## Title

Examining the Impact of Sociopolitical and School Contexts on Teachers' and Students' Multilingual and Psychosocial Development

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# UNIVERSITY OF CALIFORNIA 

Los Angeles

Examining the Impact of Sociopolitical and School Contexts on Teachers' and Students' Multilingual and Psychosocial Development

A dissertation submitted in partial satisfaction of the requirements for the degree of Doctor of Philosophy in Education
by

Janet Cerda

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2023

## ABSTRACT OF THE DISSERTATION

Examining the Impact of Sociopolitical and School Contexts on Teachers' and Students' Multilingual and Psychosocial Development
by

Janet Cerda<br>Doctor of Philosophy in Education<br>University of California, Los Angeles, 2023<br>Professor Alison L. Bailey, Chair

This three-study dissertation investigates the impact sociopolitical and school contexts have on teachers' and students' multilingual and psychosocial development.

Study 1 explores what motivated Union Community School bilingual teachers to pursue a bilingual teaching career and teach in a Spanish maintenance bilingual program. Utilizing developmental theories and an intersectional perspective, this phenomenological study examined teachers' semi-structured interview transcripts ( $\mathrm{N}=13$ ). Inductive and deductive coding techniques were applied to the data. Findings reveal teachers' experiences of ethnic-racial prejudice had long-term impacts on their well-being. However, developmental assets, such as ethnic-racial identity, critical consciousness, and bilingual acquisition, provided teachers with tools to process prejudice as adolescents and adults. These assets coupled with opportunities to
engage with their ethnic-racial social group in positive ways cultivated teachers identity-based motivation for transformative justice.

Study 2 employs an embedded sequential mixed-methods design, such that a qualitative strand is embedded within a quantitative design. Quantitative, longitudinal descriptive analysis and calculations of proportions of students exceeding certain benchmark values were examined to identify overall patterns of English and Spanish reading change for different bi/multilingual student groups of predominantly Latinx and Indigenous heritage $(\mathrm{N}=393)$. Additionally, using a smaller sample size $(\mathrm{n}=230)$, student psychosocial covariates (i.e., motivation, socioemotional self-concept) were examined using descriptive analysis across two time points (fourth and fifth grade) to explain overall reading patterns. Qualitatively, portraiture analysis was utilized to further explore two students' perspectives about their reading growth over a two-year span (fourth to fifth grade).

Findings suggest that strong Spanish reading competence in the first-grade (spring) supports modest Spanish-reading growth, and greater English-reading growth by the end-of-the fifth grade, even though most students, as kindergarteners, began reading below grade level proficiency in Spanish. Furthermore, the school was effective at supporting English and Spanish reading development: The proportion of students reading at or above grade level in Spanish and English at fifth grade (spring) increased across student cohorts, and students' motivation to learn Spanish and English increased between the fourth (spring) and fifth (spring) grades. The qualitative findings found that students' investment in developing their home/heritage languages depends on the language modality (e.g., reading versus speaking). By the end of the fifth grade, students described having a more complex understanding about their bilingualism that goes beyond language preference and performance.

Study 3 utilizes phenomenological epistemology, and perspectives on language teaching and learning, to examine the adaptations bi/multilingual teachers made to their practice and knowledge base to meet diverse students' needs and leverage their assets. Inductive and deductive codes were applied to teachers' semi-structured interview transcripts ( $\mathrm{N}=13$ ). Findings reveal that teacher-led professional development and student feedback were central to teachers' adaptation process. Furthermore, teacher adaptation did not end in the moment. Teachers reflected on the adaptive experience afterwards, which often led them to further modify instruction and/or curriculum.

The dissertation of Janet Cerda is approved.

> Karen Hunter Quartz

Ramon Martinez
Mike Seltzer
Carola Suárez-Orozco
Alison L. Bailey, Committee Chair

University of California, Los Angeles
2023

## DEDICACIÓN

## Para mi mamá y papá,

héctor, jackie, shylah, y juliana,
arturo y natalie, david y karen, \&
brian:
los amo hasta las estrellas y la luna.

# Examining the Impact of Sociopolitical and School Contexts on Teachers' and Students' Multilingual and Psychosocial Development 

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## VITA

## Researcher

2014-2019, 2021-2023
UCLA Center for Community Schooling, UCLA

- Managed a large longitudinal database of approximately 6,000 cases using EXCEL formulas.
- Collected and analyzed data across multiple time points from 393 students in $\mathrm{K}^{\text {er }}-5^{\text {th }}$ grade.
- Planned research agendas and professional learning opportunities with school leaders and researchers.
- Collaboratively led a team of diverse teacher and student researchers to develop and execute a portfolio of projects with multiple tasks and deadlines.
- Produced two peer-reviewed journal articles, one policy brief, multiple data reports, and data visualizations for different audiences.
- Presented findings at six national conferences.

Project Coordinator
2016-2017
Social \& Public Art Resource Center
Los Angeles, CA

- Interviewed about 20 activists/ union leaders of Color to capture histories of underrepresented communities.
- Managed arts programming and coached 10 bilingual art teachers.
- Facilitated parent/teacher workshops ( $30-100$ participants) sponsored by various education foundations with a team of diverse community activists, artists, and educators.


## Research Analyst

2013-2017
Institute for Immigration, Globalization, \& Education, UCLA
Los Angeles, CA

- Responsively recruited undocumented student populations nationally using social media (approx. 600).
- Developed and revised qualitative and quantitative codebooks for national research studies.
- Examined survey data (approx. 1,200 participants), interview data (approx. 60 participants) and video observations from the MET study using mixed methodology.
- Trained and mentored diverse graduate and undergraduate student researchers to input, collect, organize, and analyze quantitative and qualitative data.
- Produced three peer-reviewed journal articles, a technical report, and white papers for funding agencies.


## Bilingual Teacher

2007-2013
Wrights Bros. School P.S. 29; Cypress Hills Community School P.S. 89 New York, NY

- Taught linguistically, racially/ethnically diverse $3^{\text {rd }}, 4^{\text {th }}, 5^{\text {th }}$, and $6^{\text {th }}$ grade students of immigrant-origin.
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- Collaborated with parents to develop science curriculum and led parent workshops about math topics.


## GRANT FUNDING \& ACTIVITY

- NAEd/Spencer Foundation, Dissertation Fellowship, "Spanish and English Reading Growth Trajectories of Multilingual Students Enrolled in a Dual-Language Program: Impacts of Language Use, Motivational Processes, and Instructional Programming," 2019-2020. Principal Investigator. (Funded; \$27,500).
- LAUSD Arts Community Partnership Grant. Social and Public Art Resource Center 2016. (Funded; \$79,000).
- New York City Department of Education (NYCDOE) Assessment Practice Grant (APG) Team Leader, Cypress Hills Community School PS 89, 2012-2013.


## SELECTED PEER-REVIEWED PUBLICATIONS

Cerda, J., Bailey, A. L., \& Heritage, M. (2020). Contexts for self- and co-regulated learning in a dual-language elementary school classroom. Language \& Education, 34(5), 407-424.
Hernandez, E., Suárez-Orozco, C., Cerda, J., Birchall, O., Corral, M., Garcia, Y., Katsiaficas, D., \& Ruedas-García, N. (2019). Immigrant-origin students in community college: How do they use their time on campus? Teachers College Record, 121(7).

## SELECTED REPORTS \& INSTITUTIONAL DOCUMENTS

Cerda, J., García, N., Jiménez, R., \& Kim, Q. (2019). The power of self-assessment: Using community-based measures to advance biliteracy (1-RR-19). Retrieved from the University of California, Los Angeles, Center for Community Schooling website: https://communityschooling.gseis.ucla.edu/the-power-of-self-assessment/
Teranishi, R.T., Suárez-Orozco, C, \& Suárez-Orozco, M ...Cerda*, J...(2015). In the shadows of the ivory tower: Undocumented undergraduates and the liminal state of immigration reform. The UndocuScholars Project. The Institute for Immigration, Globalization, \& Education, University of California, Los Angeles. (*research analyst)

## SELECTED PRESENTATIONS

Quartz, K. H., Cerda, J., García, L., \& Jiménez, R. (2020, April). How community schools support adolescents’ social, emotional, and academic development. In M. Immordino-Yang (Chair) The new science of adolescence: Integrating socio-emotional and academic development in research, practice, and policy. Annual Meeting of the American Educational Research Association, San Francisco, CA.
Cerda, J., Garcia, N., \& McNaughton, I., (2018, March). Reading self-assessment: Promoting student ownership of reading progress in two languages. California Association for Bilingual Education, Sacramento, CA.

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CUNY Hunter College
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## CHAPTER 1

## General Introduction

Spanish in the United States is a colonial, indigenous, and immigrant language. (Lozano, 2018, p. 3)

We cannot even begin to encompass the human life cycle without learning to account for the fact that a human being under observation has grown stage by stage into a social world; this world, always for worse and for better, has step by step prepared for him an outer reality made up of human traditions and institutions which utilize and thus nourish his developing capacities, attract and modulate his drives, respond to and delimit his fears and phantasies, and assign to him a position in life [...]. We cannot even begin to encompass a human being without indicating for each of the stages of his life cycle the framework of social influences and of traditional institutions which determine his perspectives on his more infantile past and on his more adult future. (Erikson, 1958, p. 20)

Though it may sound counterintuitive to those unfamiliar with this research, students are helped to learn English by reading, writing, and interacting in their first language; they also acquire content knowledge in both languages. If the bilingual education model is additive rather than subtractive, the students may also become bilingual and biliterate. (Combs, Gonzalez, \& Moll, 2011, p. 194; emphasis in the original)

The historical and developmental concepts expressed in the aforementioned quotations highlight the key themes covered in this dissertation. I utilize these concepts first to review the history of Spanish and bilingualism in the United States, and highlight how the Spanish language and bilingualism have been used as markers of race, foreignness, and inferiority -- markers that continue to racialize Latinx teachers and students today. Second, Erikson's developmental theories on the bidirectional relationship between society and the individual are discussed to contextualize the impact of societal prejudice on development. This historical review is essential to providing context for the three studies presented in this dissertation, as each examines the experiences and development of historically racialized and marginalized Latinx teachers and students in school spaces.

Lozano (2018) writes that "Spanish in the United States is a colonial, indigenous, and immigrant language $[\ldots]$ (p. 3). This statement is compelling, because each adjective (colonial, indigenous, immigrant) is indexical, linking the history of Spanish in the United States to examples of privilege and oppression.

As a colonial language, Spanish was utilized by conquistadors and missionaries to subsume indigenous languages in North America (e.g., Southwestern territories, Mexico, Caribbean, Central America). In the eighteenth and nineteenth centuries, Spanish became the native (indigenous) language of Spanish settlers in what is now Louisiana, the Midwest, and the Southwest. It was the lingua franca for many American Indians who lived in these Spanishspeaking settlements, and so it remained, until the United States acquired each of these territories (Lozano, 2018).

In the late nineteenth century, when the Treaty of Guadalupe was established between the United States and Mexico, Spanish became a "language of politics" (Lozano, 2018). The

Mexican citizens who received American citizenship (known as "Treaty Citizens"), utilized Spanish to govern and establish new political connections with United States leadership. However, as these territories became states and as the pressure to assimilate Mexican American constituents increased, the repression of Spanish in classrooms and segregation practices became commonplace (Garcia, 2009). Nevertheless, some parochial schools were able to maintain bilingual instruction (Lozano, 2018).

During this period, racial ideologies persisted. Racial ideologies are a set of principles or ideas that intend to divide people into groups to benefit the interests of the dominant group (Canizales \& Vallejo, 2021). In the United States, these ideologies "center on hegemonic Whiteness and work to protect White supremacy," finding "their power in repeated cultural representations, or controlling images [...] that shape how members of a racialized group are perceived and treated at interpersonal, institutional, and political levels" (ibid. p. 152). All Mexicans, whether they were of mostly Spanish heritage or of both Native American/Indigenous and Spanish heritage, were perceived by Anglo-Americans as inferior. Mexicans of mixed heritage, however, were thought to be more inferior and were referred to by Anglo-Americans as "vermin to be exterminated," "wretched hybrids and mongrels," and of a "lower class" (Spring, 2021, p. 107, 114). School and housing segregation was driven by these racial ideologies.

In the twentieth and twenty-first centuries, different waves of migration to the United States from Spanish-speaking countries, such as Mexico, Puerto Rico, and Cuba brought new dialects and experiences, "replenishing" Spanish (Lozano, 2018). In response to these waves, Spanish became an immigrant language and a marker of foreignness (Canizales \& Vallejo, 2021), and the racial ideologies and segregation practices established in the nineteenth century continued into the twentieth century. For example, in the twentieth century, the Southwestern
territories continued segregation practices and the eradication of Spanish use in school contexts to "Americanize" Mexican Americans (Treaty Citizens) and keep immigrant farm workers and their children working in the fields (Spring, 2021).

Throughout the twentieth century, racist ideologies depicting Spanish as an immigrant, "foreign" language increased, thus perpetuating the idea that Latinx-American speakers of Spanish are foreign "others" (Garcia, 2009). While school segregation was declared unconstitutional by mid-century, Latinx students and their families continued to experience various forms of prejudice. This spurred community and student movements in the Southwest and Northeast (Spring, 2021)

During the 1960 's, Mexican American and Puerto Rican communities inspired by the Black Power movement and allied struggles, asserted a "race radical" approach (Garcia \& Sung, 2018). In this, Latinx communities recognized their histories as colonized and conquered people who were minoritized by race and language, and advocated for bilingual education as one tool to help empower the community toward self-determination.

Student and parent activists who participated in the high school walkouts in East Los Angeles expressed a desire for (McCurdy, 1968): (1) bilingual and bicultural education, with administrators, support staff, and teachers to receive training in the Spanish language and Mexican cultural heritage; (2) the removal of school leadership, teachers, and staff who showed prejudice towards Mexican Americans; (3) the development of textbooks and curricula that show the Mexican American contributions to society in the United States and the injustices they have endured; (4) smaller class sizes; (5) novice teachers to live in the community where they teach; and (6) community parent engagement as teacher aides.

While not all of these recommendations were addressed in the 1967 congressional
hearings of the Bilingual Education Act (BEA), bilingual education was promoted as a means to improve Latinx students' self-esteem through pride in their culture and languages (Garcia \& Sung, 2018). The bilingual programs that emerged as a result of the BEA were mostly transitional in nature, meaning, that students' home languages were utilized to support the acquisition of English and transition them to English immersion classrooms. These programs were "hollowed versions" of Latinx activists' vision of "community-based bilingual-bicultural school" (Flores \& Garcia, 2017).

The beginning of the twenty-first century was welcomed by an English-only movement (late 1990s into the 2000s), the enactment of restrictive language education policies in various states, racist immigrant policies (e.g., California's proposition 187), xenophobic rhetoric by politicians (e.g., California Governor Pete Wilson), as well as nativist movements (e.g., the Minuteman Project and other anti-immigrant militia groups) (Arellano, 2019; Holthouse, 2005; Spring, 2021). Twenty years later (2016), the forty-fifth president, Donald Trump and his administration, would rely on Latino racialization and xenophobic rhetoric to win an election and "propel himself into the political arena as the defender of those fearing demographic change and immigration" (Canizales \& Vallejo, 2021, p. 151).

Rhetoric and policies from Trump's campaign and presidency reinforced racist ideologies that were centuries old to depict Mexican-Americans and Latinx immigrant groups as criminals and foreign "others." Specifically, utilizing the Spanish language itself to "other" a whole segment of U.S. society, Trump declared: "We have some bad hombres here and we are going to get them out" (Canizales \& Vallejo, 2021, p. 151). An alarming feature of his presidency and lasting legacy is the legitimization of overt White nationalism and the heightened experiences of racism for many social groups, including Latinx.

When Donald Trump was campaigning, in 2016, many bilingual activists and lawmakers rebranded bilingual education, replacing the word "bilingual" with "multilingual," to reach out to a White audience (Katznelson \& Bernstein, 2017). Many, if not all, restrictive language policies from the early 2000's were overturned across the country (New America, n.d.). Today, there are different types of bilingual program models, which can be categorized as either subtractive or additive for Spanish-speaking students. Both subtractive and additive programs utilize students' home language to support the acquisition of English, but "if the bilingual education model is additive rather than subtractive, the students may also become bilingual and biliterate" (Combs, Gonzalez, \& Moll, 2011).

Specifically, subtractive bilingual programs aim to transfer or transition students to an English immersion classroom setting as soon as possible, whereas additive bilingual programs attempt to help students become bilingual and biliterate before graduating from elementary school. For this reason, subtractive programs are referred to as early exit programs, and additive programs as late exit programs. Additive bilingual programs have been identified by second language acquisition scholars (Cummins, 1978; Genesee et al. 2005) to be viable programs for English Learner students (EL, students learning English as a new language). There is a variety of additive program models, such as the maintenance or developmental bilingual model and the two-way immersion bilingual model. Some maintenance bilingual programs are also communitybased. These models aim to teach students content and language skills in their home language and a partner language, supporting the continued development of both languages. In the last ten years or so, additive bilingual models have been mostly referred to as dual-language programs.

In this dissertation, I focus on the community-based maintenance bilingual model which, as noted by Combs, Gonzalez, and Moll (2011), helps students "learn English by reading,
writing, and interacting in their first language," while also acquiring "content knowledge in both languages," becoming bilingual and biliterate (p. 194; emphasis in the original). This model serves predominantly minoritized and racialized student groups of Color and of immigrantorigin. These students are linguistically diverse, and include English speakers, bilingual speakers, Spanish speakers, or multilingual speakers. The community aspect includes partnerships with local community partners to support the development of the whole child (e.g., connecting curriculum to the community and culturally responsive pedagogy) Two-way immersion programs are similar to maintenance bilingual programs. The main difference between them is that two-way immersion programs must enroll a roughly equal number of Spanish dominant speaking students and English dominant speaking students who serve as linguistic models for one another.

Depending on the communities the schools serve, two-way immersion programs can be as linguistically diverse as maintenance bilingual programs. However, two-way immersion programs often enroll more White families than maintenance bilingual programs. This may be because maintenance bilingual programs were created to also support heritage learners' bilingual and biliteracy development. In either case, if the student is designated as an EL student, the de facto prerogative is that students' home/heritage language is utilized as a resource or a tool to support English language development. Once English proficiency has been achieved, the development of the home/heritage language becomes less important, as signaled by its omission from educational accountability regulations (Every Student Succeeds Act, 2015) in terms of accountability but not in terms of community cohesion and priorities,

Furthermore, in the last decade, a common argument for multilingual education has been the economic advantage it affords students after graduation (Callahan, Rebecca \& Gándara,
2014). In this, multilingualism is framed as human capital that increases individuals' labor market value and income. Therefore, "dual-language" schools are essential to prepare future movers and shakers to adeptly communicate with various stakeholders utilizing multiple languages. This argument helped facilitate the rebranding of bilingual education, as well as support the replacement of restrictive language policies across states. However, it overlooks the role of raciolinguistic ideology in assigning value to languages and their speakers based on race and ethnicity, not communicative utility (Rosa, 2016, 2019; Subtirelu, 2017).

Rosa's (2016) ethnographic study in Chicago public schools found that one could be highly credentialed and still be subjected to raciolinguistic discrimination. He highlighted Dr. Baez' experiences as a bilingual school principal. Dr. Baez has several university degrees, including a doctorate in education, but was described by her colleagues as having "horrible" English and Spanish that "isn't that good either", as well as "lacking intellectual capacity to hold her position in the school" (p. 167). These teachers provided examples, such as Dr. Baez' use of the phrase "making application" in a letter of recommendation. Rosa explained that although "a somewhat arcane usage" it can be found "in communicative venues emblematically associated with standardized English, such as the New York Times and The Guardian" (p. 167).

