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# The Tale of Two Cities: A Critical Spatial Analysis of Access to Two-Way Dual Language Programs in San Antonio and Austin

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## Abstract

Texas is home to a burgeoning linguistically diverse population, which has contributed to the exponential growth of bilingual education programming across the state. One program type, two-way dual language (TWDL), has become a popular enrichment model of bilingual education and has received increased attention and funding at the state level. While bilingual education was originally intended to serve linguistically diverse, primarily Latinx, students, there is a growing body of research that suggests the rapid growth of TWDL has come to serve primarily white, affluent, English-dominant students. The present study sought to contribute to this research by examining the locations of TWDL within two major cities in Texas: San Antonio and Austin. This tale of two cities employed a critical race spatial analysis to describe TWDL locational patterns within San Antonio and Austin based on neighborhood demographics including race/ethnicity and socioeconomics. Findings suggest that access to TWDL in each city is based on differing factors, with the socio-historical contexts of San Antonio and Austin playing a major role in the accessibility of TWDL today. Implications for policy makers, city leaders, and district decision-makers are considered.

**Keywords:** two-way dual language, gentrification, bilingual education, urban schools, spatial analysis

## Introduction

Texas is home to a burgeoning linguistically diverse population, which has contributed to the exponential growth of bilingual education programming across the state (Heiman et al., 2019; Zabala, 2022). One program type, two-way dual language (TWDL) has become a popular enrichment model of bilingual education and has received increased attention and funding at the state level (Zabala, 2022). TWDL is a form of bilingual education that brings together speakers of two different languages to learn in the classroom. When well implemented, TWDL is meant to develop student proficiency in both languages through content instruction (Howard et al., 2018) and bolster academic success, bilingualism and biliteracy, and sociocultural awareness (Lindholm-Leary, 2001; Morales & Rao, 2015). More recently, there is a growing body of research that suggests the rapid growth of TWDL has come to serve primarily white, English-dominant students, contributing to inequitable practices and outcomes for linguistically diverse, Latinx students (Flores & García, 2017; Valdés, 1997; Valdez et al., 2013; Valdez et al., 2016). This privileging of white, English-dominant students with the resources of bilingualism has come to be termed the gentrification of bilingual education (Valdez et al., 2013; Valdez et al., 2016).

Researchers have qualitatively investigated gentrification in Texas at the state (Dorner et al., 2021), district (Henderson & Palmer, 2019), and school level (Bernstein et al., 2021). The research demonstrates that TWDL is most often implemented in spaces that would appeal to White, English-dominant families (Bernstein et al., 2021; Burns, 2017; Chávez-Moreno, 2021; Heiman & Murakami, 2019; Morales & Rao, 2015; Wall et al., 2022). This placement of TWDL has contributed to critical conversations surrounding issues of equity and access, namely discussions of whom TWDL serves and whether these enrichment programs are accessible to linguistically diverse students from historically marginalized communities.

The present study seeks to further this conversation by examining the locations of TWDL within two major cities in Texas: San Antonio and Austin. Using mapping software and census tract level indicators from the United States (US) Census that include neighborhood racial/ethnic makeup and socioeconomic status, this study aims to determine whether the patterns for placement of TWDL are related to neighborhood demographics. The location of programming can limit the ability of families from historically marginalized communities to send their children to schools that are further from home (Bell, 2009; LaFleur,

2016). Thus, the geographic location of TWDL affects who can enroll and typically the neighborhood demographic surrounding a program's location is a strong predictor of the students who may have access to TWDL (Bell, 2009; LaFleur, 2016).

This tale of two cities will employ a critical race spatial analysis (Morrison et al., 2017) to describe TWDL locational patterns within San Antonio and Austin to investigate the dispersion of programs across both cities to better understand the access that Latinx and white students have to TWDL. What follows is a brief explanation of the Bilingual Education Act, the outgrowth of gentrification, and the historical importance of the two selected cities. Then, a description of critical race spatial analysis and its usefulness in organizing, analyzing, and interpreting TWDL program placement in combination with neighborhood demographics. This research will conclude with a discussion of implications for policy makers, city leaders, and district decision-makers as TWDL continues to expand across the state.

## **Background**

### **The Bilingual Education Act**

Prior to bilingual educational protections for linguistically diverse students, English-only, assimilative educational practices were rampant across the US. These English-only practices contributed to a dire situation for Latinx students, with many spending up to three years in first grade and large numbers dropping out by middle school (Flores & García, 2017; Moore, 2021). It was estimated that during this time only about 25% of Latinx students made it to the eighth grade, with less than ten percent reaching the twelfth grade (Blanton, 2004). The first major case to contest the segregation of linguistically diverse students was *Westminster School District v. Mendez* in 1947. This case, originating in California, allowed for the segregation of students by race, but declared that segregating Mexican American and white students because of linguistic differences was not permissible. The decision from *Westminster School District v. Mendez* set off a chain reaction that prompted Mexican American civil rights groups to begin challenging all segregation based on English proficiency (Blanton, 2004). This was almost ten years before the *Brown v Board of Education* 1954 decision that would make legal segregation unlawful.

It was not until 1964 that Title VI of the Civil Rights Act outlawed the discrimination toward individuals based on "national origin," which also includes those individuals who

speak a language other than English (Gándara et al., 2010; Gándara & Orfield, 2012). Later, Title VII of the Elementary and Secondary Act of 1968 was passed. This original piece of legislation, also known as the Bilingual Education Act (BEA), promoted additive language programs, teacher training, and additional language instruction for emergent bilinguals. Despite the provisions included within the BEA, it failed to clearly define bilingual education for the states (Gándara & Orfield, 2012), “carried no funding, and was largely symbolic” (Gándara et al., 2010, p. 24). This act also became associated with the War on Poverty, and states used it to justify remediating the perceived language deficiencies of poor, linguistically diverse students (Gándara et al., 2010; Sung, 2017). At this time in the 1960s, Latinos across the south were the poorest and least educated of any group in the nation. Political figures used this statistic to associate poverty with a lack of language proficiency and education, and the “fix” for this issue would be increased access to schooling (Sung, 2017). However, Latino poverty did not stem from limited English proficiency. Instead, it was from the outsourcing of manufacturing in urban areas and automation of agriculture in rural areas (Sung, 2017). Despite this actuality, Sung (2017) contends that “advocating for bilingual education allowed policymakers to produce new commonsense, or hegemonic logic to acknowledge Latino poverty and discuss deindustrialization’s effects that diverted attention away from outsourcing or structural weaknesses in the economy” (p. 311). Even today the language debate redirects focus away from structural, political, and economic issues stemming from hegemonic practices and reinforces language deficiency as the root cause of Latino poverty.

