of implementing a 90:10, two-way model.

Publicity

Additionally, districts and schools should publicize the SoBL to students early in their schooling. If students are aware early, even as early as elementary school, that they can earn the SoBL at graduation, they can begin to plan their language learning trajectory. This in turn may increase the number of students enrolled in language courses K-12 and thus increase availability for higher level courses since more students would be motivated to enroll. Focusing on all possible ways to publicize the endorsement is important, as previous research has shown that dissemination of the recognition is a major challenge (Davin et al., 2018). Some possible ways to publicize the SoBL would be by way of information sessions, flyers, brochures, and even

ceremonies to recognize SoBL earners. Further, districts and schools should inform students of all pathways to earn the SoBL so that they are aware of their options and can select the pathway that best meets their needs.

Concluding Thoughts

The current study explored the relationship of the awarding of the SoBL in North Carolina with the intersectionality of language, race, and class. While controlling for these variables, the study found that language and class are related to the rate of awarding the SoBL in North Carolina. Perhaps the most encouraging finding from this study was that the rate of seniors who receive the SoBL is positively related to the percentage of ML students in the district. This is promising and moving in the direction in which the SoBL was intended in North Carolina—to place value on multilingualism and celebrate the linguistic diversity that exists within the state.

The SoBL was and is a valiant effort to shift deficit-based mindsets regarding multilingualism. This study does not aim to undermine the importance of this policy nor the paramount work initiated by the movement leaders and advocates. Analyzing the SoBL critically through varying theoretical perspectives is a way in which to verify that the SoBL is enacted in practice in the ways in which it was intended. The language field should celebrate those who have advocated and continue to advocate for multilingualism and that make great strides in language education policy. In the same token, we in the field must never become complacent by accepting any language policy without scrutiny. History shows us the importance of this endeavor.

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