Another ethnographic study (Dorner et al., 2015) conducted in an elementary school located in a southeastern state found that a two-way immersion bilingual program, which served an equal proportion of Latinx Spanish-speaking students and White English-speaking students, outsourced international Spanish bilingual teachers from South America. There were two reasons provided. On the one hand, local bilingual teachers were difficult to come by due to subtractive language education practices (English immersion or English-only education) and a scarcity in bilingual teacher education programs. On the other hand, White English-speaking parents
preferred international teachers who they believed spoke uncorrupted, "standard" and authentic Spanish. The economic opportunity to be employed as a Spanish bilingual teacher was reserved for Spanish speakers who were imagined to use "standard" Spanish, a criterion that in this case excluded American Latinxs from consideration.

These historical and contemporary examples indicate that the sociocultural and political characteristics of Spanish in the United States and its perceived utility inform us of how society perceives bi/multilinguals (of Latinx heritage), and how bi/multilinguals (of Latinx heritage), in acquiescence to or in resistance to these ideologies, perceive themselves. From a developmental perspective, how languages are developed, utilized, and perceived by society informs how groups of people "grow stage by stage into a social world" that "always for worse and for better, has step by step prepared" for them "an outer reality made up of human traditions and institutions" which in a just world, would "nourish" their "developing capacities, attract and modulate" their "drives, respond to and delimit" their "fears and phantasies" (Erikson, 1958, p. 20). In essence, to understand how multilingual students develop bilingualism, biliteracy, and a strong sense of self, one must also identify how institutions as vehicles for the social world play a part in these students' bilingual development in school.

In response, this three-study dissertation aims to examine (1) the connection between diverse teachers' personal and professional experience with language learning, ideologies, and instructional practice, (2) the psychosocial characteristics that influence the bilingual reading development of multilingual Latinx and immigrant students, and (3) the pedagogical, ideological, and policy related mechanisms that support and hinder responsive bilingual programming.

## Personal Connection to the History of Latinx Immigration and Bilingualism

To provide further context to this research, this section briefly summarizes the contemporary history of Latinx immigration and bilingual education in the United States through my personal family history.

For my Mexican family of indigenous heritage, Spanish has been both an American and immigrant language--American in that it was the first language spoken by different generations of Cerdas on American soil. My great grandparents, Sabino Cerda Castro (Figure 1.1) and Ines Silva Flores, along with my great granduncle and great grandaunt, Librado Cerda Castro and Nicolasa Gomez Cerda (Figure 1.2) immigrated to the United States between 1919 and 1920 from Penjamo, Guanajuato, Mexico to El Paso, Texas. Both families worked as migrant farmworkers and lived and worked in New Mexico and California, specifically Van Nuys and San Fernando.

Figure 1.1
Great grandfather Sabino Cerda Castro (left) with my granduncle Jose Cerda Silva (right)


Note. Photograph taken sometime between 1940-1950; The children are aunts and uncles.

My grandfather Jesus Cerda Silva was born in California in 1926 (see Figure 1.3). Family members from both households spoke Spanish and/or English until Sabino's family repatriated to Mexico, sometime during the Great Depression. Librado and his family remained in Fresno, California. As unemployment grew, so did hostility toward Mexican Americans and Mexican immigrants. Consequently, the government began a program to repatriate immigrants to Mexico. While some immigrants went voluntarily, many were coerced into repatriation. American citizens who were suspected of being of Mexican descent were also deported. This policy impacted hundreds of thousands of Mexican people, especially farmworkers like my family.

Figure 1.2
Great granduncle Librado Cerda Castro (left) and wife Nicolasa Gomez Cerda (right)


Note. Photograph taken sometime between the 1900-1920s

Sometime between 1940 and 1950, my great grandfather Sabino told his son, Jesus, that he was an American citizen and encouraged him to move his family to the United States. Sabino saw how much my grandparents, Jesus and Josefina, were struggling and thought that they might have more opportunities en el Norte (the North). Jesus moved to the United States first and Josefina and the children (Figure 1.4) stayed in La Barca, Jalisco, Mexico. My grandmother Josefina, who is Purepecha, is originally from Michoacan, Mexico.

Figure 1.3
Grandfather Jesus Cerda Silva


Note. Sometime in the 1940s

As soon as Jesus arrived in San Fernando, California, he received support from his cousin Tranquilina (Figure 1.6 \& 1.7) and aunt Maria, daughter and sister, respectively, of my great granduncle Librado and great grandaunt Nicholasa. His cousin and aunt provided him with room and board, community, and employment. Sometime after 1940, Josefina and the children moved to Mexicali, Baja California, Mexico. My grandmother's sister and her husband (Figure 1.8), an Anglo-American engineer, would visit when his work sent him to Indio, which happened often.

Figure 1.4
Francisco Cerda (left), Josefina Hernandez Cerda (center), Jesus Jr. Cerda (right)


Note. Sometime between 1940-1949.

## Figure 1.5

Carlota Arias Cerda (left), Simon Cerda (center left), Tranquilina Cerda (center), Florentino
Cerda (center right), Luz Villalovos Cerda (right)


Note. Photograph taken sometime between 1915-1930

## Figure 1.6

Felipe Ferrer (left), Tranquilina Cerda Ferrer (right)


Figure 1.7

## Maria Petronia Lucia Cerda



Note. Baptized June 29, 1858 in San Francisco De Asis, Penjamo, Guanajuato, Mexico. Sister of Librado and Sabino Cerda

## Figure 1.8

Josefina's sister (bottom left) and husband (bottom right); sister's daughter (top left), Josefina Hernandez Cerda (top center), Jesus Cerda Silva (top right)


My father, Arturo Cerda (see Figure 1.9), immigrated to the United States when he was twelve and like his father and grandfather before him, worked the Central Valley fields during summer breaks when he was off from school. My father's schooling experiences were not very positive. Still, he went to East Los Angeles Community College (ELAC) and then Cal State Los Angeles (CSULA) where he became credentialed to teach high school Spanish. His friend group motivated each other to enroll in ELAC and then transfer to CSULA. While in ELAC and CSULA my father was politically active with Movimiento estudiantil Chicano Aztlán (MEChA)
a student political organization and movement that promotes political engagement related to Latinx social issues. My father continued to be politically active in East Los Angeles for decades, even after we moved to the Inland Empire.

Figure 1.9

## Arturo Cerda Hernandez



Note. My Father, working on an award-winning sculpture in ceramics class in Vale High School located in Montebello, California in the 1970s.

As a teacher, my father observed that most of his colleagues in the Spanish department had been educated in Spanish-speaking countries. He was often the only Spanish teacher who identified as Chicano rather than a Mexican national. This was because he experienced secondary and postsecondary education in the United States, lived developmentally formative years in this country, and his father was an American citizen. He advocated for Spanish heritage courses and worked to reframe the ideology that heritage Spanish speakers were unable to do well in advanced placement (AP) courses.

Figure 1.10
Estela Garcia Cerda


Note. Shortly after immigrating to the United States

My mother Estela Cerda (see Figure 1.10) immigrated to the United States as a young adult in the late 70s to join her older sister Carmela Perez. All of my family from my mom's side were undocumented until the Regan administration's amnesty. Before then, Carmela and her husband, Manuel, (see Figure 1.11) had already built roots in Los Angeles. Manuel worked in a metal yard in Vernon, and then built a lucrative family trucking business with Carmela at the helm. Their story is remarkable and very important to my family. Carmela and Manuel helped their siblings, cousins, aunts, and uncles immigrate to the United States. They offered shelter and often a job.

Figure 1.11
Carmela Garcia Perez (left), Manuel Perez (right)


Figure 1.12
Janet Cerda (left), Froilan Garcia (center), Arturo Cerda (right)


Note. Belen, Jalisco, Mexico. Sometime in the early 1990s.
Growing up, there were frequent visits to Leon, Guanajuato, Mexico where my mom is from, and Belen, Jalisco, Mexico, where my grandfather Froilan lived (Figure 1.12). All of my cousins in the States and Mexico are bilingual. I was immersed in Spanish because everyone felt most comfortable speaking Spanish in these spaces. Most of the time, when visiting family in Mexico and living in the States, I felt both American, Mexican, and bilingual. It was when I translated for my mother at the grocery store, school, or doctor appointments that I was made to feel foreign. Or, when we visited family in Mexico, I was told that my Spanish was too

American, or worse, I spoke like a pocha. "Pocha/o" is a Mexican Spanish word that stereotypically and pejoratively describes Chicanos (Mexican Americans) and those who have left Mexico as speakers of English that lack fluency in Spanish, and who use Spanglish (a hybrid English and Spanish language), code-switching (inserting English words), and loan words (e.g., "mopear" vs "trapear") when communicating in Spanish.

It was hard to avoid exposure to racism directed at Latinx peoples. In addition to policies restricting Spanish/bilingual language use in schools (proposition 227), and policies designed to deny social services to undocumented people (proposition 187), pop culture also partook in further marginalizing Latinx children and families by using Latinx culture and the Spanish language itself. For example, during the 1980s and 1990s mock Spanish was popularly used in television and movies, reproducing negative stereotypes of the Spanish language and Spanish speaking people (Hill, 2009). Some characteristics of mock Spanish include anglicizing the pronunciation of words, using words lewdly, using offensive words or phrases, and using words to disparage. These tactics function to ridicule Spanish and by association Latinx people. Renditions of mock Spanish were everywhere in the media.

Still, I held on to my Mexican ethnic identity because my mother and father shared their stories of resilience and activism, instilling pride in my ancestral history. I also felt empowered and motivated to take care of my Spanish with support from my parents (Figure 8), and unfortunately, little support from school.

As discussed previously, during the 1990's, bilingual education was losing political support and most school programs employed English immersion with English as a second language resource or subtractive bilingual programs. In effect, I enrolled in English immersion classes in neighborhood public schools, with the exception of kindergarten. I went to a Catholic
private school for kindergarten. One of my kindergarten teachers, Ms. Perez, who is bilingual, helped me acclimate to kindergarten socially, emotionally, culturally, and academically. Without her support, I think I would have struggled in first grade.

Figure 1.13
Estela Garcia Cerda (left) and Arturo Cerda Hernandez (right)


An important piece to this story is that my mom prepared me for kindergarten by enrolling me in bilingual preschool and teaching me essential skills in Spanish (e.g., colors, alphabet, numbers, shapes, pre-literacy concepts). Thus, when I was administered an entrance exam at the parochial school in English, and failed, Ms. Perez asked the administrators if she
could examine me in Spanish, and I passed. When my mom shared this story with me as an adult, I felt gratitude towards Ms. Perez, and my mother of course, but I also became interested in topics related to equitable educational assessment practices and the importance of bilingual teachers

I went to a small public high school located on the campus of the California Polytechnic University Pomona. This high school was a project-based high school which meant that in addition to the mandated curriculum, students completed interdisciplinary projects in groups each trimester. The school only offered one "foreign" language, because it was a very small school. My graduating class had about 70 seniors. When I went to Oberlin College, I enrolled in various courses taught in Spanish that supported my Spanish development, such as Spanish for heritage speakers, Mexican history, contemporary Latin American literature, and translation theory. In 2005, after I had graduated from college, and after much coaxing from my father, I decided to pursue teaching, specifically bilingual teaching. However, bilingual credentialing programs in Southern California were difficult to come by. As discussed previously, in the late 1990's, California voters passed legislation, Proposition 227, which restricted bilingual programming and caused bilingual teacher education programs to disappear. New York City, however, was recruiting bilingual teachers through their NYC Teaching Fellows program, and that is how I landed in New York City for eight years before returning to Los Angeles for graduate school.

I taught in two Spanish maintenance bilingual schools located in Washington Heights and East New York. The Cypress Hills Community School enrolled students in kindergarten to eighth grade, and was founded by parents from the neighborhood. The parents wanted a school that would offer their children bilingual instruction that promoted community-building and social
justice. The Wright Brothers School was a public school that had partnered with Columbia's Teachers' College, specifically the Lucy Calkins Readers' and Writers' Workshop curriculum development team. Working in a "lab" site as a novice teacher was difficult because I had to follow a regimented structure and adhere to a script, and my classroom had to look nearly identical to the other bilingual classrooms. I was lucky to have wonderful mentors, Ms. Felice and Mr. Barton, who trained me well and cheered me on.

These schools enrolled diverse teachers and students. My colleagues and students exposed me to various Caribbean and Latinx cultures, histories, and languages. It was beautiful. I began to question the need and utility of Panethnic terms, such as Hispanic and Latin American. I felt then, and still do, that these terms homogenize diverse groups of people. They represent people who have different histories, cultures, and dialects, as well as unique immigration, language, and cultural experiences. I recognize how difficult it is to always observe, reflect on, and report the nuances in diversity, but as a teacher, I learned that if I do not appreciate and honor the differences each student brings, then I am not really seeing them. If I am not "seeing" students and getting to know their ways of being, how will I be capable of adapting my teaching (instruction, curriculum, assessment) to their strengths?

## Dissertation Ontology: Community-Based Participatory Research Perspectives

The most salient perspectives at the core of community research include: "reciprocity in a respect for local knowledge," "collaborative decision making," and a "commitment to social justice that leads to positive change" (Jason \& Glenwick, 2016, p. 255). The research presented in this dissertation is guided by these community-based participatory research perspectives (CBPR) or "philosophy of practice" (Kidd \& Kral, 2005).

Building Relationships Based on Mutualistic Respect

For seven years, I drew from the insights I gathered as a bilingual teacher to build relationships with teachers and staff at a community school in Southern California. In the beginning, I devoted time to getting to know the teachers and the school community. Like a fly on the wall, I observed classrooms and joined grade-level meetings, and just listened. I took copious notes and during observations drew diagrams of sitting arrangements and student movement to get a sense of classroom cultures (See Cerda et al., 2020). I engaged in these practices because I wanted to get to know the teachers, but I also wanted to familiarize myself with their vision and goals, as well as their program structures, instructional approaches, curricula, and assessment. Furthermore, I made it transparently clear, early on, that I was there to collaboratively study topics related to bilingualism and biliteracy that the teachers were interested in exploring.

## Collaborative Decision Making

Together we studied topics we were both interested in, and supported each other to expand our expertise (knowledge base), as well as improve the school's bilingual program. The collective goal was to support students' bilingual learning and development. We did this by creating pedagogical tools we could utilize to analyze student-level and program-level data, and then used our findings to responsively support students' bilingual and biliteracy development (see Cerda et al., 2019).

Teachers, staff, and I engaged in the inquiry process as co-researchers for an extended period of time. Our inquiry focused on (1) creating data collection and data management protocols to maintain a longitudinal Spanish and English reading database, (2) creating longitudinal bilingual reading reports, (3) analyzing the reports together and utilizing findings to inform instruction, curricular planning, and intervention, (4) engaging students in analyzing their
own longitudinal bilingual reading data, and (5) collecting teacher historical accounts of teacher decisions to document the development of the school's bilingual program.

## Commitment to Social Justice to Improve the Program for Students

As we engaged in this work, we learned more about our student community. For example, after reading students' reflections from the self-assessment tools we created, we found that our fourth and fifth grade students desired more Spanish support from their teachers. Selfassessment tools from second and third grade informed us of the conversations students were having with their parents about the students' reading. These self-assessment tools became focal artifacts utilized during student-teacher-family conferences, as well as end-of-the-year celebrations (See Cerda et al., 2019; Cerda et al., in review). The analyses of the longitudinal Spanish and English reading data pointed out patterns we were not expecting. We noticed that most students were graduating from elementary school reading in English at or above gradelevel, and fewer students were reading in English and Spanish at or above grade-level. We also noticed that many kindergarten and first grade students were entering school with Spanish reading skills that were below grade-level expectations. Teachers collectively and individually took various steps to address these trends.

The research questions in this dissertation are a product of the aforementioned inquiry work. That is, our collective inquiry led us to the research questions I present here. While I designed these studies and analyzed the data myself, the research presented here stemmed from our collective efforts. And after I defend the dissertation, I will collaboratively work with a team of teachers to present these findings to the school community.

## Dissertation Design

To address my qualitative research questions for Study 1 (Chapter 2) and Study 3 (Chapter 4), I employ phenomenological analysis. I chose to draw from phenomenology because it gets at "the underlying structure of experience" (Merriam 2009, p. 25). Using teacher data from semi-structured teacher interviews, Study 1 documents teachers' pedagogical experience in a bilingual classroom, such as their professional trajectory and their beliefs about multilingualism; and Study 3 explores the strategies and practices teachers in grade-level teams employ, as well as the challenges they encounter and manage.

For Study 2 (Chapter 3), I utilize a mixed methods approach. Quantitatively, I examine longitudinal descriptive analysis and calculations of proportions of students exceeding certain benchmark values to identify overall patterns of English and Spanish reading change for different bi/multilingual student groups of predominantly Latinx and Indigenous heritage $(\mathrm{N}=$ 393). Additionally, I examine student psychosocial covariates (i.e., motivation, socioemotional self-concept) using descriptive analysis across two time points (fourth and fifth grade) to explain overall reading patterns. Qualitatively, I utilize portraiture analysis to further explore two students' perspectives about their reading growth over a two-year span (fourth to fifth grade).

## Research Questions

## Study 1

1. What motivated teachers at Union Community School to become bilingual teachers and teach in a Spanish maintenance bilingual program? [Qualitative]

## Study 2

2. What are the longitudinal reading trajectories of students in a developing dual language program? [Quantitative]
3. What proportions of students (in different groupings) met or exceeded grade-level benchmark expectations by the fifth grade? [Quantitative]
4. What are students' perceptions about their academic and social competence, learning behavior, motivation, and language use in the fourth and fifth grade? [Quantitative]
5. What do students (from a subsample) think about their bilingualism and their biliteracy development across the fourth and fifth grades? [Qualitative]

## Study 3

6. What adaptations did teachers make to their practice and their knowledge base to meet diverse students' needs and leverage their assets? [Qualitative]

## Methodology

## The Union Community School Context

## Demographics

In a bustling neighborhood, nestled within a large Southern California metropolis is the Union Community School (a pseudonym), a university-partnered, community public school that enrolls students in transitional kindergarten (TK) to the twelfth grade. Walking a mile around the school's neighborhood, one sees multistory apartment buildings and storefronts with bodegas, hears a multitude of languages from passersby, and smells aromas from delicious cuisines representing the continents of North America (e.g., Central America and Mexico), South America, Asia, Africa, and Europe. It is an enclave for both immigrant and urbanite communities. Thus, as the school's name proclaims, the Union Community School's diverse student body is representative of the local community it serves, enrolling approximately 1,000 students of Color, predominantly Latinx (81\%), Asian (10\%), and Filipino (5\%) students,
including a high percentage from immigrant families. These demographics have stayed fairly constant since the school opened in 2009.

## Organizational Structure

As a teacher-led community school, it implements a democratic structure of governance, meaning that all teachers engage in leadership roles and participate in decision making related to program operations including budgeting, hiring, and scheduling. Moreover, teachers engage in various activities that help shape and advance innovations at the school such as Plan Do Study Act (PDSA) activities (i.e., an inquiry period of iterative cycles lasting one academic year), summer research and development projects, and whole-school professional development. PDSA activities at the school are teacher initiated and directed and occur in grade- or department-level teams. In addition, teachers meet every other week to plan curricula, analyze outcome data, and determine the impact of instructional practices on student achievement. These activities bring together teachers of various departments and grade levels as well as university researchers as partners, and often produce research-practice practitioner briefs (i.e., Cerda et al., 2019; RiveraTorres \& Keating, 2020). The community-based participatory research described in this dissertation was made possible with support from this school practice.