Although later federal cases have attempted to better define bilingual education, over time they have been so diluted by those who oppose bilingual instruction that their impact on native language maintenance is basically nonexistent (Flores, 2016; Gándara et al., 2010; Gándara & Orfield, 2012; Orozco, 2011). In 1973, the Supreme Court case *Keyes v Denver School District No 1* used the *Brown v Board of Education* decision to affirm desegregation for Latino students. The *Keyes* decision set a precedent for lower courts and was used to deter districts from excluding emergent bilinguals based on English proficiency (Gándara & Orfield, 2012). Later, the 1975 Lau Remedies came into being because of the Supreme Court’s ruling in *Lau v Nichols*. Here the Supreme Court ruled in favor of bilingual education, requiring that emergent bilinguals be given equal access to curriculum within the public schools (Gándara et al., 2010; Gándara & Orfield, 2012). The Lau Remedies supported native language instruction and maintenance. However, they were not federally mandated and regulated, therefore their

impact was easily diminished in later opposition to bilingual education (Gándara et al., 2010). The 1980s, 1990s, and 2000s brought about a resurgence of the English-only movement and much of the work accomplished through the Civil Rights Act, and the Bilingual Education Act was undone (Gándara et al., 2010). Still today, the term “bilingual education” has never been clearly defined, nor has it been clearly established as a right for students who speak a language other than English, opening the door for the whitening of TWDL.

### **Gentrification of Bilingual Education**

TWDL was first implemented in 1963 in Dade County, Florida for the purpose of integrating Spanish-speaking Cuban students with English-speaking students (Ovando, 2003; Valdés, 2018; Weise & García, 1998). Cubans exiled to Florida after the Cuban Revolution of 1959 perceived their time in the US to be short-lived as they awaited their return to Cuba (Ovando, 2003). As a result, Cuban parents “wanted their children to retain their language and culture in preparation for their return home,” resulting in the very successful Coral Way Elementary TWDL program (Ovando, 2003, p. 7). In its original inception, TWDL was approached from an equity standpoint and was viewed as an opportunity to help linguistically diverse students learn English and language-majority students learn Spanish with the hope of also promoting student success, bringing much needed resources into poor communities, and creating cross-cultural connections (de Jong, 2016; Howard et al., 2018; Lindholm-Leary, 2001; Valdés, 2018). Unfortunately, the shift to TWDL changed the student composition of bilingual education. Whereas the original goals of the BEA were to support bilingualism, biliteracy, and biculturalism for linguistically diverse students, this new type of bilingual education has created a system that may not be of direct benefit to those intended (Flores & García, 2017; Valdés, 1997).

The challenge for TWDL programs is to create equitable spaces yet it may be “difficult to counter the impact of the larger society on both teachers and students” (Valdés, 1997, p. 417). In an early cautionary note, Valdés (1997) brings awareness to the concerns for linguistically diverse students enrolled in TWDL as these programs were gaining traction in the early 90s. Here Valdés (1997) confronts the realities that may be present in TWDL, including the prioritization of English over other languages and the positioning of language-majority students above linguistically diverse students. Each reauthorization of the BEA saw strong public opinion against using federal funds to preserve the language and culture of mostly immigrant students (Macnow, 1982; Wiese & García, 1998). So, although it may have been the

intent that TWDL would be equally accessible to all groups of students, ultimately it becomes white, English-dominant families who are overly accessing language programs (Chávez-Moreno, 2021; Delavan et al., 2022; Valdés, 1997; Wall et al., 2022).

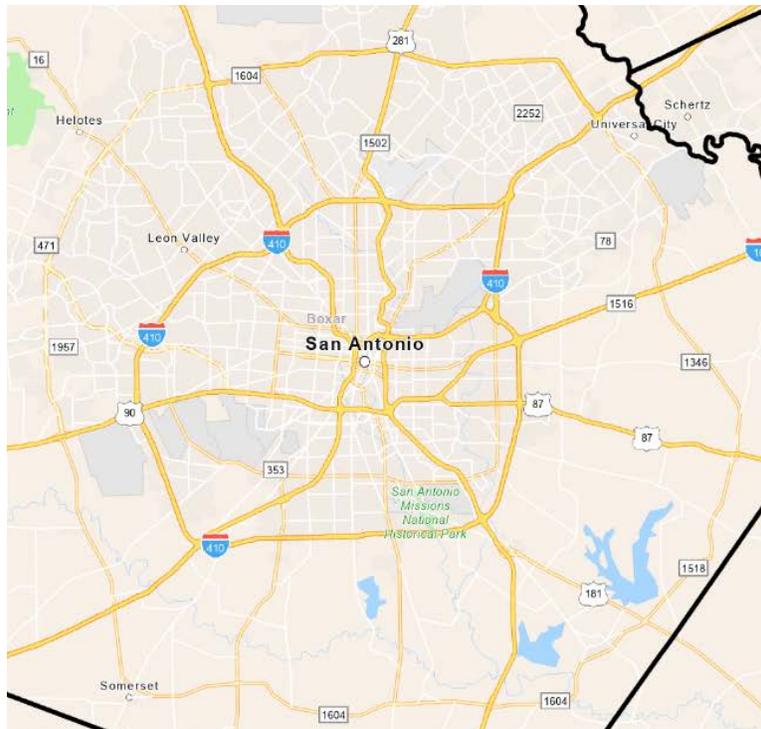
The cautionary note as presented by Valdés (1997) was the first to critically examine the ways in which TWDL may be contributing to systems of inequality for linguistically diverse students, but it was Valdez et al. (2016) who used the term *gentrification* to describe the phenomenon of linguistically diverse and non-privileged students receiving limited access to TWDL in favor of more affluent, English-dominant students. And, as TWDL continues to expand, specifically in Texas, there has been an outgrowth of researchers and scholars who are questioning the equity in these programs as they seek to establish the extent to which TWDL has come to serve primarily white, English-dominant students (Bernstein et al., 2021; Blanton et al., 2021; Burns, 2017; Chávez-Moreno, 2021; Delavan et al., 2022; Dorner et al., 2021; Heiman & Murakami, 2019; Henderson & Palmer, 2019). Taken together, the pool of research on gentrification suggests that the placement of TWDL programs is likely dependent on neighborhood demographic and may play a significant role in which students have access to TWDL, particularly in large urban areas.

### **Socio-historical Contextualization of San Antonio**

San Antonio is home to over 1.4 million people with almost 65% of the population identifying as Latinx, 39% of whom speak Spanish (World Population Review, 2023). The city is a network of major interstates including IH-10, which runs east to west from California to Florida, and IH-35, which runs north to south from the Texas-Mexico border to Minnesota (Figure 1). IH-35 is one of the most traveled routes to and from Mexico and contributes to San Antonio's accessibility to incoming migrants and continued ties to Mexican culture (Britannica, 2023). The city is also completely encircled by two major road systems (see Figure 1): Loop 410 (the inner circle) and Loop 1604 (the outer circle). These loops provide access to rural and suburban areas of the city and have allowed for the continued population growth as San Antonio expands beyond its city center.

**Figure 1**

*Map of San Antonio, Texas*



While the current demographic information of San Antonio in and of itself justifies a deeper investigation into TWDL access, there is also an important political history to consider. In 1968, Mexican-American parents in the Edgewood Independent School District (ISD) of San Antonio were determined to fight for equal educational rights for their children. At the time, Texas was operating under a complex funding formula that required dual participation from local districts and the state (Ogletree, 2014; Price, 2023). Local districts were given rights to assess and collect property taxes, which would account for 20% of the funding system, while the state contributed 80% to the program from general revenues. Funds were then redistributed to districts based on a formula reflective of that district's neighborhood taxpaying ability. Districts were made to impose property taxes also based on this formula to ensure their portion of contribution to the fund was satisfied (Ogletree, 2014).

This school funding program resulted in huge funding disparities between the wealthiest neighborhoods and the poorest. Edgewood, a largely Latinx community, was taxed at a higher rate of \$1.50 per \$100 of real estate valuation and only raised \$26 per student

(Walsh, 2011). The neighboring Alamo Heights community, which was mostly white, was able to raise \$333 per student on a lower tax rate (Walsh, 2011). There was also little recognition of the additional funding needed for special programs such as bilingual education. During this time, Texas would only provide bilingual education funding, in the amount of \$150,000, if a district had at least 26 Spanish-speaking students. In Alamo Heights, there were only around 26 Spanish speaking students, however the district still received the \$150,000, whereas in Edgewood, the same amount of funding was shared amongst 22,000 students (Walsh, 2011). Because of the continued funding disparities, Demetrio Rodriguez and several other concerned parents joined together in a class action lawsuit in protest against the Texas school funding system. A lower court found the system to be discriminatory based on wealth, however in 1973, the US Supreme Court ruled in *San Antonio ISD v Rodriguez* that no rights were being violated (Ogletree, 2014; Price, 2023). The court held that the Constitution does not directly nor implicitly give a right to education and thus, disparities between rich and poor school districts cannot be remedied. And, while several state cases have since improved the funding formulas used, school funding remains unequal, specifically in San Antonio, where poorer districts like Edgewood are taxing property at the maximum rate and still depend on the state to subsidize its budget (Swaby, 2019).

The ruling in *San Antonio ISD v Rodriguez* is important to the TWDL conversation because it ultimately protects the gentrification of bilingual education. Wealthy neighborhoods with increased funding can better afford TWDL and the resources needed to implement this type of program. Given the historical and political underpinnings present in San Antonio along with the continued funding disparities, this urban space provides a necessary context in which TWDL placement can be analyzed.

### **Socio-historical Contextualization of Austin**

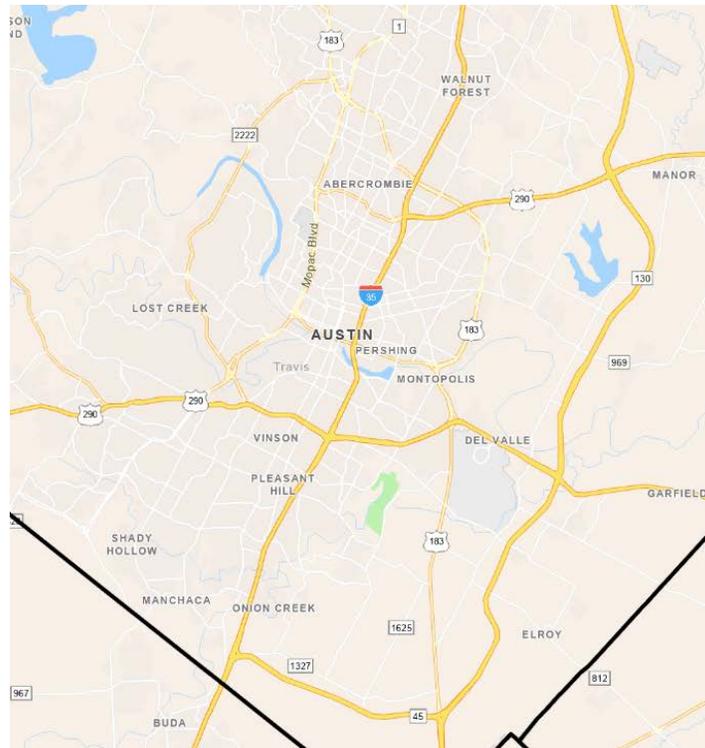
Austin, Texas has a long history of segregation and division. The city is split by IH-35 (running north to south, see Figure 2), where the east side of the interstate is mostly Mexican-American, and the west side is predominantly white. This intentional segregation resulted from redlining instituted by the city council in the 1920s (Austin PBS, 2016). Later, during the 1950s and 1960s, Mexican-American, Spanish-speaking students were enrolled in segregated schools and forced to learn English before being promoted to the next grade level. Their use of Spanish in the classroom often resulted in punishment. Not only was the curriculum and treatment unequal, but the schools that Mexican American students attended were

dilapidated and lacking in resources. Then with the *Brown v Board* decision, the Austin ISD school board determined that Mexican-Americans would be classified as “white.” This allowed for the district to continue to segregate the Latinx and white communities to essentially hide from the *Brown* decision. As a result of the continued segregation and limited resources, Mexican-American high schoolers represented the highest dropout rates, were overly recruited to the military, or were tracked in vocational training versus college preparation (Austin PBS, 2016).

Then in the 1970s, tired of separate and unequal treatment, Austin high schoolers staged a walkout where they met with the superintendent and principals of the area schools to share their concerns. Parents and community members joined in the movement and advocated for more Latinx teachers and administrators, increased funding for bilingual education, better resources, and more highly qualified educators. This advocacy resulted in the construction of a new elementary school on the east side of Interstate 35 and the implementation of a bilingual education program (Austin PBS, 2016).

**Figure 2**

*Map of Austin, Texas*



Presently, Austin is home to almost one million people, with over 33% identifying as Latinx and about 20% of the city's population speaking Spanish (US Census, 2022). Although Austin's Latinx population is about one-third of the city, this number is significantly lower than the total population of Latinx peoples across the state (about 40%), and is likely attributed to gentrification (Maxin, 2023). The rampant gentrification of Austin's east side has raised major concerns for Austinites. What was once a predominantly Black and Latinx community, this area is being taken over by a white affluent population, as they seek out the area for its proximity to downtown (Austin Texas Insider, 2014). Today east Austin is being transformed with condos, high-end apartments, and newly renovated homes. The gentrification of this area has increased property taxes and forced longtime residents from their homes (Austin Texas Insider, 2014; Maxin, 2023; Way et al., 2018). This displacement has mostly affected low-wealth communities of color (Way et al., 2018), pushing them to the edges of the city (Cantú, 2015). One scholar has conducted extensive research in an east Austin elementary school that is home to a gentrifying TWDL (Heiman, 2020; Heiman & Murakami, 2019; Heiman & Nuñez-Janes, 2021; Heiman & Yanes, 2018). Through this work, Heiman found that white students and their families were targeted for TWDL to prevent school closures, increase funding, and compete within systems of school choice. In this context, not only are historically marginalized families being pushed out of their neighborhoods, but linguistically diverse students are being forced out of their schools (Heiman, 2020; Heiman & Murakami, 2019; Heiman & Nuñez-Janes, 2021; Heiman & Yanes, 2018).

Austin's segregated past combined with its gentrifying present demands a closer look at TWDL program placement across the city. The Chicano movement in Austin brought the benefit of bilingual education to the city's Mexican-American population. Therefore, an investigation into which neighborhoods have access to TWDL today is an important part of the conversation surrounding equity and access.