## Language Programs

To further support collaboration and student development, the elementary school (TK-5) is structured by transitional kindergarten (TK) and three multi-age Dens (Den 1: kindergarten and first grade; Den 2: second and third grade; Den 3: fourth and fifth grade). The secondary school (sixth to twelfth grade) has a multi-year advisory program. The school's elementary and secondary schools are locally known as the Lower and Upper School respectively. The school has implemented various language programs that borrow from or are guided by existing program
model structures and goals. For example, the Lower School generally follows a 90:10 Spanish maintenance bilingual structure and offers a Korean world-language program (KWLP). In the Upper School, teachers are developing a language program for students to use, hear, develop and grow their home/heritage language (including non-Spanish languages). There are pathways that borrow from models including a Spanish/English dual-language structure in the middle school (6 - 8 grade), an English immersion program, Spanish world language classes, and an elective class for newcomer students (6-12 grade). All programming incorporates fluid language practices to learn content and language. For more information about Lower School students' backgrounds, see Chapter 2.

The Spanish maintenance bilingual program follows a 90:10 approach to instruction in the early grades in which the partner language (Spanish) is the medium of instruction $80 \%-90 \%$ of the time in Den 1. By the end of Den 3, Spanish is the medium of instruction $30 \%-50 \%$ of the time. The classroom teacher and/or the Den determine how much instructional time is taught in either language, hence the range in the aforementioned percentages. Motivating factors behind how teachers determine how much instructional time is allocated to developing the Spanish language and any subsequent changes to those decisions will be explored in Chapters 2 and 4. Generally, the Dens divide instructional time in either language by content area and by disciplinary unit. Additionally, all teachers employ various degrees of fluid languaging practices, using both languages interchangeably and strategically to support content learning. (For more information see, Cerda et al., 2020.)

## The Union Community School's Development Between 2009-2020

## 2009-2012 Academic School Years

When the school first opened in the Fall of 2009, the school had to scrap its original roll out plan to grow the program one grade level at a time. Instead, to relieve overcrowding at neighboring sites and save students long bus rides out of the community, they had to enroll students from more than 60 feeder schools in kindergarten to the 11th grade over a two-year period, from 2009 to 2010. While most enrolling students were of Latinx and immigrant heritage, very few students had been previously enrolled in a bilingual program. This meant that most students' prior learning experiences in school had been solely in English, and as such, students had difficulty conversing, reading, or writing in Spanish in an academic setting.

This situation impacted Den 2 and Den 3 teachers the most because at the second to fifth grade level, the expectation was that their students were in the process of acquiring the foundational language skills necessary to read, speak, and write in Spanish and English. Thus, teachers, with parents' support, modified their bilingual program structure. Rather than teach instructional content in Spanish 70/80\% of the time in Den 2 and $50 \%$ of the time in Den 3, most of the teaching was done in English with some Spanish literacy instruction in Den 2 and some Spanish language support in Den 3. Each subsequent year, Den 2 increased Spanish instruction. Den 2 ultimately reached the original program goal of teaching instructional content in Spanish $70 / 80 \%$ of the time in 2011-2012 when the school welcomed students from Cohort 1. Cohort 1 is the first student cohort to have enrolled at Union Community School since kindergarten.

## 2012-2020 Academic School Years

Spanish instruction in Den 3 increased slightly during the 2014-2015 academic school year, after the lower school created and piloted (2012-2014) the Evaluacion de la lectura en
espanol (ELE). The ELE is a Spanish reading assessment (for the upper primary school grades) designed to complement the Spanish reading assessment the school was already using in Den 1 and Den 2 classrooms. In particular, the ELE afforded Den 3 teachers with the student data they needed to gauge students' bilingual development.

When I started collaborating with Carlos, a Den 3 teacher, in the Winter of 2015, I asked him why instruction seemed to be conducted mostly in English in Den 3. He explained that for the last six years, including that academic school year (2014-2015), all lower school teachers had focused on learning balanced literacy approaches, common core state standards, and English language development standards, all while revising and creating curricula relevant to their student population. During these six years they also aligned curricular calendars within and between Dens and created the ELE. Carlos said that the lower school, especially Den 3, by the Spring of 2015, was ready to focus on how their program could support students to graduate from the fifth-grade bilingual and biliterate. He explained that teachers had collaboratively built a foundation: assessment tools, curricula and instructional knowledge and experience.

## 2015-2018 Academic School Years

During these three years, teachers relied on students' longitudinal Spanish and English reading data to inform curriculum, instruction, and assessment development. Den 2 and Den 3 teachers and I created multilingual reading assessments that encouraged students to reflect on their bi/multilingual experiences, identities, and growth. In particular, we created the Readers' Identity Self-Assessment (RISA) that required teachers to give students their longitudinal Spanish and English reading levels, so students could plot them in a bar graph. Then, students reflected on how they were developing their Spanish and English reading across grades. These assessment practices, as documented in Cerda et al. (in review) and Cerda et al. (2019), informed
instructional routines and curricula in Den 2 and Den 3. Moreover, analyzing students' Spanish and English reading levels longitudinally, afforded all teachers the opportunity to become aware of how their Spanish maintenance bilingual program was supporting students' biliteracy development across grades and Dens.

Using the longitudinal database I had built for the school, we created a data dashboard (see
Figure 1.14) and noticed that many students were reading below grade level in Spanish in Den 1, and that students reached Spanish, English, or dual proficiency by the end of Den 2. However, as soon as students entered Den 3 in the fourth grade, the percentage of students who were dual proficient decreased. Teachers then recommended we review the data by student cohort (See Figure 1.15). The results were alarming for all teachers, but for Den 3 teachers they were devastating: students' Spanish reading growth appeared to stagnate by the end of the fifth grade. While all teachers refined their Spanish curricula and structures (e.g., Den 1 began to teach Spanish phonics) during this time period (2015-2018), Den 3 focused on changing their Den from being a mostly English learning space to a more intentional bilingual learning space. By the 2018-2019 school year, Den 3 had increased Spanish reading instruction by adding Spanish read alouds and book clubs. They also created a Spanish interdisciplinary social studies unit.

## Ethical Procedures

All data gathering strategies were approved by the University's Institutional Review Board (IRB) and the participating school's Research and Accountability Committee. The Research and Accountability Committee comprises teachers, school leaders (i.e., assistant principal), the research director (university-affiliated research partner), research consultant (university-affiliated scholar), graduate-student researchers (GSR) and a representative from the Los Angeles Unified School District's (LAUSD) Committee for External Research Review
(CERR) who is the CERR Chair. The Research and Accountability Committee like the University's IRB requests a research proposal. The components of the research proposals from either board or committee are similar with one exception. The school's Committee asks researchers to expand on the benefits their research study has for the school's community, articulate succinctly how the significance of the research impacts the school community, and elucidate how study findings and implications will be shared with the school. Proposals are reviewed by the CEER chair, the research director, and a school practitioner. If a proposal is approved by the committee, it is sent to the principal for a final review and approval.

## Recruitment

All three dissertation studies utilized nonprobabilistic sampling, which involved including all teachers who were available to participate in the study (Creswell \& Clark, 2018). Teacher participant recruitment is detailed in Chapter 2. Importantly, I had worked with Lower School teachers for many years as a graduate student research partner, building strong relationships and connections to the school. The principal sent out an announcement on the school's online platform letting teachers know I was recruiting participants to document the historical evolution of the school between 2009-2019 and for my dissertation. I also announced I was recruiting teacher participants in person after a Lower School meeting. For this dissertation, I did not recruit student participants, but did request access to students' reading, self-assessment, and demographic data, which was provided by the school as part of a longstanding research-practice partnership to understand and use reading data to improve instruction and student learning. As a GSR working at the school between 2014 and the present, I was supported by the university to collect, maintain, and analyze these data. I then made an
anonymized copy of the student data to ensure data privacy. For information specific to sampling for each study, see Chapters 2, 3, and 4.

## Positionality

I practiced reflexivity to address any preconceptions and misconceptions that arose during and post analysis because it was essential to this research that I focus on the teachers' "meaning making" not my own or anyone else's. As discussed previously, I had prior experience working as a bilingual teacher in different Spanish maintenance bilingual schools: the Cypress Hills Community School and the Wright Brothers School. When I started my graduate research position in the Union Community School, I knew I carried with me many preconceived notions about what a Spanish maintenance bilingual school looks like and how balanced literacy, specifically Teachers' College Readers' and Writers' workshop, is implemented. Thus, every time after a visit to the Union Community School, I critically analyzed how I was interpreting classroom observations, teacher decisions, and school policy. Specifically, I would ask myself: Am I comparing what I heard and saw today in the Union Community School with decisions, protocols, and/or structures that I experienced as a bilingual teacher? And, if I was, then I worked very hard to identify the comparison and shelve it. For example, the schools where I had worked as a bilingual teacher were not teacher-governed schools. The Wright Brothers School was a top-down school. The Cypress Hills Community School was unique in that it implemented a parent-administrator governance model, while also encouraging collaboration within grade-level teacher teams. In contrast, the Union Community School is a teacher-led autonomous school. This structure was very new to me and I had to learn how to observe and interpret its structure with help from teachers.

## Conclusion

The ultimate goal for this dissertation is to examine how teachers (Study 1, Chapter 2; Study 3, Chapter 4) and students (Study 2, Chapter 3) develop Spanish as a home or heritage language in spite of roadblocks. In other words, Study 1 examines how Latinx teachers’ racialized experiences in primary, secondary, and postsecondary school impact(ed) their wellbeing and identifies the protective factors that motivated these teachers to pursue a bilingual teaching career in resistance to racial ideologies. Study 2 identifies what school and student level factors support (or hinder) bi/multilingual students' Spanish reading development. Study 3 identifies the instructional practices that teachers utilized to support bilingual and biliteracy development. Chapter 5, the concluding chapter ends with a synthesis of the findings and implications for research, theory, policy and practice.

## Figure 1.14

Dual Reading Proficiency Dashboard, Kindergarten to Fifth Grade, 2009-2019
Year $\begin{gathered}\text { Spanish } \\ \text { Maintenece } \\ \text { Bilingual Program }\end{gathered} \quad N$

| Year | Den 1* <br> Kindergarten and <br> First Grade | $\boldsymbol{n}$ | Year | Den 2 <br> Second and Third <br> Grade | $\boldsymbol{n}$ | Year |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | | Den 3 |
| :---: |
| Fourth and Fifth |
| Grade |$\quad \boldsymbol{n}$


| Dual Proficiency |  |
| ---: | ---: |
| $\mathbf{2 0 1 9}$ | $\mathbf{3 3 . 6 0 \%} \boldsymbol{N}=\mathbf{2 5 0}$ |
| $\mathbf{2 0 1 8}$ | $23.43 \% N=239$ |
| 2017 | $23.85 \% N=265$ |
| 2016 | $26.19 \% N=252$ |
| 2015 | $22.11 \% N=285$ |
| 2014 | $18.33 \% N=311$ |
| 2013 | $8.00 \% N=325$ |
| 2012 | $10.39 \% N=231$ |
| 2011 | $3.44 \% N=262$ |
| 2010 | $0.87 \% N=229$ |
| 2009 | $0.00 \% N=189$ |


| 2019 |  |
| :--- | :--- |
| 2018 | $4.95 \% n=\mathbf{8 1}$ |
| 2017 | $0.00 \% n=77$ |
| 2016 | $0.00 \% n=100$ |
| 2015 | $0.00 \% n=80$ |
| 2014 | $0.00 \% n=84$ |
| 2013 | $0.00 \% n=92$ |
| 2012 | $0.00 \% n=113$ |
| 2011 | $0.00 \% n=89$ |
| 2010 | $0.00 \% n=104$ |
| 2009 | $0.00 \% n=79$ |
|  | $0.00 \% n=63$ |


| Dual Proficiency |  |  |  |
| :--- | :---: | :--- | :--- |
| $\mathbf{2 0 1 9}$ | $\mathbf{4 5 . 2 6 \%} \mathbf{n}=\mathbf{9 5}$ | $\mathbf{2 0 1 9}$ | $\mathbf{5 0 . 0 0 \%} \boldsymbol{n}=\mathbf{7 4}$ |
| 2018 | $34.48 \% \mathrm{n}=87$ | 2018 | $34.67 \% \quad n=75$ |
| 2017 | $41.10 \% \mathrm{n}=74$ | 2017 | $35.96 \% n=91$ |
| 2016 | $40.98 \% \mathrm{n}=61$ | 2016 | $38.89 \% n=108$ |
| 2015 | $29.79 \% \mathrm{n}=94$ | 2015 | $33.33 \% n=105$ |
| 2014 | $30.97 \% \mathrm{n}=113$ | 2014 | $21.10 \% n=109$ |
| 2013 | $22.61 \% \mathrm{n}=115$ | 2013 | $0.00 \% n=96$ |
| 2012 | $23.08 \% \mathrm{n}=104$ | 2012 | $0.00 \% n=38$ |
| 2011 | $11.39 \% \mathrm{n}=79$ | 2011 | $0.00 \% n=80$ |
| 2010 | $2.30 \% \mathrm{n}=87$ | 2010 | $0.00 \% n=63$ |
| 2009 | $0.00 \% \mathrm{n}=79$ | 2009 | $0.00 \% n=48$ |


| Approaching Dual Proficiency <br> $\mathbf{2 0 1 9}$ | $\mathbf{9 . 2 0} \% \quad N=\mathbf{2 5 0}$ |
| ---: | :--- |
| $\mathbf{2 0 1 8}$ | $13.39 \% N=239$ |
| $\mathbf{2 0 1 7}$ | $11.54 \% N=265$ |
| 2016 | $12.30 \% N=252$ |
| 2015 | $11.23 \% N=285$ |
| 2014 | $9.97 \% N=311$ |
| 2013 | $5.54 \% N=325$ |
| 2012 | $2.60 \% N=231$ |
| 2011 | $0.76 \% N=262$ |
| 2010 | $1.31 \% N=229$ |
| 2009 | $0.00 \% N=189$ |


|  |  |
| :--- | :--- |
| 2019 | $9.88 \% n=\mathbf{8 1}$ |
| 2018 | $0.00 \% n=77$ |
| 2017 | $0.00 \% n=100$ |
| 2016 | $0.00 \% n=80$ |
| 2015 | $0.00 \% n=84$ |
| 2014 | $0.00 \% n=92$ |
| 2013 | $0.00 \% n=113$ |
| 2012 | $0.00 \% n=89$ |
| 2011 | $0.00 \% n=104$ |
| 2010 | $0.00 \% n=79$ |
| 2009 | $0.00 \% n=63$ |


| 2019 | 3.16\% | $n=95$ | 2019 | 16.22\% | $n=74$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2018 | 14.94\% | $n=87$ | 2018 | 25.33\% | $n=75$ |
| 2017 | 9.58\% | $n=74$ | 2017 | 25.84\% | $n=91$ |
| 2016 | 9.84\% | $n=61$ | 2016 | 23.14\% | $n=108$ |
| 2015 | 15.96\% | $n=94$ | 2015 | 16.19\% | $n=105$ |
| 2014 | 15.93\% | $n=113$ | 2014 | 11.93\% | $n=109$ |
| 2013 | 15.65\% | $n=115$ | 2013 | 0.00\% | $n=96$ |
| 2012 | 5.77\% | $n=104$ | 2012 | 0.00\% | $n=38$ |
| 2011 | 2.53\% | $n=79$ | 2011 | 0.00\% | $n=80$ |
| 2010 | 3.45\% | $n=87$ | 2010 | 0.00\% | $n=63$ |
| 2009 | 0.00\% | $n=79$ | 2009 | 0.00\% | $n=48$ |


| Proficiency |  |
| :--- | ---: |
| $\mathbf{2 0 1 9}$ | $\mathbf{1 4 . 4 0 \%} N=\mathbf{2 5 0}$ |
| 2018 | $20.08 \% N=239$ |
| 2017 | $23.07 \% N=265$ |
| 2016 | $23.81 \% N=252$ |
| 2015 | $28.77 \% N=285$ |
| 2014 | $24.11 \% N=311$ |
| 2013 | $36.92 \% N=325$ |
| 2012 | $35.06 \% N=231$ |
| 2011 | $30.92 \% N=262$ |
| 2010 | $56.33 \% N=229$ |
| 2009 | $53.44 \% N=189$ |


|  |  |
| ---: | :--- |
| $\mathbf{2 0 1 9}$ | $\mathbf{9 . 8 8 \%} \boldsymbol{n}=\mathbf{8 1}$ |
| 2018 | $29.87 \% n=77$ |
| 2017 | $22.45 \% n=100$ |
| 2016 | $40.00 \% n=80$ |
| 2015 | $50.00 \% n=84$ |
| 2014 | $30.43 \% n=92$ |
| 2013 | $39.47 \% n=113$ |
| 2012 | $31.46 \% n=89$ |
| 2011 | $14.56 \% n=104$ |
| 2010 | $49.40 \% n=79$ |
| 2009 | $29.03 \% n=63$ |


| Proficiency |  |  |  |
| :--- | :---: | :---: | :---: |
| $\mathbf{2 0 1 9}$ | $\mathbf{2 2 . 1 1 \%} \boldsymbol{n}=\mathbf{9 5}$ | $\mathbf{2 0 1 9}$ | $\mathbf{9 . 4 6 \%} \boldsymbol{n}=\mathbf{7 4}$ |
| 2018 | $\mathbf{1 7 . 2 4 \%} \boldsymbol{n}=87$ | 2018 | $13.33 \% n=75$ |
| 2017 | $28.77 \%$ | $n=74$ | 2017 |
| 2016 | $22.95 \% n=61$ | 2016 | $19.10 \% n=91$ |
| 2015 | $26.60 \% n=94$ | 2015 | $12.04 \% n=108$ |
| 2014 | $23.01 \% n=113$ | 2014 | $13.33 \% n=105$ |
| 2013 | $29.56 \% n=115$ | 2013 | $20.18 \% n=109$ |
| 2012 | $33.65 \% n=104$ | 2012 | $42.71 \% n=96$ |
| 2011 | $53.17 \% n=79$ | 2011 | $47.37 \% n=38$ |
| 2010 | $72.41 \% n=87$ | 2010 | $30.00 \% n=80$ |
| 2009 | $84.81 \% n=79$ | 2009 | $42.86 \% n=63$ |
|  |  |  | $33.33 \% n=48$ |


| Approaching Proficiency |  |
| ---: | :--- |
| $\mathbf{2 0 1 9}$ | $\mathbf{1 9 . 2 0 \%} \boldsymbol{N}$ |$=\mathbf{2 5 0}$,


|  |  |
| :--- | :--- |
| $\mathbf{2 0 1 9}$ |  |
| 2018 | $45.68 \% n=81$ |
| 2017 | $37.66 \% n=77$ |
| 2016 | $46.94 \% n=100$ |
| 2015 | $31.76 \% n=80$ |
| 2014 | $30.23 \% n=84$ |
| 2013 | $44.57 \% n=92$ |
| 2012 | $42.11 \% n=113$ |
| 2011 | $46.07 \% n=89$ |
| 2010 | $58.25 \% n=104$ |
| 2009 | $44.30 \% n=79$ |
|  | $38.71 \% n=63$ |


| Approaching Proficiency |  |
| :--- | :---: |
| $\mathbf{2 0 1 9}$ |  |
| 2018 |  |
| $\mathbf{6 . 3 2 \%} \boldsymbol{n}=\mathbf{9 5}$ |  |
| 2017 |  |
| 2016 |  |
| 2015 |  |
| 2014 |  |
| 2013 |  |
| 2012 |  |


| 2019 | 6.76\% | $\boldsymbol{n}=74$ |
| :---: | :---: | :---: |
| 2018 | 14.67\% | $n=75$ |
| 2017 | 10.11\% | $n=91$ |
| 2016 | 12.04\% | $n=108$ |
| 2015 | 9.53\% | $n=105$ |
| 2014 | 9.17\% | $n=109$ |
| 2013 | 12.50\% | $n=96$ |
| 2012 | 7.89\% | $n=38$ |
| 2011 | 12.50\% | $n=80$ |
| 2010 | 14.28\% | $n=63$ |
| 2009 | 4.17\% | $n=48$ |


|  | Emerging |
| ---: | :--- |
| $\mathbf{2 0 1 9}$ | $\mathbf{2 3 . 6 0 \%} N=\mathbf{2 5 0}$ |
| 2018 | $25.94 \% N=239$ |
| 2017 | $18.85 \% N=265$ |
| 2016 | $20.64 \% N=252$ |
| 2015 | $24.21 \% N=285$ |
| 2014 | $28.94 \% N=311$ |
| 2013 | $28.31 \% N=325$ |
| 2012 | $29.44 \% N=231$ |
| 2011 | $35.88 \% N=262$ |
| 2010 | $18.78 \% N=229$ |
| 2009 | $31.22 \% N=189$ |


|  |  |  |
| :--- | :--- | :--- |
| $\mathbf{2 0 1 9}$ | $29.63 \%$ | $n=81$ |
| 2018 | $32.47 \%$ | $n=77$ |
| 2017 | $30.61 \%$ | $n=100$ |
| 2016 | $28.24 \%$ | $n=80$ |
| 2015 | $19.77 \%$ | $n=84$ |
| 2014 | $25.00 \%$ | $n=92$ |
| 2013 | $18.42 \%$ | $n=113$ |
| 2012 | $22.47 \%$ | $n=89$ |
| 2011 | $27.19 \%$ | $n=104$ |
| 2010 | $6.30 \%$ | $n=79$ |
| 2009 | $32.26 \%$ | $n=63$ |


| ing |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2019 | 23.16\% | $\boldsymbol{n}=95$ | 2019 | 17.57\% | $\boldsymbol{n}=74$ |
| 2018 | 32.18\% | $n=87$ | 2018 | 12.00\% | $n=75$ |
| 2017 | 15.07\% | $n=74$ | 2017 | 8.99\% | $n=91$ |
| 2016 | 21.31\% | $n=61$ | 2016 | 13.89\% | $n=108$ |
| 2015 | 24.46\% | $n=94$ | 2015 | 27.62\% | $n=105$ |
| 2014 | 24.78\% | $n=113$ | 2014 | 37.62\% | $n=109$ |
| 2013 | 24.35\% | $n=115$ | 2013 | 47.79\% | $n=96$ |
| 2012 | 29.81\% | $n=104$ | 2012 | 44.74\% | $n=38$ |
| 2011 | 25.32\% | $n=79$ | 2011 | 57.50\% | $n=80$ |
| 2010 | 12.64\% | $n=87$ | 2010 | 42.86\% | $n=63$ |
| 2009 | 11.39\% | $n=79$ | 2009 | 62.50\% | $n=48$ |