## **Methods and Data**

### **Critical Race Spatial Analysis**

Spatial analyses are conducted using mapping technology called geographical information systems (GIS). GIS has traditionally been used by geographers and urban planners (Vélez & Solórzano, 2017), but more recently researchers have employed spatial

analysis to critically examine educational issues and academic outcomes (Cobb, 2020; Garo et al., 2018; Puente, 2022; Williams et al., 2022). Critical race spatial analysis (CRSA) as a methodology can traverse society's academic, social, and political realms (Soja, 2010). As a geographical tool, it can aid in demonstrating how space is structured and how spaces create and uphold boundaries or blur boundaries to benefit one group over another (Soja, 2008; Soja, 2010). Much like Du Bois' (1903) notion of the color line, CRSA can aid in the understanding of how race influences the occupation of space and the role of power and privilege in determining the features present within a particular space. "CRSA goes beyond description to spatially examine how structural and institutional factors influence and shape racial dynamics, and the power associated with those dynamics over time" (Solórzano & Vélez, 2016, p. 429-430).

Historically, the clustering of individuals within communities based on race/ethnicity, language, socioeconomics, and country of origin is not random (Feagin & Ducey, 2019; Kozol, 1991; Rothstein, 2017; Stern, 2018; Takaki, 2008). The segregation of communities and schools has been shaped by policy that intentionally excluded groups of people (Rothstein, 2017; Stern, 2018). These segregated and historically marginalized spaces have become areas that are highly concentrated with Latinx families. In San Antonio there is a history of clustering based on wealth and the social constructs of race/ethnicity, while redlining and segregation in Austin created densely populated areas of Mexican-American Spanish speakers. The intersecting realities of families living in these two cities demand an interrogation of the educational access for minoritized students.

Texas's TWDL programs are being gentrified (Bernstein et al., 2021; Burns, 2017; Chávez-Moreno, 2021; Heiman & Murakami, 2019), but what is missing from the present literature is the extent of the gentrification within major urban spaces. The literature on the historic and social occurrences of gentrification and the evidence of the blurring of district and school boundaries to seize and appropriate foreign languages creates an opportunity for CRSA to be employed as a methodological framework to better understand the gentrification of bilingual education using mapping (Annamma et al., 2017; Soja, 2010). Thus, this research seeks to observe the placement of TWDL across San Antonio and Austin to better understand the accessibility of programs based on neighborhood demographic.

## **Data**

This analysis draws on the Texas Education Agency's (TEA) English Learner Program Report for the 2021-2022 school year. This report indicates the campuses housing TWDL and the number of students enrolled in the TWDL program. Missing from the report are the languages spoken within the program; however the goal of the present study is to investigate access to TWDL, not necessarily language of instruction. Data were also collected from the US Census Bureau's American Community Survey (ACS) of 2021 to understand Austin's and San Antonio's socioeconomic and racial/ethnic landscape. Because of San Antonio's and Austin's Latinx populations, the historical context of Mexican Americans in both cities, and the current literature surrounding gentrification of TWDL Spanish and English programs, this study will only focus on the racial/ ethnic groups of white, non-Hispanic and Hispanic/ Latino from the US Census and ACS. Reports on this data include the Median Household Income Table and the ACS Demographic and Housing Estimates Table. To visually represent median household income and racial/ethnic data, TIGER/Line® Shapefiles were used.

Shapefiles represent geographic features (i.e., census tracts) digitally and are used to create maps. Each shapefile contains a standard geographic identifier (GEOID). The GEOID links data from the ACS to the shapefile, thus creating a map layer that visually represents the demographic and socioeconomic makeup of a census tract. Map layers were displayed using ArcGIS Pro Desktop software. Then, campuses housing TWDL were added as points on the map to critically analyze the relationship between neighborhood makeup and TWDL placement. The tools available in ArcGIS Pro give the ability to visualize the dispersion of TWDL across each city, but it is CRSA that provides the lens through which to analyze the patterns that emerged across San Antonio and Austin.

## **Findings**

### **Spatial Contextualization of San Antonio**

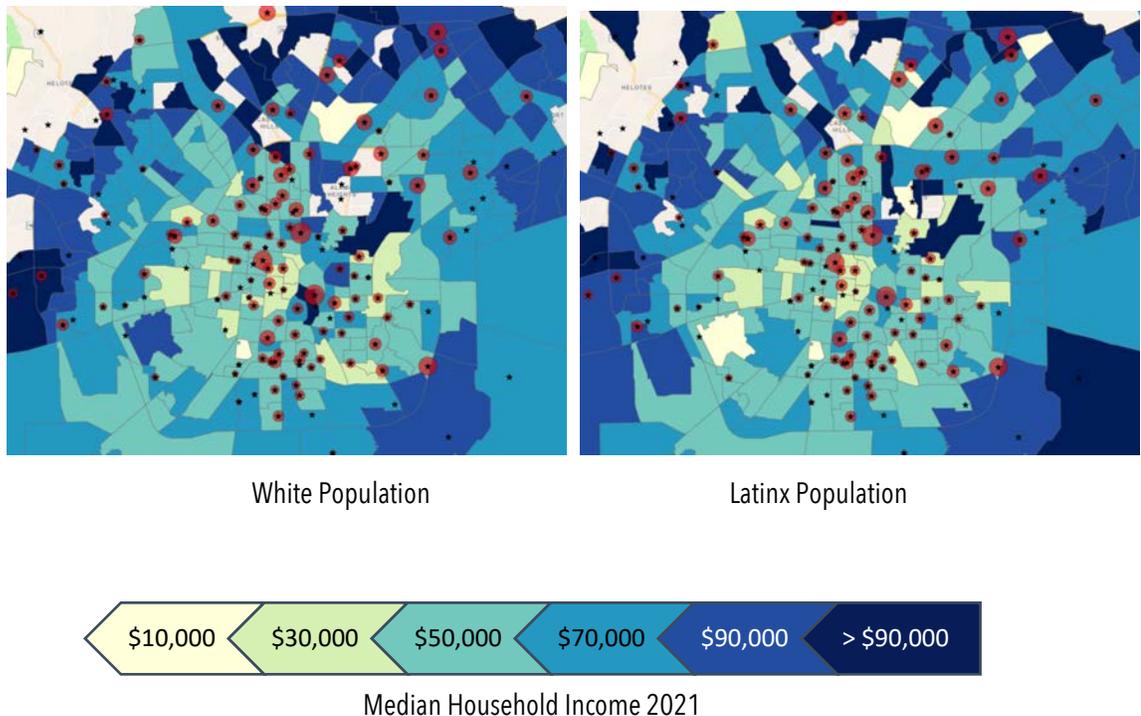
Map layers were visually displayed to first include the median income of white households and Latinx households and then layered with the location of schools with TWDL (Figure 3). In Figure 3, the median income of households at first glance appears to be similar between white and Latinx households. The greatest wealth amongst both demographics is outside of the city center surrounding Loop 1604, the outermost highway that completely loops around the city of San Antonio. Upon closer investigation, it is evident that white

households are making more than Latinx households with many census tracts showing a difference in income ranging from \$20,000 up to \$80,000 or more. For both communities, the city center contains census tracts where children live in households with a median income of less than \$30,000.