Note. * Students in Den 1 are not tested in English until the Spring of first grade. Dual Proficiency: reading at or above the grade-level benchmark in both Spanish and
English. Approaching Dual Proficiency: reading at, above, or approaching the grade-level benchmark in Spanish or English, while also approaching proficiency with the second language. Proficiency: reading at or above the grade-level benchmark in one language, while emerging proficiency with the second language (e.g., English "at;" Spanish "emerging"). Approaching Proficiency: approaching the grade-level benchmark in one language, while emerging proficiency with the second language (e.g., English "at;" Spanish "emerging"). Emerging: reading an entire grade level below the grade-level benchmark in both languages. In the Spring of first grade (time point four), students continue Spanish testing and begin English testing.

## Figure 1.15

## Evidence of Program Effectiveness: Cohort Charts of Dual (Bilingual) Reading Proficiency



Note. Figure from Cerda et al. (in review). Each cohort follows a different group of students from kindergarten to fifth grade. Reading data was collected by teachers in the Fall and Spring ("F" and "S" on the x -axis). Cohort 2027 fifth grade spring data is unavailable because students were not tested due to the Covid-9 Pandemic stay at home order. Reading assessments: Fountas and Pinnell Benchmark Assessment System (BAS) Kit 1 and Kit 2;Fountas and Pinnell Sistema; and the Evaluacion de la lectura en Español (ELE). Dual Proficiency: reading at or above the grade-level in both Spanish and English. Approaching Dual Proficiency: reading at, above, or approaching the grade-level in Spanish or English, while also approaching proficiency with the second language. Proficiency: reading at or above the grade-level in one language, while emerging proficiency with the second language (e.g., English "at;" Spanish "emerging"). Approaching Proficiency: approaching grade-level in one language, while emerging proficiency with the second language (e.g., English "at;" Spanish "emerging"). Emerging: reading an entire grade level below the grade-level benchmark in both languages. In the Spring of first grade (time point four), students continue Spanish testing and begin English testing. From that point onward both Spanish and English test scores are required to calculate the dual reading variable. If a student is missing the expected Spanish, English or both Spanish and English reading data for a particular time point, that case is omitted. Percentage of missing/omitted data across time points in each cohort: Cohort 2023, 5.85\%; Cohort 2024, 2.19\%; Cohort 2025, $5.27 \%$; Cohort 2026, $3.81 \%$; Cohort 2027, $3.67 \%$. Cohort 2022 was the first cohort to complete a full term (kindergarten to fifth grade) at the school, however, this data is not presented because $25.46 \%$ of it is missing.

## References

Arellano, G. (2019, November 17). Pete Wilson still defending prop. 187 and fighting for a better place in history. The Los Angeles Times. https://www.latimes.com/california/story/2019-11-17/proposition-187-pete-wilsonlatinos

Callahan, R. M., \& Gándara, P. C. (Eds.). (2014). The bilingual advantage: Language, literacy and the US labor market. Multilingual Matters.

Canizales, S. L. \& Vallejo, J. A. (2021). Latinos \& racism in the Trump era. Daedalus, The Journal of the American Academy of Arts \& Sciences, 150(2), 150-164. https://doi.org/10.1162/DAED_a 01852

Cerda, J., Garcia, N., Jimenez, R., Kim, Q. (2019). The power of self-assessment: Using community-based measures to advance biliteracy. UCLA Center for Community Schooling Research Report 1-RR19. Retrieved from https://communityschooling.gseis.ucla.edu/ the-power-of-self-assessment/.

Cerda, J., Bailey, A. L., \& Heritage, M. (2020). Contexts for self-and co-regulated learning in a dual-language elementary school classroom. Language and Education, 34(5), 407-424. https://doi.org/10.1080/09500782.2020.1751194

Cerda, J., Darriet, C., Quartz, K. H., Kim, Q., McNaughton, I., \& Jiménez, R. (in review). Building on community assets: A school's journey developing a TK-12 community language approach.

Combs, M. C., Gonzalez, L. C., \& Moll, L. C. (2011). U.S. Latinos and the learning of English: The metonymy of language policy. In T. L. McCarty (Ed.), Ethnography and language policy (pp. 185-204). Routledge.

Cummins, J. 1978. Educational implications of mother tongue maintenance in minority-language groups. The Canadian Modern Language Review, 34(3), 395-418.
https://doi.org/10.3138/cmlr.34.3.395
Dorner, L. M., Cervantes-Soon, C. G., Heiman, D., \& Palmer, D. (2021). "Now it's all upperclass parents who are checking out schools": Gentrification as coloniality in the enactment of two-way bilingual education policies. Language Policy, 20(3), 1-27.

Erikson, E. H. (1958). Young man Luther: A study in psychoanalysis and history. Norton.
Every Student Succeeds Act, 20 U.S.C. § 6301 (2015). https://www.congress.gov/bill/114th-congress/senate-bill/1177

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. https://doi.org/10.1017/S0267190517000162

Garica, O. (2009) Racializing the language practices of U.S. Latinos. In J. A. Cobas, J. Duany, \& J. R. Feagin (Eds.), How the United States racializes Latinos: White hegemony and its consequences (pp. 100-114). Routledge. https://doi.org/10.4324/9781315634104-7

García, O. \& Sung, K. K. (2018). Critically assessing the 1968 bilingual education act at 50 years: Taming tongues and Latinx communities. Bilingual Research Journal, 41(4), 318333. https://doi.org/10.1080/15235882.2018.1529642

Genesee, F., Lindholm-Leary, K., Saunders, W., \& Christian, D. (2005). English language learners in US schools: An overview of research findings. Journal of Education for students placed at risk, 10(4), 363-385. https://doi.org/10.1207/s15327671espr1004_2

Hill, J. H. (2009). English-language Spanish in the United States as a site of symbolic violence. In J. A. Cobas, J. Duany, \& J. R. Feagin (Eds.), How the United States racializes Latinos:

White hegemony and its consequences (pp. 115-132). Routledge.
https://doi.org/10.4324/9781315634104-8
Holthouse, D. (2005, June 27). Minutemen, other anti-immigrant militia groups stake out Arizona border. Intelligence Report. The Southern Policy Law Center. https://www.splcenter.org/fighting-hate/intelligence-report/2005/minutemen-other-anti-immigrant-militia-groups-stake-out-arizona-border

Katznelson, N., \& Bernstein, K. A. (2017). Rebranding bilingualism: The shifting discourses of language education policy in California's 2016 election. Linguistics and Education, 40, 11-26. https://doi.org/10.1016/j.linged.2017.05.002

Lozano, R. (2018). An American language: The history of Spanish in the United States. UC Press.

New America. (n.d.). English learners: State legislation. https://www.newamerica.org/education-policy/topics/english-learners/state-legislation/

Merriam, S. B. (2009). Qualitative research: A guide to design and implementation. John Wiley \& Sons.

Rosa, J. D. (2016). Standardization, racialization, languagelessness: Raciolinguistic ideologies across communicative contexts. Journal of Linguistic Anthropology, 26(2), 162183. https://doi.org/10.1111/jola. 12116

Rosa, J. D. (2019). Looking like a language sounding like a race. Oxford University Press.
Spring, J. (2021). Hispanic/Latino/Latina/Latinx Americans: Exclusion and segregation. In Deculturalization and the struggle for equality: A brief history of the education of dominated cultures in the United States (9th ed.) (pp.103-135). Routledge. https://doi.org/10.4324/9781003213932-5

## CHAPTER 2

Study 1:
The Psychosocial, Linguistic, and Sociocultural Factors that Impact Bilingual Teachers:
A Developmental Perspective Spanning Childhood to Adulthood


#### Abstract

Utilizing developmental theories (Erikson, 1958, 1959, 1968; Rogers, 2018) and an intersectional perspective (Crenshaw, 1991, 2015), this phenomenological study examined teachers' retrospective interview transcripts $(\mathrm{N}=13)$ to investigate: What motivated teachers at Union Community School to become bilingual teachers and teach in a Spanish maintenance bilingual program? Inductive and deductive coding techniques were applied to the data. Key findings: All bilingual teachers of Color in this study experienced ethnic-racial prejudice in elementary and secondary school. These experiences had long-term impacts on teachers' wellbeing. However, developmental assets, such as ethnic-racial identity, critical consciousness, and bilingual acquisition, provided teachers with tools to process prejudice as adolescents and adults. These assets coupled with opportunities to engage with their ethnic-racial social group in positive ways cultivated teachers' identity-based motivation for transformative justice. Positive social interactions with peers, teacher mentors, and parents were also lucrative in pushing teachers to become active participants for social change as bilingual teachers in a Spanish maintenance bilingual community program.


## Introduction

Teaching is a life-long endeavor. Most people do not get to immerse themselves in the profession they will partake in as three- or four-year-olds. Nor do they get to spend the next 20 years or so, developing formative experiences in school contexts before they embark on their career in the field where they developed as people. This is unique to the teaching profession. In fact, research suggests that interest in teaching as a potential career emerges early in life, when teachers are students themselves (Goodson, 1992; McKenzie, Weldon, Rowley, Murphy, \& McMillan, 2014). Yet, few studies investigate how the formative developmental years of teachers of Color, who share their students' ethnicity/race and often their first language, influence their career trajectories (for some exceptions see Galindo, 1996; Gardner et al. 2019; Gauna \& Beaudry, 2016; Graham \& Erwin, 2011; Winstead \& Wang, 2017).

Even less research explores the role that developmental assets, such as identity, critical consciousness, and bi/multilingualism play in heightening "potential bilingual teachers"" interest in the profession. Especially as they journey through "the pre-kindergarten to college (PK-20) bilingual teacher pipeline" (Gauna et al., 2022). Ethnic-racial identity refers to the attitudes, feelings, and connection one has to their ethnic/racial group (Phinney, 1993). Critical consciousness refers to the process of recognizing, reflecting, and challenging social inequities (Diemer et al., 2016). Furthermore, "it is through language that we transmit our experiences... traditions... knowledge" and identities (Azoulay, 2018, para. 2). Language, after all, is a marker of identity, specifically ethnic-racial identity (Marks et al., 2007).

Broadly, identity is essential to understanding motivation because people act (e.g. "what I do"), and make meaning (e.g., "why I do it") through the lens of the "self" (Oyserman \& Destin, 2010), which includes self-identity (e.g., "the attitudes, characteristics, and social roles and
affiliations that define who I am"), as well as self-concept (e.g., "who I am conceptually") and self-image (e.g., "how I see myself") (Bailey II, 2003). Similarly, Markus and Nurius (1986) contend that the very essence of what one believes is possible for themselves is both identity and motivation. In this, motivations (i.e., aspiration, incentives, motives, threats) and feelings (affective states) are primed by one's possible selves (i.e., self-identities or identities). Also consequential to both identity and motivation or identity-based motivations are self-esteem (i.e., places value or appreciation on themselves, "I am good") and self-efficacy (i.e., evaluates their ability, "I do it well"). This is because "both categories are extremely influential in determining one's decisions on life-shaping issues" (Bailey, 2003, p. 385).

Research has long established that an ethnically, racially, and linguistically diverse workforce is crucial to improving student performance, especially among diverse students of Color (e.g., Carver-Thomas, 2018). Yet, few bi/multilingual teachers of Color have journeyed America's school system (primary, secondary, postsecondary, postgraduate) with access to teachers who share their ethnicity, race, culture, languages and experiences (See Figure 1). For example, in the 2020-21 academic school year, $80 \%$ of the teaching workforce in the United States was White and female (77\%) (U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, SASS).

In addition, bi/multilingual students of Color (or "potential bilingual teachers") continue to experience various levels of discrimination as they journey through the PK-20 bilingual teacher pipeline (Cervantes-soon et al., 2018). One example: Bi/multilingual students of Color still experience the suppression of their home/heritage languages (e.g., Spanish) in school, including actions that devalue their bilingualism or their potential for becoming bilingual (Gauna et al., 2022). In effect, students or "potential bilingual teachers" become highly proficient in

English at the expense of losing their home/heritage language. For these reasons, it is essential we identify what developmental assets support (e.g., strong ethnic-racial identity) and what experiences compel bi/multilingual teachers of Color to enter the profession and how.

To address these gaps, the aims of this study are twofold. Firstly, examine the retrospective accounts (i.e., semi-structured interviews) of bilingual teachers who are predominantly of Latinx background. Specifically, identifying the experiences teachers deemed formative and influential to their ethnic-racial identities and critical consciousness as children, adolescents, and adults. And secondly, identify the sociopolitical factors (e.g., discrimination) that they had to navigate on their journey to becoming and being bilingual teachers. Of particular interest to this study is examining the relationship between ethnic-racial identity, critical consciousness, bi/multilingualism, and discrimination. Scholars have postulated that ethnic-racial identity, critical consciousness, and bi/multilingualism are involved in children, youth, and adult's processing of the meaning of ethnicity/race, racism, and discrimination in their lives (Marks et al., 2007; Mathews et al., 2020; Rosa, 2016; Phinney, 1989). This processing may compel bi/multilingual children and youth of Color to pursue careers that support critical action (Rapa et al. 2018), such as teaching. Understanding the impact of racialized experiences on developmental assets (e.g., ethnic-racial identity) might help explain how bi/multilingual teachers of Color have negotiated, resisted, and challenged marginalizing school environments and still be compelled to become bilingual teachers.

## Theoretical Frameworks

## A Transactional Approach: The Mutual and Dependent Relationship Between Society and

## the Self

To examine bi/multilingual teachers' identity-based motivations, this study asserts a
transactional approach, as conceptualized by Erikson $(1958,1959,1968)$ and further defined by Rogers (2018). From an Eriksonian perspective a transactional approach describes self (identity) and society as having a bidirectional relationship. Society shapes the self, and in turn, the self, shapes society, completing the feedback loop. For example, he explained that children, youth, and adults may develop negative identities when conditions of marginality, whether economic, ethnic, sexual orientation, gender, and/or religious, to name a few, provide inadequate contexts for the development of positive identities. In the process youth "becom[e] exactly what the careless and fearful community expects," (re)producing systems of marginalization, which in turn impact society (Erikson, 1959, p. 174).

To illustrate how this transactional approach manifests, I draw from the following historical example: Throughout the Southwest, school systems practiced de facto segregation in which Latinx students (predominantly of Mexican heritage) and White students attended different schools until Brown v. The Board of Education in 1954 declared the unconstitutionality of "separate but equal" (De León \& Calvert, 2021). Many of the children who had attended these schools were verbally and/or physically reprimanded (e.g., demerited, beaten/paddled, put in closets) by school educators and staff for speaking Spanish in school settings (StoryCorps, 2017). In some places, these practices continued long after 1954. When these students grew up and became parents, many decided not to teach their children Spanish at home. In effect, entire generations of children and youth (or potential bi/multilingual teachers) became monolingual speakers of English.

## Figure 2.1

Percentage Distribution of Public School Teachers by Race/Ethnicity Over Time, 1987-88 to 2020-21
95.0
90.0
85.0
80.0
75.0
70.0
65.0
60.0
55.0
50.0
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0


Note. The new category of Two or more races was introduced in 2003-04. Prior to 2003-04, respondents were asked to select only one race category from the options of White, Black, Asian or Pacific Islander, and American Indian or Alaska Native. Includes Pacific Islander for 1987-88 through 1999-2000. SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Teacher Data File" and "Private School Teacher Data File," 1987-88 through 2011-12; SASS, "Charter School Teacher Data File," 1999-2000; and National Teacher and Principal Survey (NTPS), "Public School Teacher Data File" 2015-16, 2017-18, and 2020-21; and "Private School Teacher Data File," 2017-18 and 2020-21. (This table was prepared September 2022.)

In this historical example, state and local educational policy supported the marginalization of Latinx children and youth by suppressing their Spanish language. Senator Padilla of California, when discussing the de facto segregation of this time period, specifically the linguistic marginalization that occurred, stated: "If you suppress language and you suppress culture, you suppress identity" (Hennessky-Fiske, 2022, para. 59). The teachers' actions in the school (context) were a manifestation of how society, at that particular time and place, identified its young (i.e., sociocultural conditions). Children were coerced to suppress a cultural and ethnic characteristic that was important to them: Being a Spanish speaker. The context (schools and teachers) contributed to the children's identity formation later in life. That is, how students processed this discrimination and what they did in response shaped their identities and society. Some students from that point onward stopped speaking Spanish, and were adamant about not teaching their children Spanish, while others shared that this experience encouraged them, as adults, to speak up against things that seemed socially unjust.

Of particular interest to this study is identifying the developmental assets that support the latter. What developmental assets support people of Color (specifically bilingual teachers) to process discrimination and effect social change? Is it ethnic-racial identity? critical consciousness? or both? To this end, this study examines how society's social structures of oppression (e.g., discrimination) impacted participants' motivation to pursue a teaching career as children and youth. Then, to complete the feedback loop between the "self" and "society," this study also examines which developmental assets (ethnic-racial identity, critical consciousness, bilingualism) helped participants cope with the discrimination they experienced in school, and strengthened their motivation to become bilingual teachers. To guide the application of a
transactional approach to ethnic-racial identity (and motivation), this study espouses an intersectional orientation.

## Intersectionality: Marginalization, Ethnicity/Race, Identity and Critical Consciousness

According to Kimberlé Crenshaw (1991, 2015), intersectionality is "an analytic sensibility, a way of thinking about identity and its relationship to power" (para. 6). For example, Hernández and Alfaro's (2020) review about the challenges bilingual teacher candidates experience in their childhood and youth, highlight the intersectional identities of Latinx teacher candidates. One candidate in their study, Omar, who identifies as Indigenous and Latino from Guatemala, said that while he benefited greatly from having been enrolled in a bilingual program (grades kindergarten to eighth) in his youth, at a time when California law restricted access to bilingual schooling (years: 1998-2016), he still experienced marginalization by his White and Latinx peers.

On the one hand, Omar as a person who immigrated is marginalized by American peers who are phenotypically White and/or of Anglo-Saxon heritage because of his Latinx and immigrant heritage. On the other hand, as a person of Latinx heritage, he is further marginalized by Latinx peers because of his Indigenous heritage. Considering American and Latin American socio-political and cultural histories, one could argue that the ethnic-racial discrimination experienced by Omar may stem in part from ideologies ingrained in society/culture: (1) America's history of White supremacy (i.e., manifest destiny) and erasure of non-White peoples (Gómez, 2007); and (2) Latin America's history of colonization and erasure of indigeneity (Gómez, 2020). To gain acceptance, Omar would fight with other kids and "hacer[se] el chistoso en clase (clown around in class)" (p. 40). However, he says "pero ahora, camino con el rostro hacia arriba y marcho adelante para poder educar a muchos sobre la presencia indígena en esta
sociedad (but now, I walk with my head high and march forward, so I can educate many about the presence of indigenous groups in this society" (p. 40). Bi/Multilingual teachers of Color, as students first, and then as teachers, face vulnerabilities that reflect the different intersections of race, ethnicity, class, gender, ability, language, immigrant-generation, country of origin, indigeneity and more.

## Literature Review

## Why People (of Color) Become Teachers

Most scholarship investigating teacher motivation and identity has predominantly focused on the experiences of White, female preservice and in-service teachers (Fray \& Gore, 2018; Heinz, 2015; Kwok et al., 2022; Watt et al., 2017). From this scholarship, Fray and Gore's (2018) international review of seventy empirical studies exploring "why people choose teaching" found that most studies published between 2007 and 2016 highlight intrinsic and altruistic reasons as the most salient. Altruistic motivations include: service to others, a desire to help and support students, make a difference, contribute to society, and answer a calling. While intrinsic motivation includes: interest in or enjoyment of teaching, being suited to the career, intellectually stimulated, a desire to work with children or young people, and enjoying the company of children and youth.

Surprisingly, in Western countries, such as the United States, extrinsic motives (e.g., work hours and secure job conditions) were not as important as altruistic and intrinsic reasons. In addition, gender (e.g., being female), the role of significant others (e.g., a parent), as well as teachers and mentors were identified as key influences to pursuing a career in teaching. Of interest to this study was Fray and Gore's (2018) identification of the influence of sociopolitical and sociocultural issues on one's motivation to teach. This was evidenced by Graham and

Erwin's (2011) study, which was also the only study highlighted by Fray and Gore (2018) with people of Color as participants.

Graham and Erwin's (2011) phenomenological study examining the perceptions of 63 high-achieving high school aged African American boys to pursue teaching as a viable career option identified three barriers: 1) "teachers devalue the experiences of African Americans" especially Black males, 2) "labeling and stigmatizing," and 3) "disrespect by White parents" (p.406). The students had mostly White, female teachers, and, on average, reported having fewer than two African American male teachers. They also shared that pursuing teaching as a profession would involve "selling out" by teaching a curriculum that does not represent Black people fairly or accurately (p.410). The students in this study articulated that their perception of the teaching profession is shaped by their daily experiences with their teachers, staff, and administrators. Indicating that the students could not imagine considering a career in an institution they viewed as oppressive for people of Color.

Similar to Fray and Gore (2018), Heinz's (2015) international review of empirical studies on student teachers' career motivations also found ample evidence of intrinsic and altruistic sources of motivation to enter the profession. Heinz (2015) noted two studies that focused on the motivations of novice teachers of Color (King, 1993) and student teachers of Color (Su, 1997). A key finding: "Minority teacher candidates are motivated by their awareness of the inequalities in the existing educational and social establishments and view themselves as change agents. They believe that teaching can contribute to the betterment of society" (Heinz, 2015, p. 264).

There is a consensus in the field that most teacher candidates and novice teachers in the United States are motivated to enter the teaching profession for altruistic and intrinsic motivation reasons. This attestation includes teachers from diverse ethnic-racial backgrounds, albeit from a
very limited pool of studies, as Fray and Gore (2018) and Heinz (2015) noted in their empirical reviews. Graham and Erwin's (2011), King (1993), Su's (1997) and Gauna et al.s' (2022) seminal studies (in that they are the only of their kind) found that high schoolers, teacher candidates, and novice teachers of Color, discuss being influenced by their own marginalized experiences in school as well as the inequities experienced by youth of Color in school (e.g., poor conditions, lack of role models, need for teachers of Color).

Salient takeaways: While Graham and Erwin (2011) found that for some African American males becoming a teacher was not a viable option due to having experienced discrimination and marginalization in school, King (1993) found that once students were in college, teaching was seen as a sound career option and social action. Furthermore, Gauna et al.s (2022) found that despite the marginalization experienced across the bilingual teacher pipeline, teacher participants' desire to serve their community encourages them to continue on their career path. Although experiences of marginalization and discrimination in primary, secondary and postsecondary school dissuade students of Color from considering a teaching career early on, something appears to happen during the undergraduate school years that motivate students of Color to view teaching as a viable career option.

Due to the dearth of research on bi/multilingual teachers of Color's early schooling experiences as it relates to their motivation to become teachers, the following sections review an interdisciplinary scope of work. The aims are three-fold. First, identify in what ways primary, secondary, undergraduate, and postsecondary school may perpetuate and facilitate the discrimination and marginalization of bi/multilingual students of Color. Second, identify how these experiences of discrimination and marginalization have impacted the wellbeing of bi/multilingual students of Color as students and as bi/multilingual teachers. Third, identify what
developmental assets have been found to support potential and current bi/multilingual teachers to resist and challenge oppressive systems of discrimination.

## A History of Structural and Systemic Discrimination in Education Impacting Potential

## Bilingual Latinx Teachers

## Americanization and Deculturalization

In the early twentieth century, there were two important elements in the Americanization of Mexican Americans and Puerto Rican Americans: Suppression of their native languages and educational segregation or isolation. In addition, in school contexts, deculturalization facilitated Americanization processes by encouraging: (a) the use of curricula and textbooks that reflected the culture of dominant groups, (b) the denial of cultural and religious expression by dominant groups, and (c) the use of teachers from dominant groups (Spring, 2021). From a deculturalization framework, the main objective for segregated schools was to "strip away" Mexican and Puerto Rican values and culture and replace the use of Spanish with English. Furthermore, segregation served the purpose of maintaining White supremacy - separating the "superior" race from the "inferior".

By the mid-twentieth century (1940-1970), Mexican American and Puerto Rican community groups demanded that public schools desegregate and incorporate their languages and cultures into curricula and instruction. Indeed, many landmark decisions by the United States Supreme Court countermanded deculturalization processes specific to Latinx students. Latinx community groups advocated for quality education that was also bilingual and bicultural for their children (Garcia \& Sung, 2018). Community demands countered characteristics of the deculturalization process that attempted to erase their home/heritage languages, histories, cultures, and their contributions to the United States (Spring, 2021).

In effect, lawmakers instated educational law, the Bilingual Education Act (BEA), that supported bilingual education programs for minoritized bilingual children. However, the education of minoritized bilingual children, as defined by law then (1960s) and now (2023), focuses on the utilization of students' home languages to support English acquisition, not bilingual acquisition. Thus, bilingual education from lawmakers' point of view, since inception, were programs for "poor," "semilingual," Latinx-American and -immigrant children (Flores \& Garcia, 2017). From that point onward, bilingual education became a racialized term, and by the end of the twentieth century, bilingual education programs were restricted in many states.

## White Supremacy and Raciolinguistc Discrimination

For all the progress made, undone, and then remade, White Supremacist ideology, specifically ideas about Latinx-American communities as inferior races, has not dissipated. These notions are often conveyed through raciolinguistic perspectives (Flores \& Rosa, 2015; Rosa \& Flores, 2017). In this, individuals are racialized "without explicitly invoking race" which "allow[s] people to reproduce racism while promoting colorblindness or maintaining that we inhabit a post racial society" (Rosa, 2016, p. 163). For example, every amendment or reauthorization made to the BEA after 1967 gradually increased focus on utilizing home/heritage languages to transition students to English classrooms as quickly as possible, and designated greater percentages of funds to these approaches (Ricento \& Wright, 2008). Eventually, the initial goal of the BEA, to promote Latinx cultural heritage and home/heritage language maintenance/development, became subordinate to Anglicized English teaching and learning (Libowitz, 1980; Rosa 2016).

By the 1980's the English-only movement began to gain traction, and in 2001, the BEA was replaced by the Bush administration's No Child Left Behind (NCLB). Restrictive language
education policy ensued. In 1998, California voters passed Proposition 227, "English Language in Public Schools," followed by Arizona (2000), Massachusetts (2002), and Oregon (2008) (Garcia \& Sung, 2018). Under NCLB, the term "bilingual education" was omitted, and funds were no longer formally allocated to additive bilingual program models (Ricento \& Wright, 2008). Not only is bilingualism "devalued" in this context but also "inverted," meaning that "to be bilingual was not to use more than one language; it was to use less than one language in particular" and that to be enrolled in bilingual programs was to "dumb down" (Rosa, 2016, p. 169). In effect, bilingual students' language skills were measured in relation to English proficiency not bilingual proficiency, and since their English proficiency was not perceived as corresponding to "standardized" English, they were identified and classified as not knowing any legitimate language (Cummins, 1976; MacSwan et al., 2002).

These ideologies of languageless continue to manifest in the education of Latinx students and careers of bilingual teachers. For students who are classified as English Learners (EL) the implication is that there is a language barrier they must overcome, and once reached they will be welcomed as legitimate participants in the United States. However, as Rosa (2016) argues, there are many Latinx individuals who identify as bilingual, English-dominant, or monolingual English users, yet they still face similar raciolinguistic ideologies.

## The Impact of Discrimination on Bi/Multilingual Latinx Teachers Development and Well

## Being

Scant research has examined how marginalizing experiences in primary, secondary, and postsecondary school spaces impact the wellbeing of Latinx bilingual teachers. However, there is evidence to suggest that these experiences may be detrimental to bilingual teachers' wellbeing over time. Experiences of discrimination and marginalization bring forth feelings of language
loss and shame, as well as linguistic insecurities (i.e., unsure about their abilities in either language; Rosa, 2016). These experiences influence teachers' academic self-esteem and confidence as they journey through the bilingual teacher pipeline.

Winstead and Wang's (2017) multiple-case study of eight bilingual Latinx teachers' ( $\mathrm{n}=$ 5 female, $\mathrm{n}=3$ male; aged 22-39) early schooling experiences found that teacher reprimands and public humiliations made teachers feel "dumb," "miserable," and that they were "not proficient in either language" (p.22). When considering enrolling in a bilingual teacher education credential program, teachers thought that perhaps they were not "good enough." However, family support with utilizing Spanish and their families' "positive acknowledgment of their bilingualism" as "capital" were essential in countering deficit notions and negative voices" (p. 23).

Similarly, Gauna and Beaudry's (2016) longitudinal qualitative study, followed Marlene as she completed her teacher education courses at university, student teaching, and her first-year teaching. Interviews focused on Marlene's experiences before, during, and after she became a teacher highlight various schooling experiences that made her feel she was "not good enough." For example, when Marlene was in primary school, her teachers called her "lazy" for not speaking English. Sometimes she was accused of pretending to not know English. Eventually, her teachers stopped calling on her.

As an adult, Marlene is "still trying to get that chip off" her "shoulder" and often reminds herself, "I'm not dumb, I know what I'm doing [...]" (p. 9). As she finished her teacher education coursework, student teaching, and applied for bilingual teaching positions, she expressed feeling conflicted. Even though she was well prepared (high self-efficacy), she still felt she had something to prove (low self-esteem). Her desire to serve her community pushed her to
persevere even as she continued to navigate negative messaging about her self-worth and ability as a teacher.

## Developmental Assets that May Support Potential Bilingual Latinx Teachers to Resist and Challenge Oppressive Systems of Discrimination

In general, the ethnic-racial identity research has revealed that elements of ethnic-racial identity development in children, youth, and adults of Color manifest following exposure to ethnic-racial prejudice, which includes discrimination and racialization (Cross 1971; Hoffman et al., 2019; Phinney 1989; Quintana, 2007). For children of immigrant origin (i.e., foreign born and born in the United States to immigrant parents), acculturation and discrimination, which often intersect, are "two powerful social forces [...] each pulling and pushing in different directions in the process of ethnic [and racial] self-definition" (Rumbaut, 2005, p. 130). Nevertheless, ethnic-racial identity and critical consciousness, together, as developmental assets may protect students of Color (e.g., potential bilingual teachers) from internalizing ethnic-racial prejudice across the lifespan (Mathews et al., 2020).

Critical consciousness, a process conceptualized by Freire (2000), describes how marginalized individuals upon recognizing societal inequalities take subsequent action. The essential elements to critical consciousness include critical awareness, which is the process of reflecting about the causes of social inequity, critical action, which is engagement in action for social change, and political efficacy, which are the beliefs and attitudes one has about their ability to effect change.

Particularly, Marks and colleagues (2007) highlight that early exploration of ethnicracial identity may be related to children of second-immigrant generations (aged 6-12; grades first to fourth) being exposed to White American culture in schools, as other scholars have
substantiated (Suárez-Orozco \& Suárez-Orozco, 2001). The second-immigrant generation refers to children who were born in the United States and have at least one parent who is foreign-born. In this, students become aware of the prejudicial ideologies assigned to their ethnic-racial group, accentuating group differences, and prompting early exploration of their racial-ethnic identity as children (Steketee et al., 2021). However, Marks and colleagues (2007) also identified protective mechanisms: The language children use and the family cultural practices they engage in ascribe importance to their ethnic-racial identity (salience) over time (centrality) and strengthen ethnic pride (Akiba et al., 2004; Marks et al., 2007; Suárez-Orozco \& Suárez-Orozco, 2001).

Analogously, Raumbaut (2005) found that the more cohesive the family (i.e., strength of attachment youth feel to their parents) the more likely adolescents of immigrant-origin consider their ethnicity/race as being very important to them. Thus, ethnic-racial socialization, whether discriminatory or not, conjures ethnic-racial exploration, which depending on the exploratory experience, may induce critical reflection or thinking about their ethnic-group and/or experienced discrimination. For example, families may unpack the racialized experiences students are exposed to in school with their children, and by having these conversations, the parent and child make sense of the experience together or the parent guides the child through the reflection process.

Exploration of ethnic-racial identity increases during adolescence, as does exposure to racial-ethnic prejudice (Hoffman et al., 2019). For Black youth and adults, exploration of one's ethnic-racial identity may occur during or after experiencing a racial awakening or increased awareness about the meaning of being Black (Cross, 1971). Neville and Cross’ (2017) research of this phenomena with Black adults $(\mathrm{N}=64)$ from four sites - Australia, Bermuda, South Africa, and the United States -- found that racial awakening was propelled by personal
experiences and/or observations, education, and activism. Moreover, participants discussed that after the process of racial awakening and continued exploration, their racial activism, racial pride, and beliefs about what is possible for them in the future increased.

Portes and Rumbaut's (1996) reactive ethnicity, which is a process experienced by adolescents and adults of the second-immigrant generation, shares similarities to Cross' (1971) racial awakening process. In this, second-generation immigrant youth and adults react to racialethnic prejudice targeting their racial-ethnic group by engaging in political action. Reactions, similar to awakenings, may stem from learning about their ethnic-racial group's experiences of racialization in the United States or directly observing and experiencing racialization. Both processes indicate that an essential component to the exploration of ethnic-racial identity for marginalized groups is critical awareness and reflection, which in turn may lead adolescents and adults to take critical action.

After ethnic-racial exploration, resolution ensues. Resolution refers to an individual's sense of clarity and certainty with the role of their ethnic-racial group in their lives (Phinney, 1989), which includes awareness and reflection of one's politicized history (Umana-Taylor et al., 2018), which may lead adolescents and adults to take political action, participate in civic engagement, and engage in activism (Mathew et al., 2020).

## Present Study and Research Question

This study explores how bi/multilingual teachers of Color have negotiated, resisted, and challenged marginalizing school environments as students, and yet, still chose to become bilingual teachers. This study utilizes phenomenological epistemology, specifically, Smith's (2009) conceptualization of interpretative activity, which posits that lived experience, as phenomenon, can be understood through Heidegger's (2013/1927) logos, the meanings people
formulate from experience to make sense of how things appear or are disguised. Here, teachers' lived experiences, as the phenomenon, and their rationales or explanations for becoming bi/multilingual teachers, as the logos, are examined. Of particular interest are the meanings teachers narrate that embody the cognitive-affective and existential domains of psychology because teachers "as physical and psychological entities" are influenced by "the world" as they "reflect on what they do, and those actions have meaningful, existential consequences" (e.g., I wanted to be a bilingual teacher because...) (Smith, 2009, p. 34). Thus, drawing from developmental perspectives and guided by phenomenological epistemology, this study seeks to address the following research question: What motivated teachers at Union Community School to become bilingual teachers and teach in a Spanish maintenance bilingual program?

## Methods

See Chapter 1 for school site information.

## Teacher-Participants

I used a purposive sampling approach to recruit Union Community School teachers during the 2018-2019 academic school year who were interested in participating in the study. Participation was not restricted to Latinx teachers and teachers of immigrant-origin. All teachers were eligible to participate. Of the seventeen teachers working at the elementary school level at the time (2019), thirteen Spanish-English bilingual program teachers consented to be interviewed. Three teachers (two teachers from the Korean world language program and one teacher from the Spanish-English dual language program) did not reply to email invitations. One teacher from the Korean world language program confirmed to be interviewed but canceled because she felt the research-practice partnership (RPP) inquiry had mostly focused on the Spanish-English maintenance bilingual program. The RPP inquiry that I and teachers had
worked on, until that point (7 years total), had focused on bilingual language learning and development. The Korean world language program does not assess Korean learning and development, thus the Spanish-English maintenance bilingual program became the site of interest, although the Korean teachers participated on all inquiries related to English language learning and development. See Chapter 1 for more information about recruitment and sampling as it relates to this RPP inquiry.

Most teacher-participants were female $(92.31 \%, n=12)$ and self-identify as Latinx $(84.62 \%, n=11)$ and Spanish-English bilingual $(84.62 \%, n=11)$. On average, teacherparticipants self-reported having 17 years of teaching experience (range: 1-29) and having taught at the Union Community School for 8 years (range: 1-10). All teacher-participants have acquired California's Multiple Subject and Bilingual Authorization Credentials. $69.23 \%(\mathrm{n}=9)$ of the teacher-participants have a master's degree and $30.77 \%(n=4)$ of the teacher-participants have acquired National Board Certification. See Table 2.1 for more background information.

## Data Gathering Strategies

All data gathering strategies were approved by the University's Institutional Review Board (IRB) and the participating school's Research and Accountability Committee. See Chapter 1 for more detailed information about ethical procedures. Teacher demographic and background information was collected from an Educator Survey created by the Union Community School and administered every Spring. Teachers' individual and collective experiences (as detailed by selfreported survey data, see Table 2.1) provide background information about the teacherparticipants (e.g., ethnicity, number of years in the profession and at the school site) and contextual information about the Union Community School's Spanish-English Dual Language program (e.g., retention).