Figure 4 displays map layers that include the population densities for white and Latinx groups alongside the location of schools with TWDL. The maps from Figure 4 reveal clear lines of segregation within the city. While the Latinx community is spread throughout the city, their population is most dense near the city center and southwest of the city center. There is a minimal white population near the city center and this racial/ ethnic group appears to increase in density towards the north, northeast, and east sides of San Antonio’s city center.

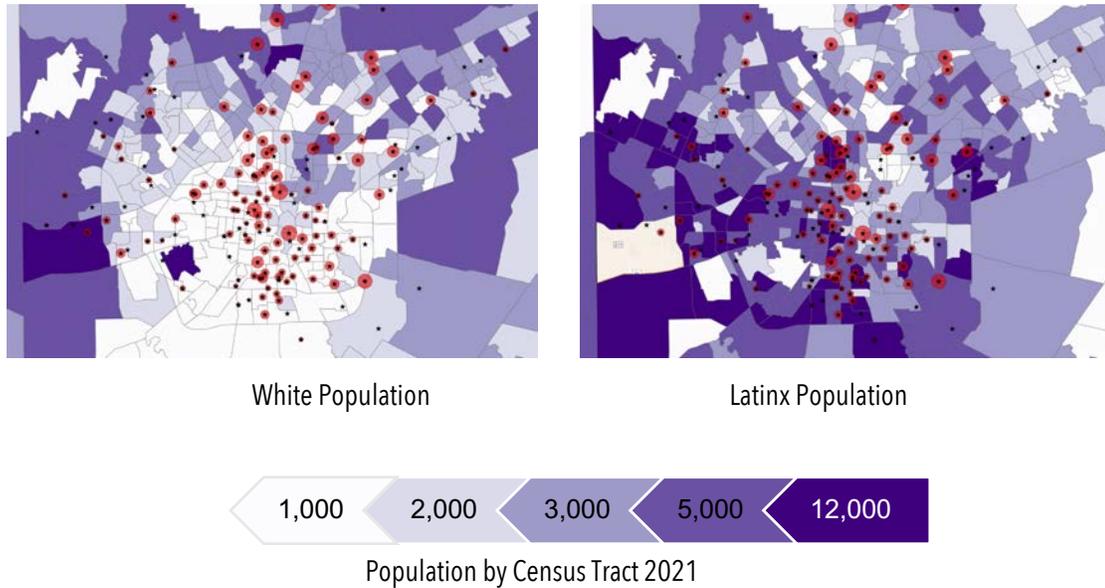
**Figure 3**

*TWDL program enrollment in San Antonio by race/ethnicity*



**Figure 4**

*TWDL program enrollment in San Antonio by race/ethnicity*



Figures 3 and 4 also show the location of TWDL programs as indicated by a black star. Programs with higher student enrollments are marked with a star surrounded by a red circle. The size of the red circle is indicative of the number of students enrolled with the largest circles representing the highest enrollments. Programs with higher enrollments of students may demonstrate greater access while programs with lower enrollments of students may indicate limited or selective access. Figure 3 illustrates that TWDL programs are accessible to students who live in households with varied median incomes. However, most programs are found in census tracts with median household incomes of \$50,000 or greater, and the number of programs and enrollment in those programs increases as the median household income increases. Figure 4 shows that areas most densely populated by Latinx households are the areas that are most likely to contain TWDL programming, and there are few TWDL programs housed in census tracts with the highest density of white households.

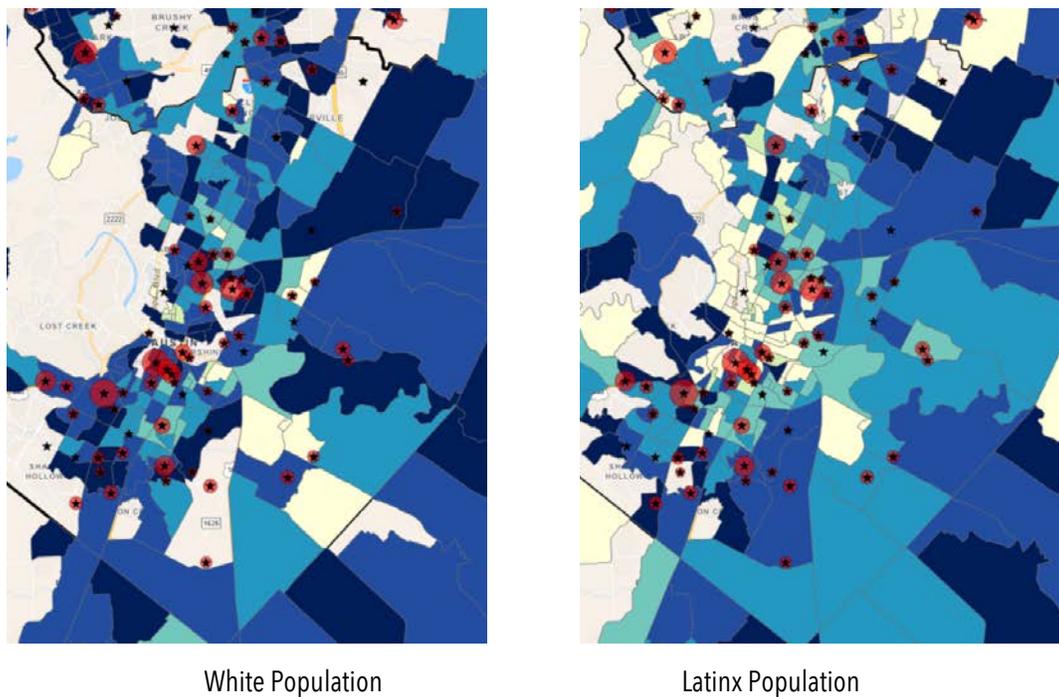
### **Spatial Contextualization of Austin**

Map layers displaying median household income by race/ethnicity and TWDL placement were also created for Austin (Figure 5). As conveyed in the socio-political section on Austin, there is a considerable difference in the median income of white households as

compared to Latinx households, specifically near the city center. In many census tracts near downtown, white households are making more than \$80,000 annually as compared to Latinx households. It is in these areas that most of Austin’s gentrification is occurring. For census tracts further from the city center, there are still large income differences with most white households earning median incomes of at least \$70,000 while many Latinx households earn less than \$50,000. In Figure 5, TWDL access appears to be dependent on wealth. Few of the poorest census tracts in Austin house TWDL, and the programs with the highest enrollment are found in more affluent areas of the city. Interestingly, there are also several census tracts in north Austin that contain higher enrollment TWDL. These programs are found in areas of the highest white household income (>\$90,000) and lowest Latinx income (<\$10,000), likely indicating that the linguistic resources of the Latinx community are being targeted by the affluent white community.