Thirteen in-depth, semi-structured interviews were conducted between May 2019 and July 2019 using a modified version of Seidman's (2019) in-depth three-interview series. Typically, Seidman's (2019) three-interview series consists of three separate 90-minute interviews, each one drawing from and building on the conversation topics from the previous interviews. Per the Union Community School's Research and Accountability Council (the school's institutional review board affiliated to the school District) recommendations, I modified the original threeinterview series to a single 50-60-minute interview, to accommodate teachers' busy schedules and responsibilities outside of school hours. According to Seidman (2019), when considering alternatives to the structure and process of the three-interview series, it is important to capture the three-interview series' goals, so that the participants have the opportunity to share their experience as they relate to a topic area of inquiry (goal of the first interview), reconstruct their experience (goal of the second interview), and reflect on the meaning of their experience (goal of the third interview). Considering these recommendations, when creating an interview protocol for this present study, I focused on creating questions that facilitated reflection (goal of the third interview) and addressed the goals salient to the first and second interviews from the threeinterview series. The interview questions were organized into three categories, which included A) Professional trajectory with a focus on changing beliefs, B) Practices and instructional strategies employed, and C) Turning points and recommendations: Enacting program structures. Per Seidman's (2019) recommendation, to elicit further reflection from teacher-participants on the meaning of the narrated experience, when appropriate, I asked the teacher-participants to reflect on recurring experiences mentioned at different times during the interview (e.g., "Earlier you shared 'X,' and just now, 'Y.' What does this mean to you?'). See Table 2.2 for the interview protocol created for this study.

Table 2.1
Elementary School Teacher-Participants' Demographic Information

| Teacher Name (pseudonyms) | Current Professional Role | Previous Roles | Ethnicity | Languages in addition to English ${ }^{1}$ | Teaching Since | No. of Years Teaching | First Year at Sitel ${ }^{2}$ | No. of Years at Site |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Paty Cabal | Den 1 |  | Latinx | Spanish | N/A | N/A | 2016 | 3 |
| Elena Lopez | Den 1 |  | Latinx | Spanish | 2005 | 14 | 2015 | 4 |
| Liliana Rodríguez | TK | Den 1 | Latinx | Spanish | 2007 | 12 | 2009 | 10 |
| Maite Sánchez | Den 1 | Den 1 | Latinx | Spanish | 1990 | 29 | 2012 | 7 |
| Graciela Pinto | Den 1 | Den 2 | Latinx | Spanish | 2008 | 11 | 2014 | 5 |
| Julia Cortés | Den 2 |  | Latinx | Spanish | 2006 | 13 | 2010 | 9 |
| Maya Bhave | Den 2 |  | South Asian | Hindi, Spanish | 1999 | 20 | 2011 | 8 |
| Fatima Botín | Den 3 | Den 2 | Latinx | Spanish | 1995 | 24 | 2014 | 10 |
| Ana Andrade | Den 2 |  | Latinx | Spanish | 2018 | 1 | 2018 | 1 |
| Silvia Rubio | Den 3 |  | Latinx | Korean, Spanish, Conversational French \& Portuguese | 2006 | 13 | 2009 | 10 |
| Carlos Alvaro | Den 3 |  | Latinx | Spanish | 2007 | 12 | 2009 | 10 |
| Mariana Hurtado | Den 3 |  | Latinx | Spanish | 2010 | 9 | 2015 | 4 |
| Zoe Boyd | Grade 6 | Den 1, Den 3 | Multiracial/ethnic | Spanish | 1996 | 23 | 2009 | 10 |

Note. Data retrieved Summer 2019 from the Educator Survey created by the UCLA Community School, administered every Spring.
TK $=$ Transitional Kindergarten; Den $1=$ Grades K-1; Den $2=$ Grades 2-3; Den 3 = Grades 4-5.
${ }^{1}$ Categorical Item Data: "What languages other than English do you speak, read, and write? Check all that apply and feel free to qualify proficiency levels in the comment box below."
${ }^{2}$ The range of years a teacher taught at the Community School. "Present" indicates that the teacher was still active at the Community School in the Summer of 2019.

Interviews were audio recorded using an Apple I-Phone XS MAX Voice Memo application (version iOS 13.5.1) and a portable digital recorder. To preserve teachers' anonymity, interview audio files were named using a randomly assigned 6-digit ID code. I kept a key linking original names and study IDs in a secure location. Interviewee pseudonyms were added during transcription. Transcriptions were completed using an artificial intelligence application, Otter.ai, which automatically transcribes and punctuates an audio file using speech recognition. The artificial intelligence application had difficulty accurately recognizing Spanish-language usage and Spanish-accented English speech, so I edited all interview transcripts using the original audio files as input to facilitate accurate reading and analysis of the transcriptions. All revisions were bracketed except for punctuation additions and words that were omitted. For example, false starts, such as "We went--we were going" were removed from the final transcript. Revisions were made to facilitate readability and accuracy when coding the substance of the interview so that the meanings and perceptions created and shared by the participant during the interview could be captured with credibility (Nordstrom, 2019).

Table 2.2
A. Professional Trajectory with a Focus on Changing Beliefs

1. Why do you teach at a dual language immersion (DLI) school?

Prompt: Has this always been the case? What was your thinking before?
2. How have your beliefs about multilingual language development changed or expanded throughout your career?

Prompt: [Spanish, English] language
development?
3. Describe a moment when your understanding about multilingual reading development shifted.

Prompt: [Spanish, English] reading
development?
4. Describe a professional learning experience that has been formative to you.

Prompt: How has this experience informed your practice when teaching [Spanish, English] reading?
5. What kind of professional development would you like access to? Why?

Prompt: What kind of PD related to multicultural language development would you be interested in? Why?
B. Practices and Instructional Strategies Employed with a Focus on Turning Points

1. In what ways have students informed your multilingual teaching practice?

Prompt: e.g., different immigrant-generations, ethnicities, cultures, and linguistic experiences...
2. What instructional strategies do you believe have been most successful with supporting students' multilingual [Spanish, English] reading development?

Prompt: What strategies have been less successful and why?
3. In what ways have you managed pedagogical obstacles related to teaching [Spanish, English] reading in a dual language school?

Prompt: [Korean/ Spanish/ English] language development?
4. How have you navigated programmatic obstacles?
5. In what ways has your Den helped students obtain Spanish and/or English reading proficiency?

Prompt: What about [Spanish, English]
language development? What would you like to change? Why?
C. Programmatic Turning Points and Recommendations

1. In what ways has the DL program grown since you began working here?

Prompt: How have these changes influenced your [Spanish, English] teaching, curriculum, and practice?
2. What is your opinion on language allocation? Why?

Prompt: Have you always thought this? What did you think before and what changed your mind?
3. What recommendations would you give a teacher who is thinking about working at a dual language school?

Prompt: Has this always been the case? What was your thinking before?
4. What recommendations would you give a Spanish-speaking friend of Latinx descent who is thinking of enrolling their child in a Spanish-English dual language program?

Prompt: Has this always been the case? What was your thinking before?
5. The school is expanding the dual language program to the secondary grades. What would you like secondary school teachers and support staff to consider?

## Methodological Integrity

## Coding Scheme Development

## The Unit of Analysis for Coding

Before developing the coding scheme, interview transcripts were demarcated into text blocks of "conceptually meaningful" units to preserve contextual information and facilitate coding between two coders during coding scheme development and when calculating for interrater reliability (Campbell et al., 2013; O’Connor \& Joffe, 2020). For purposes of this study, a text block is defined as a chunk of text that conceptually addresses a distinguishable topic and includes a central point with supporting details. First, one coder formatted the transcripts into chunks, and then, a second coder reviewed them, flagging chunks that could be consolidated or divided based on topic delineation. To finalize the parsing of text into meaningful units, coders "negotiated agreement" discussing discordances until a consensus was reached (Campbell et al., 2013), also known as consensus decision-making. Disagreement rarely occurred.

Table 2.3.

In-Depth Semi-Structured Interview Data Sample

| Data Types | Interviews, $\boldsymbol{N}$ | $\mathbf{\%}$ | Text Chunks, $\boldsymbol{N}$ | $\%$ |
| :--- | :--- | :--- | :--- | :--- |
| Elementary Teacher Interviews | $n=13$ | $32.50 \%$ | $n=322$ | $49.01 \%$ |
| Upper School Teacher \& Staff Interviews | $n=15$ | $35 \%$ | $n=257$ | $36.12 \%$ |
|  | $N=28$ | $100 \%$ | $N=657$ | $100 \%$ |

## Sampling the Units of Analysis to be Utilized During Coding Scheme Development

Data (or text blocks) used to develop the coding scheme were sampled from the complete data set of in-depth semi-structured interviews ( $\mathrm{N}=28$ Union Community School teachers and staff; $\mathrm{n}=13$ primary school teachers, $\mathrm{n}=15$ secondary school teachers and staff). The
elementary school and secondary school teacher/staff interview protocols are nearly identical. Modifications were made to the secondary school teacher/staff interview protocol so that questions were relevant to secondary school program structures, as well as content-area disciplines and teaching.

The elementary school teacher interviews were collected for this dissertation and for the larger collaborative research practice partnership (RPP) effort with the school. The secondary school teacher/staff interviews were collected for the RPP project and to support the coding procedures for this study (see Table 2.3). Sampling from the complete data set allowed the interviews to be organized into subgroups to ensure the sampling encompassed various points-ofviews and experiences, also known as stratified sampling.

The following characteristics were used to stratify interviews for selection so representation across strata was obtained: gender, years of teaching experience, years teaching at Union Community School, role (primary school teacher, secondary school teacher, secondary school staff). Additionally, having a lot of data to sample from afforded us the opportunity to develop the coding scheme iteratively and support extensive coder training before the coding scheme was applied to all the elementary school teacher interview data blocks relevant for this study.

## Developing the Coding Scheme

School and university research partners participating in the RPP recommended using a priori codes that would facilitate the analysis of the phenomena under study at the programmatic level. We drew from Valdés's (2018) analytical framework of interactive mechanisms in the process of curricularizing language to identify deductive codes. Curricularization is the process
by which language is standardized and transformed into an academic subject when it is taught in school settings (Valdés \& Parra, 2018).

Valdés's (2018) framework identifies the sociopolitical, socio-structural, and school mechanisms that influence language learning and teaching. The framework was designed by Valdés to critically examine the ways in which pedagogical and structural elements of language program models are or are not providing equitable learning opportunities for linguistically diverse children whose languages and/or dialects have been marginalized and/or racialized in school settings.

To investigate the phenomenon under study, it was also appropriate to utilize data-driven techniques, such as inductive open coding (Saldaña, 2021), to capture codes attuned to teachers' lived experiences as well as the culture and history of the school, the local setting, and the political landscape. This "dualistic approach" of deductive and inductive coding techniques (Roberts et al. 2019) provided an opportunity to expand a priori codes of deductive reasoning to include contextual characteristics relevant to the school site that embodied the mechanisms that curricularize language in this particular context.

First, two coders, myself and C.D. (a graduate researcher also employed by the school site), read copies of the same three interview transcripts and coded the text blocks inductively (Saldaña, 2021) and deductively (Valdés, 2018). We added inductive codes as subcodes to Valdés's (2018) deductive meta codes and subcategories. A meta code is a category or conceptual label that identifies and organizes similarly coded data from a data corpus (Saldaña, 2021). We added the inductive subcategory, "translanguaging" to the deductive meta code "core program elements." Then, we shared examples from the text that exemplified each inductive and deductive code, and made revisions to code definitions.

Table 2.4
Purposeful Sample of Text Blocks from a Randomly Stratified Interview Sample

| Interviewee | Teacher Role | Ethnicity | Gender | Bilingual or Multilingual | Den or Division | Total Years Teaching in Union Community | Total Year <br> Teaching Overall | Total number of text blocks sampled |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Carlos Alvaro | LST | Latino | Male | Bilingual | Den 3 | 10 | 12 | 6 |
| Liliana Rodriguez | LST | Latina | Female | Bilingual | TK, Den 1 | 10 | 12 | 7 |
| Paty Cabal | LST | Latina | Female | Bilingual | Den 1 | 4 |  | 7 |
| Maya Bhave | LST | South Asian | Female | Multilingual | Den 2 | 8 | 20 | 7 |
| Elena Lopez | LST | Latina | Female | Bilingual | Den 1 | 4 | 13 | 11 |
| Mariana Hurtado | LST | Latina | Female | Bilingual | Den 3 | 4 | 9 | 10 |
| Silvia Rubio | LST | Latina | Female | Multilingual | Den 3 | 10 | 13 | 9 |
| Fatima Botín | LST | Latina | Female | Bilingual | Den 2, Den 3 | 10 | 24 | 5 |
| Maite Sánchez | LST | Latina | Female | Bilingual | Den 1 | 7 | 29 | 2 |
| Elizabeth Ryan | USS | Caucasian | Female | Bilingual | US admin | 10 |  | 7 |
| Gabriela Chavez | USS | Latina | Female | Bilingual | US science | 10 |  | 5 |
| Anura Barnes | UST | Latina | Female | Bilingual | US Spanish | 9 |  | 4 |
| Javier Torres | UST | Latino | Male | Bilingual | US Math | 10 |  | 7 |
| Barbara Chen | UST | Korean | Female | Bilingual | Spec. Ed, Admin | 11 |  | 7 |
| Ines Huerta | UST | Latina | Female | Bilingual | US SS, Admin | 11 |  | 7 |
| Lisa Byrne | UST | Multiracial | Female | Bilingual | US SS | 8 |  | 7 |
| Olivia Serrano | UST | Latina | Female | Bilingual | Division 1 | 6 |  | 6 |

Note. LST = Lower School Teacher; UST = Upper School Teacher; TK = Transitional Kindergarten; US = Upper School; SS = Social Studies

Afterward, we individually coded a purposeful subsample of 153 text blocks (approximately $23 \%$ of $N=657$ text blocks) from a subset of $n=7$ interviews. Interviews were sampled from the complete RPP teacher interview data set ( $N=28$ Union Community School teachers and staff; $\mathrm{n}=13$ primary school teachers, $\mathrm{n}=15$ secondary school teachers and staff) and were randomly stratified so that the teacher sample was representative of all Dens from the primary school and content-areas from the secondary school. This sampling approach provided a more varied sample of interview transcripts (See Table 2.4 and Table A1), which was essential since we were still developing the coding scheme (i.e., continuing to inductively code using open coding and test the coding scheme codes we had developed thus far).

Subsequently, we discussed emerging inductive subcodes and revised the deductive meta codes to encompass all inductive subcodes. For example, the subcode "motivation" inductively emerged from the data, but we did not have a deductive meta code for $i t$, so we added the meta code "psychosocial characteristics" inductively. In another example, the deductive meta code "core program elements" had so many inductive and deductive subcodes that upon review, two inductive meta codes emerged, "program operations" and "pedagogical elements."

Using this newly revised coding scheme, we applied interrater reliability (IRR) techniques (i.e., percentage agreement, $P_{A}$, and kappa statistics, $k$ ) to a $20 \%$ purposeful sample of text blocks from the stratified sample of interviews. We coded copies of the same text blocks, and independently indicated on a spreadsheet whether or not a code was present using a binary system $(1=$ present; $0=$ not present $)$. We repeated this process, each time with a new $20 \%$ sample, until IRR indices thresholds were met.

We utilized Viera and Garrett's (2005) criteria to interpret the $k$ statistic: Almost perfect ( $81 \%-100 \%$ ), Substantial ( $61 \%-80 \%$ ), Moderate ( $41 \%-60 \%$ ), Fair ( $21 \%-40 \%$ ), Slight ( $20 \%$

- 0\%), and Poor ( $<0 \%$ ). We utilized Miles, Huberman, and Saldaña's (2014) criteria to interpret $P_{A}$ : Results within an $85 \%$ to $100 \% P_{A}$ range are highly recommended. Per scholars' recommendations (Belur et al., 2021; Campbell et al. 2013, Syed \& Nelson, 2015) we calculated both IRR indices since they each offer somewhat different information. $P_{A}$ provides a literal representation of the degree to which two coders agree but does not consider matches due to chance, unlike the $k$ statistic. Korobov and Thorne (2006) argue that $P_{A}$, instead of $k$, may be the most appropriate index for coding specific units from narrative-based data (e.g., semi-structured interviews).

One reason provided by scholars is that IRR indices require designating data as either "hits" (present) or "misses" (not present), and that when working with open-ended data, it is not unusual for there to be an incongruous number of agreements in the "misses," inflating $k$ values (Belur et al., 2021; Campbell et al. 2013; Korobov \& Thorne, 2006). Due to this inflation, any disagreements could have a disproportionately large effect on $k$.

In contrast, Syed and Nelson (2015) suggest that researchers interpret their $k$ values alongside $P_{A}$. They explained: "A value of $k=0.64$ with an $85 \%$ agreement should be interpreted quite differently than a value of $k=0.64$ with a $72 \%$ agreement" $(\mathrm{p} .381)$, meaning that the latter is less trustworthy because both indices are below their respective indices. The first example is more trustworthy because one of the indices meet the respective threshold. Furthermore, as previously discussed, the $k$ index may be sensitive when utilized with narrative data, and thus unreliable, so having another index , such as $P_{A}$ is helpful.

There were two iterations to compute IRR in total. After the first iteration, IRR indices were used to identify which mismatches needed to be reviewed, discussed, and revised by editing definitions, collapsing subcodes, and merging subcodes. After the second iteration, we noticed
that our $P_{A}$ and $k$ statistics were not improving (i.e., meeting recommended thresholds) for all codes, and in some cases, the $P_{A}$ and $k$ indices worsened. For example, the IRR indices for the code Interpretations of Theories \& Conceptualizations after the first iteration were: $P_{A}=75.29$; $k=0.46$ (moderate), and after the second iteration: $P_{A}=69.28 ; k=0.38$ (fair). The $P_{A}$ indices after the first and second iteration were $<85 \%$, below the recommended threshold. See Table 2.5 for $P_{A}$ and $k$ indices from the first and second IRR iteration.

After reviewing and discussing IRR indices and the corresponding mismatches, we found that most mismatches were a result of human error, which is when coders just happen to miss applying codes to text units and fewer mismatches were packaging concepts, which is when coders think about a task differently based on their background, domain knowledge, and research experience (Belur et al., 2021). Thus, I wondered how the semi-structured interview data itself, after transcription and unitization, may have confounded $k$ and $P_{A}$ values. I sought guidance from the literature and found that the number of linear and nonlinear data units analyzed, the length of the data units analyzed, the number of codes one has to keep track of, and the size of the coding task (i.e., total number of data units sampled) all make the coding process more taxing on the coder, increasing extraneous cognitive load known as fatigue effects, which may in turn, increase human error (Belur et al., 2021; Campbell et al., 2013).

Therefore, we finalized our coding scheme one last time to decrease fatigue effects. Firstly, we revised the coding scheme according to $k$ and $P_{A}$ values from the first and second IRR iterations. Then, we created a list of keywords that encapsulated each code we had matched on previously. Secondly, we used the Microsoft Excel "find" feature to locate relevant text blocks using the keyword lists. Thirdly, we read the text blocks and noted whether the keyword successfully identified a text block that encapsulated the code of interest.

We found that some keywords identified relevant text blocks $100 \%$ of the time regardless of whether the text block was from an elementary or secondary/staff interview. We named those keywords "code every time keywords" which means that once the text block is identified by the "find" function, it does not need to be read/reviewed by the coder because it encapsulates the code every time. Keywords that were less than $100 \%$ effective at identifying relevant text blocks were still utilized using the "find" feature, however the identified text blocks had to be closely read/reviewed by the two coders to determine whether the text block captured the code of interest.

We kept a log of text blocks that were reviewed by both coders, and also recorded the key points from discussions. We made minor revisions at this stage. For example, we omitted the "personal experiences" code and added a "teaching for social justice code." This process helped us become very familiar with the data and the coding definitions. See Table 2.6 for the final codes and definitions.

Once we had a finalized coding scheme, we coded the data using both the code definitions and keywords. C.D. coded all of the secondary school teacher/staff interviews and I coded all of the elementary school teacher interviews.

## Trustworthiness

To ameliorate bias, throughout this study, I applied various trustworthiness strategies, namely member checks and peer debriefing, auditing and reflexivity, and triangulation, which I describe in detail below.

Table 2.5
Inter-Rater Reliability (IRR) Indices for Two Consecutive IRR Coding Iterations

| Meta- \& Sub-codes |  |  |  |
| :--- | :--- | :--- | :--- |


| Interpretations of Theories \& Conceptualizations | 75.29 | 0.46 | 69.28 | 0.38 |
| :---: | :---: | :---: | :---: | :---: |
| People \& School Categorizations | 67.82 | 0.38 | 77.78 | 0.53 |
| Evaluative Views | 62.64 | 0.36 |  |  |
| Widespread Phenomena | 90.80 | 0.38 | 95.42 | 0.64 |
| Pedagogical Program Elements | 89.54 | 0.66 | 90.36 | 0.72 |
| Assessment | 87.93 | 0.55 | 84.97 | 0.50 |
| Instructional Practices | 83.91 | 0.53 |  |  |
| Curriculum | 84.48 | 0.53 |  |  |
| Instructional Practice \& Curriculum |  |  | 79.08 | 0.54 |
| Parent-Family Practices | 95.40 | 0.85 | 97.39 | 0.85 |
| Translanguaging | 95.98 | 0.86 | 100.00 | 1.00 |

Note. $k=$ Kappa statistic; $P_{A}=$ Percentage agreement; $1=$ first inter-rater reliability (IRR) coding iteration; $2=$ second IRR coding iteration; $* *=$ There was not enough variability of code matches or mismatches to determine the kappa statistic. Codes that are in bold and underlined are meta codes and all other codes are subcodes. Some codes from the first IRR coding round do not have a kappa statistic or percent agreement value because they had not yet been created. Some codes from the second IRR coding round do not have a kappa statistic or percent agreement value because they were either omitted or merged with another code after the results from the previous codebook iteration were analyzed and discussed by the coders.

## Member Checks and Peer Debriefing

I member-checked with participating teachers by sharing the interview transcripts and results with them to ensure the "faithfulness" of my interpretation of them (Bazeley, 2014, p. 408). I presented preliminary findings to school leadership and teachers in den-level meetings and asked teachers and staff what they thought and whether the analysis accurately represented their collective experience. I also examined the study results with impartial colleagues during research apprenticeship course (RAC) meetings to test my conclusions and clarify interpretations.

## Auditing and Reflexivity

When developing and revising the coding scheme, I worked with C.D., an L\&L RPP University research partner, to maintain a detailed account of our procedures and methods by documenting the lines of inquiry that led to our conclusions, also known as auditing, while concurrently
practicing reflexivity to ensure that our coding accurately represented the teacher-participants' experiences and perspectives, not our own. For example, while creating the coding scheme, we kept track of every decision made for each a priori and data-driven code by keeping a detailed record of discussions, decisions, and quotes from the data that exemplified the code. Developing the coding scheme as we did, helped us create systematic protocols that immersed us deeply and repeatedly in the transcript data.

## Triangulation

Moreover, I employed triangulation of teacher interview data as a trustworthiness strategy to increase the credibility of the findings and to deepen my understanding of the work by obtaining a "rich and complex picture of the social phenomenon being studied" (Mathison, 1988, p. 15). I analyzed different sample groups by grade-level (Den 1, Den 2, and Den 3 teachers) and by years of experience. Then, I compared the results to identify points of convergence, inconsistency, and contradiction to better understand how singular or varying teacher experiences and points of view influenced their pedagogical practice while teaching at the Union Community School.

Through the in-depth analysis brought forth by triangulation, I was able to analyze the data from various angles, as well as take note of the gaps in the data that needed clarification from teacher-participants. Together, these trustworthiness strategies increased the credibility of the results by grounding the analytic claims in the data obtained and by giving participants a leading voice in the study--both characteristics essential to phenomenological analysis (Smith et al., 2009

Table 2.6
Final Coding Scheme of First Level Codes

| LONGITUDINAL INDICATORS ** | The Early Years: Before Joining the UCLA Community School ** |
| :---: | :---: |
|  | Change ** |
|  | Permanence ** |
| LANGUAGE POLICIES * | Federal \& State * |
|  | District * |
|  | School, Den, Division, \& Department ** |
|  | Classroom * |
| THEORETICAL \& IDEOLOGICAL MECHANISMS ON LANGUAGE, RACE, ETHNICITY, AND CLASS * | Widespread Phenomenon ** |
|  | Interpretations of Theories, Conceptualizations, \& Philosophical Underpinnings * |
|  | Teaching for Social Justice ** |
|  | People Categorizations * |
|  | Community ** |
| PROGRAM OPERATIONS ** | Korean Program ** |
|  | Programmatic Cohesion (or Lack Thereof) ** |
|  | Recommendations, Necessities, \& Possibilities ** |
|  | Dilemmas \& Queries ** |
|  | Professional Development * |
|  | Professional Training \& Credentialing ** |
|  | Resources* |
|  | University Partnership ** |
| PEDAGOGICAL PROGRAM ELEMENTS * | Instructional Practices* |
|  | Curriculum * |
|  | Parent-Family Practices (or Lack Thereof) ** |
|  | Assessment * |
|  | Multilingual \& Multicultural Social Action (MISA) Curriculum, Instruction and Assessment / Reader Identity Self-Assessment (RISA) ** |
|  | Translanguaging ** |
| EDUCATOR PSYCHOSOCIAL DEVELOPMENT ** | Educator Motivation, Commitments, \& Buy-ins (or Lack Thereof) ** |
|  | Educator Self-Views ** |

Note. * = deductive (Valdés, 2018), ${ }^{* *}=$ inductive

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by years of experience. Then, I compared the results to identify points of convergence, inconsistency, and contradiction to better understand how singular or varying teacher experiences and points of view influenced their pedagogical practice while teaching at the Union Community School. Through the in-depth analysis brought forth by triangulation, I was able to analyze the data from various angles, as well as take note of the gaps in the data that needed clarification from teacher-participants. Together, these trustworthiness strategies increased the credibility of the results by grounding the analytic claims in the data obtained and by giving participants a leading voice in the study--both characteristics essential to phenomenological analysis (Smith et al., 2009).

## Data Analyses

After developing the coding scheme and achieving IRR with the second coder, I coded the teacher interview transcripts on Microsoft Excel using the codes from the final coding scheme as first-cycle codes. I selected all the text blocks that were coded as "teacher motivation," and then coded the selected text blocks using focused coding, which is usually applied to categorize or select coded text that makes the most analytic sense (Saldaña, 2021). Utilizing this technique, I selected text blocks where teachers described what motivated them to become bilingual teachers and teach in a bilingual program. I then charted the selected "teacher motivation" codes by teacher and grade-level team so I could further analyze the data utilizing pattern coding at the individual and team level as a "splitter," meaning that I "split" or coded a teacher's grouped text blocks line-by-line to identify emerging categories (see Figure 2.2).

## Figure 2.2

## Line-by-Line Focused Coding

| Patterns | [Text Block 1] I teach at a dual language school because it's a part of my identity. I feel that growing up in a community that is similar to |
| :---: | :---: |
| A - Previous schooling | Ktown, with a culture that's similar [informed my thinking]-- number one, I feel it's really important for kids to be able to use and express their culture and then share what they're proud of with their families; part of that is language, right? Speaking Spanish, or Korean here |
| B - Theory and skills (language and content) | would be part of students' culture; that's really important. And, number two, I have seen through various experiences why it's important to support students to learn a second language by first |
| C-Structural and systemic racism | mastering the first language. I've seen a lot of examples throughout my life, how that's been very evident, if you have a strong first language, a lot of the skills will transfer over to your second |
| D1-Commitment to bilingual children | language, [There have been] so many points in my life [where I've felt] Spanish is not desirable by people in society: There are laws against it prohibiting me to do it; my parents are saying that I should |
| D2 - Commitment to ethnic and linguistic group identity and/or bilingual community | speak it, but then, they didn't value it [because they didn't] put me in a bilingual program in school; and, I saw the challenges I had growing up fully immersed in English, it was sink or swim. I know, for sure, that [sink or swim programs are] not the best way to support students |
| D3 - Commitment to the community school's bilingual program | to: feel proud of who they are in school; using [their languages] to build their identity as readers writers and speakers of multiple languages; and, just embracing people because I feel that in general, |
| D4 - Commitment to bilingual education to preserve home/ heritage language and culture | bilingual programs do create that sense of: "I want to learn to speak to so and so, but they speak this and I want to go ask them how do I say this." |

Once patterns were identified, the "split" codes and their corresponding text blocks were "grouped" together forming three "groups," or larger units of data made up of multiple "split" codes and their respective text blocks. The three groups included: 1) Schooling experiences that shaped teacher's identity and career, 2) reason for becoming a bilingual teacher, and 3)

Countering the effects of discrimination on the socioemotional wellbeing of bilingual children. I then themed the data phenomenologically (See Figure 2.3), which means identifying what motivated the participating teachers to become bilingual teachers and teach in a Spanish maintenance bilingual program (the phenomenon, the manifest, the observable) and why (the logos, the latent, the conceptual) (Boyatzis, 1998; Smith et al., 2009).

## Figure 2.3

Theming the Data


Note. This figure illustrates the process that emerged from organizing the data by what motivated the participating teachers to become bilingual teachers and teach in a Spanish maintenance bilingual program.

Figure 2.4

## Theoretical Model of Theories Utilized for Final Themes



Note. The gold circles (individuals) and the lines in gray (societies) connect as they oscillate, indicative of the bidirectional relation between the individual and society. The inner circles are also oscillating, and connect with other oscillating circles, indicating an association. References:

1 = Erikson, 1958; 1959; 1968;
$2=$ Fores \& Rosa, 2015; Flores \& Garcia, 2017; Garcia, 2009; Hoffman et al., 2019; Rosa, 2016; Spring, 2021;
3 = Akiba et al., 2004; Marks et al., 2007; Rumbaut, 2005; Steketee et al., 2021; Suárez-Orozco \& Suárez-Orozco, 2001;
4 = Cross, 1971;
5 = Mathews et al., 2020; Neville \& Cross, 2017; Phinney 1989, 1993; Quintana, 2007; Umana-Taylor et al., 2018;
6 = Diemer et al., 2016; Freire, 2000; Rapa et al., 2018;

7 = Rumbaut, 2005;

As a last step, I analyzed each theme using theories on the relationship between ethnicracial identity and critical consciousness, as well as literature that addresses the racialization and discrimination experienced by people of Latinx and immigrant backgrounds (See Figure 2.4). The following five themes emerged:

1. Early experiences of discrimination in school had a profound impact on teachers' identity formation;
2. Teachers strengthen their Spanish confidence and fortify their ethnic-racial identities;
3. Undergraduate experiences helped teachers reflect on their early schooling experiences;
4. Role models supported teachers on their path to understanding who they are and who they want to become;
5. Teachers dismantle schooling structures that racialize and discriminate;
6. Sociopolitical factors continue to impact the maintenance of a positive ethnic-racial identity.

## Findings

Findings are in response to the following research question: What motivated teachers at Union Community School to become bilingual teachers and teach in a Spanish maintenance bilingual program?

The findings are organized chronologically in line with teachers' human development childhood, adolescence, young adulthood, and middle adulthood. Each theme depicts the impact society (sociocultural and sociopolitical messaging) had on teachers' ethnic-racial identity formation at a particular developmental period, as well as teachers' efforts to process experiences of ethnic racial prejudice (e.g., discrimination, raciolinguistic perspectives, racialization, marginalization). In addition, Themes 2-6 illustrate how teachers worked to change society by
addressing the educational and social injustices they experienced and taking action, which included becoming a bilingual teacher.

## Theme 1- Early Experiences of Racial-Ethnic Prejudice in School Had a Profound Impact on Teachers' Identity Formation

All teachers, except for Ana, began teaching before 2018, and had completed elementary school before Proposition 227 was voted into law by Californians in 1998. About half of the teachers in this group were novice/mid-career teachers when it was law, meaning that they had completed primary and secondary school sometime between the 1970s and 1980s, not so long after the Bilingual Education Act was instituted in 1969. The other half started teaching at the end of the aughts, when I started teaching. These teachers were either enrolled in an upper elementary school grade or just starting middle school when the law was enacted.

Elementary school, especially kindergarten, was a distressing place for these teachers. That is when they became aware that the absence of their home languages (Spanish, Hindi) at school was a "very violent kind of denial of [their] home," because they could not communicate in English. Elena explained: "I have this vivid memory of not knowing how to tell my teacher that I needed to go to the bathroom." For Elena, not being able to communicate basic needs to an adult as a young child felt violent. Other teachers felt similarly. They described feeling "assault[ed]," "dumped into kindergarten and English," "thrown in," and as if they were "sink[ing] or swim[ing] for a while." Descriptions which invoke feelings of rejection (e.g., "dumped") and physical violence (e.g., "thrown in," "assault," "sink or swim," "violent kind of denial"). These examples illustrate how teachers were dehumanized as children, a manifestation of ethnic-racial prejudice (Hoffman et al. 2019). Dehumanization is the act of depriving people or groups of positive human qualities (Hoffman et al, 2019). In this case, teachers as young
children, five years of age, were deprived of participating in the learning process and of communicating their basic needs.

Some schooling experiences were seemingly positive. For example, by second or third grade, Julia, who was enrolled in an English immersion school, was given the opportunity to work with peers in a small group facilitated by a teacher assistant. In the small group, Julia was encouraged to speak Spanish and English. She was even praised for her work, which caught her by surprise. Julia had not been praised in school before. In these moments she thought: "The teachers are okay with me speaking [Spanish] in the small group, [but in] the small group I [also] have to speak English." For Julia, using Spanish in school with peers and educators was bittersweet because she was allowed to use it, but only in specific learning conditions and with caveats, such as using Spanish only to support her English language development.

Ana was the only teacher who had completed primary and secondary school (kindergarten to twelfth grade) during Proposition 227. In elementary school, Ana, experienced deculturalization, raciolinguistic discrimination, and racialization. Sometime between the ages of five and nine, Ana realized that Spanish was not an appropriate language to use in school (i.e., "there wasn't a space for Spanish"), an example of deculturalization. She also recognized that the rule/norm was directed at "Brown" children like herself and her peers, an example of raciolinguistic discrimination and racialization. She became ashamed to speak Spanish. Ana recalled: "At school, I only speak English and I'm too embarrassed to speak Spanish with friends who look like me and probably also speak Spanish." Although Ana's classmates shared her ethnicity/racial, cultural, and linguistic background, none of her teachers did, which added to the tension she felt between English and Spanish, home and school, Anglo-Saxon culture and Latinx culture. By the time Ana was in secondary school, she "started feeling more comfortable with
being "Brown" and speaking Spanish" but was not yet "transformed." As Ana was forming her ethnic/racial and cultural identities, her experiences with using (or not using) Spanish in particular spaces with certain people (teachers, peers, family) and the feelings and perceptions society had of her were imprinted onto her self-image at a developmental stage in her life (adolescence) when the exploration of ethnic-racial identity is most salient.

Years after Proposition 227 was replaced by Proposition 58, Liliana observed that students at Union Community School who are of immigrant origin, including students of Latinx descent like herself, still view school and other public spaces as English spaces, just as she once did, and sometimes still does when speaking with bilingual colleagues and peers. Liliana reflected: "It's like what we see here [at the Union Community School], we go to fourth [grade], fifth grade, middle school, and we all [know we] speak Spanish, but we don't speak it amongst ourselves." Teachers' collective descriptions are vivid in their depictions of despair, shame, and violence caused by deculturalization as well as acts of dehumanization, raciolinguistic discrimination, and racialization. Upon retrospection, Liliana shared: "You learn from your experiences, the negative ones and the positive ones, but I think being a bilingual kid is feeling inadequate, losing a language, and losing a culture."

The schooling experiences described in this theme are reflective of at least five decades and speak to the insidious and relentless nature of systemic ethnic-racial prejudice. In other words, the experiences described occurred before, during, and after Proposition 227, indicating that long before restrictive language policy was instituted as law, ethnic-racial prejudice towards Latinx and immigrant children was pervasive in schools, and continues today.

## Theme 2 - Teachers Strengthen Their Spanish Confidence and Fortify Their Ethnic and Cultural Identities

The examples below show how families encouraged their children and adolescents to utilize their home language (Spanish). Some examples highlight how one's family can value and support the development of their child's home language while concurrently communicating raciolinguistic ideologies that disparage the dialects spoken by their children. These examples identify how teachers (as children and adolescents) processed positive and negative messaging from their families, and the impact it had on their identity, specifically on their self-esteem (confidence) and self-efficacy (beliefs about ability).

Paty, for example, attributed her success learning English as a new language to her family's commitment to literacy. She shared: "education was always important in our family." Before Paty "came to the United States," she "had learned to read and write" in Spanish in Mexico at a school where her grandfather was principal. When Paty was placed in a transitional bilingual classroom in California, she felt fairly good because even though she "didn't know any English," she "knew how to read and write in Spanish [...] and that was really helpful." Other teachers, however, were socialized by their families to feel they lacked Spanish proficiency for speaking dialects of Spanish uniquely spoken in the United States or for speaking "informal" Spanish. For example, Julia remembered "lov[ing]" to speak Spanish with her grandparents when she visited them in Mexico, but sometimes they would call her "pocha." She ascribed this to mean that she was an inadequate Spanish speaker. She received contradictory messaging, that the Spanish she used at home was inferior because it was not "academic," while also struggling to acquire English in school. Teachers who had similar experiences to Julia's said that at different points in their lives they also felt their Spanish was not "good enough."

The emotionally fraught experiences teachers lived through at home did not stop them from moving forward with their academic and linguistic pursuits. Perhaps, it was because aspects of teachers' ethnic-racial identity were linked to their confidence (self-esteem) and ability (selfefficacy) to speak Spanish, meaning that teachers felt proud of their ethnicity, "I am Mexican," and their language use, "I speak Spanish." For teachers, developing their Spanish meant that they valued their ethnicity, and in effect stimulated a reactive ethnicity, meaning that the teachers, prompted by the "trauma" they experienced growing up, that their "Spanish wasn't good enough," continued to "improve" their Spanish. Furthermore, developing their Spanish selfefficacy and building their self-esteem continued to be important features of teachers' ethnicracial identities.

In particular, the pursuit of speaking Spanish "well" became a lifelong endeavor for some teachers. For example, Julia independently sought tutelage because she was not receiving support from family or teachers. She volunteered to be a teacher's assistant in a bilingual classroom while in middle school. This experience introduced her to bilingual teaching and its potential. Julia was inspired and recalled thinking at the time: "alright, if I teach, I'm going to have to master Spanish, and I will, and I do want to." In high school, some teachers chose to continue Spanish coursework and pursue extracurricular activities. High school courses (e.g., high school AP Spanish classes) and extracurricular activities (e.g., soccer team player) provided spaces for observing and using Spanish and building self-esteem related to Spanish language ability. Yet, some teachers"still" felt their Spanish "wasn't that great."

Teachers' pursuit of reaching stellar levels of proficiency did not subside in college or thereafter. Liliana, Fatima, and Maya studied Spanish in Costa Rica, Spain, or Guatemala. Many teachers continued building their Spanish skills by taking college courses in Spanish. The week I
conducted teacher interviews in 2019, five teachers voluntarily enrolled in Spanish literacy classes sponsored by a teacher institute. They continue to, as Liliana shared, "improve" their Spanish.