**Figure 5**

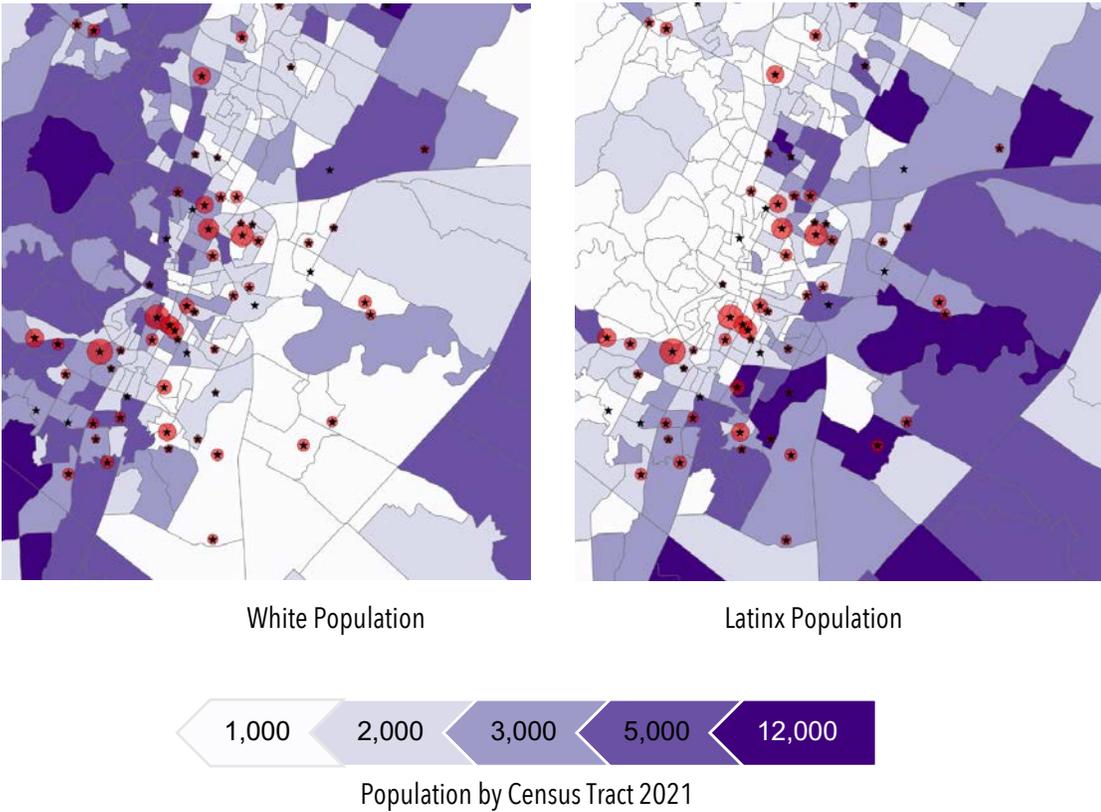
*TWDL program enrollment in Austin by median household income*



Median Household Income 2021

Figure 6 includes the map layers of white and Latinx population densities as well as TWDL location. There is a clear color line along the IH-35 corridor with east Austin heavily populated by Latinx communities, and west Austin mostly inhabited by white communities. This boundary that is created by IH-35 appears to also create a line of TWDL placement, with many programs falling equally across predominantly white and predominantly Latinx neighborhoods nearest the city center. TWDL programs that are further from the city center occur in census tracts that are more densely populated with white households.

**Figure 6**  
*TWDL program enrollment in Austin by race/ethnicity*



**Limitations**

With any spatial analysis, the potential for limitations must be considered. For example, when collecting data from TEA’s English Learner Program Report, programs with

fewer than ten students or those with identifiable information were masked. While this was accounted for in the data analysis, it has the potential to affect the relationship between income and/or population density and TWDL enrollment size. Furthermore, this study was birthed from prior gentrification research that is centered on white and Latinx students in Spanish-speaking TWDL programs. While this, combined with the socio-historical contexts of San Antonio and Austin, continue to demonstrate that Latinx and white students in TWDL remain important populations of interest, it is my sincere hope that by only focusing on these two groups I have not diminished the desire for other historically underrepresented students to access TWDL.

## Discussion

The purpose of this CRSA was to examine TWDL accessibility in San Antonio and Austin. By investigating neighborhood racial/ ethnic and socioeconomic makeup surrounding TWDL programs, the goal was to add to current gentrification literature and solidify a gap by spatially representing access to bilingual education. The findings reveal that the cities of San Antonio and Austin each exhibit differing patterns that are associated with their separate socio-historical contexts. Therefore, the discussion will be divided into two sections: one for San Antonio and one for Austin.

### Contextualizing Access in San Antonio

CRSA revealed that TWDL placement in San Antonio is related to wealth. In the city, TWDL was mostly located in census tracts with high densities of Latinx population. Despite this positive, it appears to be the students from the most affluent Latinx families have accessibility to TWDL. This is indicative of San Antonio's long history with school funding inequality (Ogletree, 2014; Walsh, 2011). In the *San Antonio ISD v Rodriguez* ruling, the court sided with a long-standing framework that would separate race and class (Walsh, 2011). This separation contributes to the current accessibility of programs as evidenced by Latinx students' ability (through neighborhood proximity) to enroll in TWDL. Here, program access appears to serve its intended population: Latinx Spanish-speakers. What is missed are the Latinx students who live in the lowest wealth census tracts. This group remains limited in their access to TWDL. The precedent of *Rodriguez* continues to uphold the misappropriation of funding for program placement and allows for the continued ignorance surrounding

educational inequities across the intersecting constructs of race/ ethnicity and socioeconomics.

### **Contextualizing Access in Austin**

The present CRSA further exposes Austin's ongoing struggle with segregation and gentrification and the effects of both on the most vulnerable populations. The racial/ ethnic and socioeconomic maps display a clear division between east and west and the income disparities that exist between the two. These maps also display evidence of the gentrification of bilingual education, specifically in north Austin and near Austin's city center, where program placement appears to be closely tied to high-density, affluent, white and low-density, low-wealth, Latinx census tracts. The research has demonstrated that Austin TWDL programs are prioritizing the desires of the white, affluent population, as this group seeks out bilingualism and biliteracy for their children (Heiman & Murakami, 2019), and the present study further supports this reality.

Of equal concern are that areas that are mostly Latinx and low wealth are least likely to have TWDL. This harkens back to the time period prior to the passage of bilingual education protections wherein lack of English proficiency was largely tied to poverty (Sung, 2017). The language debates during that time shifted the conversation away from the structural, political, and economic concerns for historically marginalized communities and instead associated language with socioeconomics (Gándara et al., 2010; Sung, 2017). This linkage is detrimental to historically marginalized communities as it perpetuates inequality and maintains the ideology that linguistically diverse students from low-wealth households need "fixing."

### **Conclusion and Recommendations**

Both San Antonio and Austin demonstrated that TWDL program accessibility is dependent on racial/ ethnic and socioeconomic factors. Yet the demographic indicators for access were different in each city and were closely tied to their socio-historical contexts. The differences in the findings between San Antonio and Austin exemplify the idea that it is institutional and structural factors that impact the ways in which power and privilege are exerted within communities (Solórzano & Vélez, 2016). This is important as it challenges policymakers, city leaders, and district decision-makers to see beyond existing structures and

to reimagine those structures with the community already living within those spaces (Flores, 2023).

Equitable access to TWDL is dependent on stakeholders recognizing that gentrification in these programs exists and access is likely related to socio-historical contexts of the city. This acknowledgement allows those in positions of power to ensure that this program type is available to all students. Policymakers and city leaders can work in tandem with districts to continually evaluate the establishment of TWDL and the students it is enrolling by monitoring enrollment demographics of TWDL and the school in which the program is housed. This data can be used to support the establishment of protocols that would support access for students from historically marginalized communities. District decision-makers would do well to give space for collaboration between administrators, teachers, and community members, specifically those who live in historically marginalized communities. Administrators play a critical role in how TWDL is established in their schools as well as which students are enrolled. Centering the voices of working-class, linguistically diverse families would provide administrators and teachers with a deeper understanding of what factors are affecting these families outside of the school. The knowledge gained from intentional conversations that recenter the voices of historically marginalized families allows administrators to implement school-level policies that prioritize the students for which bilingual education was originally intended, and it gives bilingual teachers the ability to exercise their autonomy in developing curricula and pedagogy that would best serve the needs of the students in their classrooms.

Stakeholders must acknowledge the socio-historical contexts shaping their communities, otherwise the expansion of TWDL in Texas is likely to continue to populate in similar spaces and remain mostly accessible for the dominant group. This requires a more nuanced approach to implementation that considers the needs of the historically marginalized and resists gentrification.

## References

- Annamma, S. A., Morrison, D., & Jackson, D. D. (2017). Searching for educational equity through critical spatial analysis. In D. Morrison, S. A. Annamma, & D. D. Jackson (Eds.), *Critical Race Spatial Analysis: Mapping to understand and address educational inequity* (pp. 3-7). Stylus Publishing.
- Austin PBS. (2016). *Austin revealed: Chicano civil rights “Desegregation & Education”* [Video]. YouTube. <https://www.youtube.com/watch?v=Y3oBmZ9bJDo>
- Austin Texas Insider. (2014). *Transformation of East Austin*. AustinTexasInsider.com. <https://www.austintexasinsider.com/gentrification.html>
- Bell, C. (2009). Geography in parental choice. *American Journal of Education*, 115(4), 493-521. <http://dx.doi.org/10.1086/599779>
- Bernstein, K. A., Alvarez, A., Chaparro, S., & Henderson, K. I. (2021). “We live in the age of choice”: School administrators, school choice policies, and the shaping of dual language bilingual education. *Language Policy*, 20, 383-412. <https://doi.org/10.1007/s10993-021-09578-0>
- Blanton, C. K. (2004). *The strange career of bilingual education in Texas, 1836-1981*. Texas A&M University Press.
- Britannica. (2023). *San Antonio Texas, United States*. Encyclopedia Britannica. <https://www.britannica.com/place/San-Antonio-Texas>
- Burns, M. (2017). “Compromises that we make”: Whiteness in the dual language context. *Bilingual Research Journal*, 40(4), 339-352. DOI 10.1080/15235882.2017.1388303
- Cantú, T. (2015, February 27). *Gentrification Refugees*. The Austin Chronicle. <https://www.austinchronicle.com/news/2015-02-27/gentrification-refugees/>
- Chávez-Moreno, L. C. (2021). Dual language as white property: Examining a secondary bilingual-education program and Latinx equity. *American Educational Research Journal*, 58(6), 1107-1141. DOI 10.3102/00028312211052508
- Cobb, C. D. (2020). Geospatial analysis: A new window into educational equity, access, and opportunity. *Review of Research in Education*, 44, 97-129. DOI 10.3102/0091732X20907362

- de Jong, E. J. (2016). Two-way immersion for the next generation: Models, policies, and principles. *International Multilingual Research Journal*, 10(1), 6-16, DOI 10.1080/19313152.2016.1118667
- Delavan, M. G., Freire, J. A., & Morita-Mullaney, T. (2022). Conscripted into thinking of scarce, selective, privatized, and precarious seats in dual language bilingual education: The choice discourse of mercenary exclusivity. *Current Issues in Language Planning*, 1-27. DOI 10.1080/14664208.2022.2077032
- Dorner, L. M., Cervantes-Soon, C. G., Heiman, D., & Palmer, D. (2021). “Now it’s all upper-class parents who are checking out schools”: Gentrification as coloniality in the enactment of two-way bilingual education policies. *Language Policy*, 20, 323-349. DOI <https://doi.org/10.1007/s10993-021-09580-6>
- Du Bois, W. E. B. (1903). *The souls of Black folk*. Oxford University Press.
- Feagin, J.R., & Ducey, K. (2019). *Racist America: Roots, current realities and future reparations*. Routledge.
- Flores, N. (2016). A tale of two visions: Hegemonic whiteness and bilingual education. *Educational Policy*, 30(1), 13-38.
- Flores, N. (2023, April 14). 2022 *Early career award lecture: What can bilingual education teach us about race in the post-civil rights era?* [Conference session]. American Educational Research Association Annual Meeting, Chicago, IL.
- Flores, N., & García, O. (2017). A critical review of bilingual education in the United States: From basements and pride to boutiques and profit. *Annual Review of Applied Linguistics*, 37, 14-29. DOI 10.1017/S0267190517000162
- Gándara, P., Losen, D., August, D., Uriarte, M., Gómez, M. C., & Hopkins, M. (2010). Forbidden language: A brief history of U.S. language policy. In P. Gándara & Hopkins, M. (Eds.), *Forbidden language: English learners and restrictive language policies* (pp. 20-33). Teachers College Press.
- Gándara, P., & Orfield, G. (2012). Why Arizona matters: The historical, legal, and political contexts of Arizona’s instructional policies and U.S. linguistic hegemony. *Lang Policy*, 11(2012), 7-19.

- Garo, L., Allen-Handy, A., & Lewis, C. W. (2018). Race, poverty, and violence exposure: A critical spatial analysis of African American trauma vulnerability and educational outcomes in Charlotte, North Carolina. *The Journal of Negro Education*, 87(3), 246-269. <http://dx.doi.org/10.7709/jnegroeducation.87.3.0246>
- Heiman, D. (2020). “So, is gentrification good or bad?”: One teacher’s implementation of the fourth goal in her TWBE classroom. *Anthropology & Education Quarterly*, 52(1), 63-81. DOI 10.1111/aeq.12362
- Heiman, D., DeVaughn, N., & González-Carriedo, R. (2019). The seal of biliteracy. *Texas Journal of Literacy Education*, 7(1), 5-9.
- Heiman, D., & Murakami, E. (2019). “It was like a magnet to bring people in”: School administrators’ responses to the gentrification of a two-way bilingual education (TWBE) program in central Texas. *Journal of School Leadership*, 29(6), 454-472. DOI 10.1177/1052684619864702
- Heiman, D., & Nuñez-Janes, M. (2021). “Research shows that I am here for them”: *Acompañamiento* as language policy activism in times of TWBE gentrification. *Language Policy*, 20, 491-515. DOI <https://doi.org/10.1007/s10993-020-09577-7>
- Heiman, D., & Yanes, M. (2018). Centering the fourth pillar in times of TWBE gentrification: “Spanish, love, content, not in that order.” *International Multilingual Research Journal*, 12(3), 173-187. DOI <https://doi.org/10.1080/19313152.2018.1474064>
- Henderson, K. I., & Palmer, D. K. (2019). “I wonder why they don’t do the two-way”: Disrupting the one-way/two-way dichotomy, re-envisioning the possibilities of dual language bilingual education. *NABE Journal of Research and Practice*, 9(1), 47-59. DOI <https://doi.org/10.1080/26390043.2019.1589292>
- Howard, E. R., Lindholm-Leary, K., Rodgers, D., Olague, N., Medina, J. Kennedy, B., Sugarman, J., & Christian, D. (2018). *Guiding principles for dual language education*. Center for Applied Linguistics.
- Kozol, J. (1991). *Savage inequalities*. Broadway Books.
- LaFleur, J. C. (2016). Locating Chicago’s charter schools: A socio-spatial analysis. *Education Policy Analysis Archives*, 24(33), 1-20. <http://dx.doi.org/10.14507/epaa.v24.1745>

- Lindholm-Leary, K. J. (2001). *Dual language education*. Multilingual Matters.
- Macnow, G. (1982). Proposed federal policies threaten bilingual programs, educators say. *Education Week*, 1(29), 4-5.
- Maxin, R. (2023, July 3). *Hispanics now the largest racial group in Texas-but not in Austin*. Austin American-Stateman. <https://www.statesman.com/story/news/2023/07/03/hispanic-population-in-texas-largest-racial-demographic-2020-census-austin/70365069007/>
- Moore, S. C. K. (2021). *A history of bilingual education in the US*. Multilingual Matters.
- Morales, P. Z., & Rao, A. B. (2015). How ideology and cultural capital shape the distribution of Illinois' bilingual education programs. *Teachers College Record*, 123(1).  
<https://doi.org/10.1177/016146812112300106>
- Morrison, D., Annamma, S. A., & Jackson, D. D. (Eds.). (2017). *Critical race spatial analysis: Mapping to understand and address educational inequity*. Stylus Publishing, LLC.
- Ogletree, C. (2014). The legacy and implications of San Antonio independent school district v. Rodriguez. *Richmond Journal of Law and the Public Interest*, 17(2), 515-548.
- Orozco, R. A. (2011). 'It is certainly strange...': Attacks on ethnic studies and whiteness as property. *Journal of Education Policy*, 26(6), 819-838.
- Ovando, C. J. (2003). Bilingual education in the United States: Historical development and current issues. *Bilingual Research Journal*, 27(1), 1-24. DOI 10.1080/15235882.2003.10162589
- Price, S. (2023, March 21). 'The little man has lost again': How a San Antonio lawsuit set back American education 50 years ago. San Antonio Express News.  
<https://www.expressnews.com/news/education/article/san-antonio-isd-rodriguez-50-17838148.php>
- Puente, M. (2022). A critical race spatial analysis of rural Latinx students' college (in)opportunities and conscious choices during the COVID-19 pandemic. *Journal of Latinos and Education*, 21(3), 304-318. DOI 10.1080/15348431.2022.2051040
- Rothstein, R. (2017). *The color of law*. Liveright Publishing Corporation.

- Soja, E. W. (2008). *The city and spatial justice*. Paper prepared for presentation at the conference Spatial Justice, Nanterre, Paris. Retrieved from: <https://www.jssj.org/wp-content/uploads/2012/12/JSSJ1-1en4.pdf>
- Soja, E. (2010). Spatializing the urban, Part I. *City*, 14(6), 629–635.
- Solórzano, D. G., & Vélez, V. N. (2016). Using critical race spatial analysis to examine the Du Boisian color-line along the Alameda corridor in southern California. *Whittier Law Review*, 37(3), 423-438.
- Stern, W. C. (2018). *Race & Education in New Orleans*. Louisiana State University Press.
- Sung, K. K. (2017). “Accentuate the positive; eliminate the negative”: Hegemonic interest convergence, racialization of Latino poverty, and the 1968 Bilingual Education Act. *Peabody Journal of Education*, 92(3), 302-321. DOI 10.1080/0161956X.2017.1324657
- Swaby, A. (2019, February 15). *Texas’ school finance system is unpopular and complex. Here’s how it works*. The Texas Tribune. [www.texastribune.org/2019/02/15/texas-school-funding-how-it-works/](http://www.texastribune.org/2019/02/15/texas-school-funding-how-it-works/)
- Takaki, R. (2008). *A different mirror: A history of multicultural America*. Back Bay Books.
- US Census Bureau. (2022). *QuickFacts: Austin city, Texas*. Retrieved July 3, 2023, from <https://www.census.gov/quickfacts/fact/table/austincitytexas/POP010210>
- Valdés, G. (1997). Dual-language immersion programs: A cautionary note concerning the education of language-minority students. *Harvard Educational Review*, 67(3), 391-429.
- Valdés, G. (2018). Analyzing the curricularization of language in two-way immersion education: Restating two cautionary notes. *Bilingual Research Journal*, 41(4), 388-412. DOI 10.1080/15235882.2018.1539886
- Valdez, V. E., Delavan, G., & Freire, J. A. (2013). *For whom is the dual language immersion boom?: The gentrification of strong forms of U.S. language education*. Paper presented at a Paper session titled, “Social Justice Implications of Language Policies and Practices” at the annual meeting of the AERA. San Francisco, CA.
- Valdez, V. E., Freire, J. A., & Delevan, M. G. (2016). The gentrification of dual language education. *Urban Rev*, 48, 601-627. DOI 10.1007/s11256-016-0370-0

- Vélez, V. N., & Solórzano, D. G. (2017). Critical race spatial analysis. In D. Morrison, S. A. Annamma, & D. D. Jackson (Eds.), *Critical Race Spatial Analysis: Mapping to understand and address educational inequity* (pp. 8-31). Stylus Publishing.
- Wall, D. J., Greer, E., & Palmer, D. K. (2022). Exploring institutional processes in a district-wide dual language program: Who is it for? Who is left out? *Journal of Latinos and Education*, 21(1), 87-102. DOI <https://doi.org/10.1080/15348431.2019.1613996>
- Walsh, C. (2011). Erasing race, dismissing class: San Antonio independent school district v. Rodriguez. *Berkeley La Raza Law Journal*, 21, 133-171.
- Way, H., Mueller, E., & Wegmann, J. (2018). *Uprooted: Residential displacement in Austin's gentrifying neighborhoods and what can be done about it*. The University of Texas Center for Sustainability Development in the School of Architecture & the Entrepreneurship and Community Development Clinic in the School of Law.  
<https://sites.utexas.edu/gentrificationproject/files/2018/10/UT-gentrification-executive-summary.pdf>
- Weise, A-M., & García, E.E. (1998). The bilingual education act: Language minority students and equal educational opportunity. *Bilingual Research Journal*, 22(1), 1-18. DOI 10.1080/15235882.1998.10668670
- Williams III, J. A., James, M., Díaz Beltrán, A. C., Young, J., Neshyba, M. V., & Ogletree, Q. (2022). Employing the urban education typology through a critical race spatial analysis. *The Urban Review*, 54, 450-480. <https://doi.org/10.1007/s11256-021-00625-y>
- World Population Review. (2023). *San Antonio, Texas population 2023*. Retrieved July 3, 2023, from <https://worldpopulationreview.com/us-cities/san-antonio-tx-population>
- Zabala, J. (2022, April 12). *How Texas is funding the expansion of dual language programs*. The Century Foundation. <https://tcf.org/content/commentary/how-texas-is-funding-the-expansion-of-dual-language-programs/>

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