## Theme 3 - Undergraduate Experiences Helped Teachers Reflect on Their Early Schooling

## Experiences

Ana, Julia, Liliana, Zoe, Carlos, and Graciela pursued a bilingual teaching career, in part, because they were galvanized to do so by their undergraduate coursework, community-based internships, or study abroad programs. Coursework provided teachers opportunities to critically reflect on their own experiences as it related to the content they were learning in class. Connecting personal experiences with course material led teachers who were heritage Spanish speakers to explore and resolve some of the discrimination they encountered in school for being a speaker of a minoritized language and belonging to a racialized group. Furthermore, this process led teachers (including Zoe who is not Latina) to empathize with others as they contextualized their language experiences, fortifying their political efficacy or belief that they can help society address educational and linguistic injustices. A desire, they claim, led them to become bilingual teachers as critical action.

To illustrate, Ana enrolled in a Chicana/o course because a friend had recommended it and it fulfilled "an undergrad requirement for [her] major," unaware of the impact the course would have on her identity development and career trajectory. She shared:

I had the awakening that every undergrad in Chi [Chicana/o] studies has: 'Oh my gosh, I've never learned about this.' I connected with my professor and the people that were sitting around me and that's when I was like: 'There's this whole community and sense of self that I didn't get growing up that I was fortunate to get in undergrad.' I started
reflecting on my K through 12 experiences and started thinking about the shame I felt. The Chicana/o course provided Ana with knowledge she used to reflect on her schooling experiences, specifically the "shame" she felt from being a Spanish speaker and being "Brown." This reflective process led Ana to become critically aware of the injustices she experienced. The awakening she described is the realization that she -- Ana, who is a Spanish speaking Latina, a "Brown" woman -- is not the cause of the shame she felt. Ethnic-racial discrimination is the culprit (see Theme 1).

In addition, connecting with her professor and peers, who were also of Latinx heritage, about topics salient to her ethnic/racial and cultural identity, helped Ana explore and develop a positive sense of self and community. Ana's experience led her to a career related epiphany, which in turn, strengthened her political efficacy. She decided she wanted to "become a teacher" because she "realized how important it is to have teachers who not only like look like you...but who also understand where you're coming from, had similar experiences growing up as you, eat the same foods as you, [and] shop at the same places you do." "Chi" coursework afforded Ana opportunities to critically reflect on the discrimination she experienced in primary and secondary school, become aware of the injustice, explore what that meant for her sense of self, and cultivate political efficacy or the desire to effect positive change in schools. For Ana, effecting social change meant becoming a bilingual teacher. As a bilingual teacher she hoped to provide Latinx students with a positive sense of self and community, just as her "Chi" professors did for her when she was an undergraduate student.

Another example: Carlos' college internship experience brought to the fore "injustices" Carlos had experienced growing up in Southern California as a child of immigrant parents. For six months, while working on his undergraduate degree, Carlos worked with community activists
and parents in an elementary school located in a Latinx enclave in Bushwick, a neighborhood in the Brooklyn borough of New York City, New York. Many parents and their children felt alienated in their current school because school information was not being translated for parents. He said, "I think that experience really kind of began to trigger a lot of things." He realized or became aware, similar to an awakening of sorts, that the "injustices" he experienced as a child of immigrants were also lived by children of immigrants in other parts of the country. Carlos's college internship experience, and the awakening and critical awareness that ensued, reinforced his political efficacy and the belief that pursuing a career in bilingual education would provide him with the necessary tools to ensure that students of immigrant origin, like himself, have equal access to educational opportunities and social privileges, such as the right to receive school information (e.g., calendar, bulletins) in the languages they know and use.

Sometimes learning about others' experiences and history, even if it is somewhat different than one's own, can be as impactful and profound as Ana and Carlos' experiences. For instance, Zoe, who is of mixed ethnicity (Anglo-Saxon and Jewish heritage), remembered the profound effect that researching law cases related to language education rights in a public library in Boston, Massachusetts had on her career path. The cases were about "Spanish speaking kids not being allowed to speak Spanish at school," the corporal punishment that was inflicted on students if they spoke Spanish, and the language loss. Zoe recalled: "they could have had two, but then they only had one."

Zoe's connection to Spanish is not ethnic, racial, and/or cultural. She "worked hard to learn" Spanish as a foreign language and it was a challenging experience of immeasurable "value" (i.e., learning Spanish is her "heart"). Thus, having learned Spanish, and identifying as a speaker of Spanish was important to how Zoe saw herself, and as such, an integral part of her
self-identification or identity. When Zoe read those cases, she experienced critical consciousness. Specifically, through critical awareness, she empathized with the students and felt the "devastati[on]" and recognized the injustice -- that "no one should ever lose a language." That is, learning about the history of Spanish speakers in the United States and being in her "particular little sphere as a Spanish speaker [...] and major" and identifying with this role as representative of aspects of herself (i.e., identity), motivated Zoe to become a bilingual teacher.

For these teachers, learning about the history of Latinx groups in the United States motivated them to pursue a career in bilingual education. They deeply reflected on how American schools have historically perpetuated social injustices for students of Latinx descent, which led to awakenings, exploration of self, and critical awareness, which in turn strengthened their political efficacy and overall sense of self.

## Theme 4 - Role Models Supported Teachers on Their Path to Understanding Who They

## Are and Who They Want to Become

Carlos, Julia, Fatima, and Ana highlighted the psychosocial support teachers and professors provided them on their journeys to becoming bilingual teachers. Role models and mentors positively affirmed teachers' ethnic-racial identity and provided frameworks to elicit critical reflection.

The professor who mentored Fatima helped her explore aspects of her ethnic-racial identity later in life, while she was enrolled in a bilingual extension certification program and teaching in an elementary school. Fatima recalled: "I went through the program when [Proposition] 227 passed, and they were saying, 'No more bilingual education.'" In the extension certification program, Fatima received "a lot of positive ideas about bilingual education." However, it was not until she "stud[ied] abroad with Alma Flor Ada in Spain" that she had the
opportunity to learn "about social justice, and how bilingual education informed that, and how multiculturalism informed that." Ama Flor Ada supported Fatima to cultivate her political efficacy. Fatima learned:
...how important it [is] to have families and kids maintain their bilingualism and their home language, and how [bilingual education] would give them this foundation, so they could be really successful in school. [Being bilingual] wouldn't be a deterrent, actually, it would propel them even further than just [teaching] them to read and write in English. She strongly believes "this greater transformative education philosophy [...] set the tone for the rest of [her] career." Furthermore, being "connected to another woman of Color, somebody who was older, who was really passionate about [bilingual] reading and writing, as she is, was really formative." This specific experience affirmed aspects of her identity that were salient and central, such as being bilingual and her passion for biliteracy. In addition, this relationship supported Fatima as she cultivated her social justice teaching philosophy or political efficacy.

Julia and Carlos' role models were the educators they worked with as teacher assistants. Their role models reaffirmed their belief that students' bilingualism should be valued. The reaffirmation they received strengthened their political efficacy, and encouraged them to pursue a bilingual teaching career as critical action. By the time Carlos and Julia were in secondary school, they knew they wanted "to work with kids." Julia was on track to becoming a bilingual teacher in college, while Carlos "just didn't know at what capacity."

Julia's experience volunteering, and then working with a bilingual teacher in a bilingual classroom, motivated her to pursue a bilingual teaching career. She explored how important being bilingual was to her and her students' sense of self (see Theme 2). Julia shared: "I was immersed in bilingual programs at that point as a TA, and I thought: 'Yeah, this is the only way
to teach kids how to speak English so that they don't feel like I did.'" TA'ing provided Julia opportunities to explore and resolve her bilingual identity -- that is exploring and reaching an understanding of what being bilingual means to her and others from her social group. This process also primed Julia's political efficacy (i.e., political beliefs). These beliefs helped her further resolve the negative social messaging from family, school, and policies that targeted her bilingualism, a marker of her ethnic-racial identity.

In contrast, "it wasn't until" after Carlos graduated from college and was employed as a teacher's assistant, at the same elementary school he attended as a child, that he realized he wanted to become a bilingual teacher. Specifically, "the encouragement from the principal and the teachers" and the joy he found in teaching students helped Carlos identify his calling. He found that he "enjoy[ed]...find[ing] ways to make content accessible for all students based on language....access to language, access to the content." Moreover, working as a bilingual teacher's assistant reaffirmed Carlos' beliefs that language is part of culture and identity (i.e., "being bilingual or multilingual is part of who these students are, part of their culture"). The reaffirmation of his identity and his beliefs (i.e., "It's about knowing the power of being bilingual or multilingual") by role models and the experience itself strengthened his political efficacy. Theme 5 - Teachers' Dismantle the Schooling Structures that Racialize and Discriminate

Silvia, Fatima, Julia, and Ana described teaching students of Color in a bilingual setting as a "healing," "learning," or "reflective" process. In this, teachers mitigated trauma experienced prior to teaching to support their students as they processed similar traumas, such as "family separations," "identity" conflicts due to "not being embraced fully for who you are," and language insecurity.

As a bilingual teacher of color, Silvia felt it was her professional responsibility to be aware of and reflect on her role as a "model" for her students Silvia explained:

There are so many things [my students and I] have to fight against outside and inside.
Teaching has been a healing process, not just for me, but for many of our students as they continue to grow in [and] explore different systems. As a professional, [I have the opportunity] to share my experience--who I am--and be a model for students who are just like me, who are experiencing so many things that many kids of Color, dual language people, or immigrants face.

Silvia reflected on the experiences she shared with her students, practicing critical awareness and perspective taking, which facilitated healing. The healing process described by teachers has been life changing and has directly informed their practice. To illustrate, Fatima shared:

Once I started teaching, I started learning about what one of my students said this year as we were reading the bilingual opinion pieces, that language isn't just language, it's part of culture, and it's a part of who you are. It made sense looking back at why I was so shy and quiet in school, because...I couldn't use my language, and then I had to learn somebody else's language, and I felt like a part of me was not acknowledged.

To understand the magnitude of what it means to lack acknowledgement, it helps to review the definition.

## Acknowledge /ak'nalıd3/

: to accept or admit that something exists, is true, or is real
: to know or recognize that someone or something is important.
(MacMillan Dictionary, 2022)

In other words, the discriminatory messaging Fatima received in school conveyed that the part of her ethnic-racial identity that intersects with knowing the Spanish language, did not exist, was not true or real, and was not important. For Fatima, having conversations about the connection between language, identity, and culture with her students and then self-reflecting on her own schooling and language experiences helped her heal and become whole. In this, she realized that language is a conduit for aspects of her identity, and possibly her students' identities as well.

Through these experiences, Fatima became aware that teaching content in Spanish and speaking with students in Spanish outside of content instruction is important to their Spanish development, but not enough. She learned to accept that the "yard is their world." Meaning that in the yard, students get to freely choose which of their languages they want to communicate with their peers. Still, she reminds them "that they have" Spanish, a "tool that they can use in so many different ways." Additionally, Fatima "creates experiences for students throughout the day" using Spanish, "connecting" those experiences "to future experiences that they" might "have." She explains:

It's so important" for "teachers to find ways for" students "to use Spanish in authentic ways, whether it's talking to their peers, or their family members, or their friends because we get so many messages about how Spanish is less, about how if you're Latino, you're not as great, racism is in every corner, and some of it, you're not even aware of it.

For Fatima, healing includes the reflection of personal trauma, the desire to protect students, listening to students, and creating authentic experiences and spaces for student and teacher reflection.

Sometimes, students and teachers help each other expand their Spanish language skills, facilitating a healing and learning process of sorts. Ana shared that in August 2018, she was
scared about starting her first-year teaching. She could not abate the feeling that she might not be "qualified" to teach content in Spanish because not so long ago she had forgotten how to say fork in Spanish when speaking with her mother. To her surprise, "on day one, it all came back, and it wasn't gone." She shared that she still has moments when she may not pronounce something correctly, but "a student steps in and helps" her "out and" she "help[s] them, and" they "help each other." She is "not embarrassed about it." She is "not ashamed." She adds:

After surviving parent conferences $100 \%$ in Spanish, with the exception of maybe two, I was so confident, like I got this. I just did a full, what was it? Twenty-one parent conferences, $100 \%$ in Spanish. I am great. I am good to go. I feel good.

Ana shows her students that she is a life-long learner. When she mispronounces words, the experience becomes a teachable moment. Ana encourages students to model their Spanish, just as her students encourage her to model her Spanish. Furthermore, teaching bilingually has shown her that she is more than capable of teaching Spanish and communicating with parents about educational topics. She went from having language insecurities, such as feeling "scared" and "unqualified" to being "confident," "great," "good."

Theme 6 - Sociopolitical Factors Continue to Impact the Maintenance of a Positive EthnicRacial Identity

For all participating teachers, being bilingual was described as central to their selfdefinition -- "It is who I am," "It's a part of my identity," "I live and breathe in two languages," "I am bilingual." Teachers' ethnicity, first language, and desire to support and effect positive change for their ethnic-racial group were central. Thus, teachers' bilingual identities were central, and multidimensional, sometimes encapsulating a reactive ethnicity (Rumbaut, 2005), driven by political efficacy (i.e., beliefs about social issues). To illustrate, Mariana explained:

To me, being a bilingual educator is a political identity. It's about preserving culture and language, and challenging this notion that being bilingual is dumb, or that very kind of historical, very negative view of what it means to be bilingual.

Mariana evokes a reactive ethnicity, which is to say that to her, identifying as a bilingual educator meant that she was "challenging" the racialization of linguistic difference. Specifically, she explained that the concept of "bilingualism," when used in reference to the languages of people of Color, has historically signified "being dumb." These pejorative definitions have been used in legislation, media, and practice to describe bilingual people of Color as lacking proficiency in any language and/or refusing to learn English (Flores \& García, 2017).

Furthermore, Mariana shared that "in today's political climate," referring to the Trump era, being a bilingual educator "is also taking a stand against what it means to be an immigrant." While Donald Trump and his administration did not create Latinx racialization and ethnic-racial prejudice towards Latinx and immigrant groups, his campaign and presidency relied on "preexisting politics of Latino immigration and historical and contemporary processes of racializing Latinos as criminals, others, and colonial subjects" Canizales \& Vallejo, 2021, p. 151). Mariana evoked a reactive ethnicity by taking a stand against notions of racialized illegality, that "immigrant" means both criminal and other/foreigner. She counters this form of racialization and prejudice by preserving the culture and language she shares with her students as a bilingual teacher.

Silvia spoke about racialized markers of ethnorace that shape Latinx experiences of racism including Spanish and English accents and/or dialects and dark skin, both of which have been associated with foreignness, criminality, and undocumented status regardless of class and immigrant-generation (Canizales \& Vallejo, 2021; Rendón, Aldana, \& Hom, 2018). Sometimes
these racialized markers are interwoven. To illustrate, Silvia explained that there is this misconception in the Latinx community that Latinx children:
[...] have to learn perfect English so they can be accepted and embraced, and it's like, no, they won't be. If they're brown or if they're dark there [are] going to be a lot of different issues, regardless [of] whether they speak perfect English or not. They're always going to be questioned about their birthplace. They're always going to be second guessed. There is always going to be doubt. So, why don't you just create this beautiful, colorful flower? Students of Color will need to be able to navigate all these different systems in different languages.

Silvia, speaking from experience, detailed how linguistic discrimination may intersect with race when a bi/multilingual person (and speaker of a racialized language) speaks "perfect" or "standard" English but due to the Color of their skin and/or their affiliation to a racialized group, they continue to experience racism (Alim et al., 2016; Rosa, 2019). She conveys discriminationresistant identity ideology, which includes beliefs about resisting pressure from the dominant group to drop their ethnic minority affiliations or orientations (Rivas-Drake \& Mooney, 2009). Instead of succumbing to dominant group pressures to speak "standardized" English with a "standardized" accent, otherwise known as "perfect English," Silvia believes that difference should be cultivated: Relatedly, drawing from her beliefs about social justice (political efficacy), Silvia explains how important it is for teachers to support "students of Color to navigate all these different systems in different languages." Thus, an essential component to preparing students to navigate systems is to afford students opportunities to practice critical awareness to learn how to identify racist systems.

Mariana discussed the interwoven nature of discrimination by adding social class when
describing how working in a mixed-income school "solidified" her discriminant resistant ideology and political efficacy. Her discriminant resistant ideologies include beliefs about resisting dominant group perceptions about who has access to bi/multilingual development and education. Specifically, the belief that working in a mixed-income dual language school that perpetuates the racialization of "Latino and Brown" students is not for her. She shared:

When I work[ed] at a mixed-income school, I struggle[d] with [the idea that] children who had a lot of privilege were going to advance even more, be more, be bilingual, and it was really trendy and fun, and innovative and progressive if they learned Spanish. Yet, when I worked at low-income schools it wasn't trendy or hot, fun or hip or progressive when Latino and Brown children wanted to preserve their home language. It was like: "Oh, you know, let's push them to learn English as quickly as possible.

In this, Mariana shared how her experiences working at a mixed-income school made salient her ethnic-racial, social class, and bilingual identities, which led her to critically reflect on what she was observing and feeling as a bilingual teacher of Color who shared the same ethnic-racial background with some of her students. This process led Mariana to develop political efficacy: She concluded that in America bilingualism is not for everyone, there is an imbalance. She argued: For children with "a lot of privilege" becoming bilingual is seen as enrichment -- "fun," a totem of liberalism -- "progressive," and popular --"trendy." However, for bilingual children of Color, it is about becoming proficient monolingual speakers of English at the cost of losing their home language. Mariana's experience working at a mixed-income school strengthened her discrimination resistant ideology and political efficacy that "the environment of preserving someone's home language and empowering [them] through that is really [her] jam."

## Discussion

Utilizing developmental theories (Erikson, 1958, 1959, 1968; Rogers, 2018) and an intersectional perspective (Crenshaw, 1991, 2015), this phenomenological study examined teachers' retrospective interview transcripts to investigate: What motivated teachers at Union Community School to become bilingual teachers and teach in a Spanish maintenance bilingual program? Teachers' narratives included experiences which ranged developmental periods, beginning with childhood and ending in adulthood. To understand teacher motivation across these periods, developmental motivators such as ethnic-racial identity and critical consciousness, as well as sociopolitical factors (i.e., ethnic-racial prejudice) and sociocultural contexts (i.e., school) were examined.

## Evidence of Identity-Based Motivation for Transformative Justice

Findings show that by adulthood all participants entered the bilingual teaching profession to redress injustices targeting bi/multilingual students of Color and/or students of immigrantorigin in school. For example: Teachers, who identified as Latinx or South Asian, felt becoming a bilingual teacher was one way they could prevent students from having to endure the same marginalization and discrimination they experienced in school. This discovery aligns with King's (1993) and Su's (1997) findings which found that teachers of Color are motivated by their awareness of inequalities through their experiences in educational and social spaces. Zoe, the only participating teacher of mixed ethnicity (Jewish- and Anglo-American) became aware of language injustices while reviewing legal cases for a college course. Although Zoe did not ascribe to a particular ethnic-racial identity, her narrative illustrates the importance of critical consciousness in supporting the development of her identity as a language learner. Thus, teachers' motivation to enter the bilingual teaching profession emerged from their lived
experiences, identity formation, critical consciousness development, and experiences sustaining their bi/multilingualism.

The type of motivation described by teachers in this study does not fit with transitional concepts of motivation, such as altruistic, intrinsic, and extrinsic motivation. While it most closely resembles altruistic motivation, in that both motivation types are driven by a desire to make a difference in children's lives (Fray \& Gore, 2018), the motivation that teacherparticipants describe includes an "action" component. This component commits the teacher to actively undo inequities in education for the betterment of society. Thus, I refer to this type of motivation as an identity-based motivation for transformative justice.

Still, teachers exhibited altruistic and intrinsic motivation, and one teacher expressed extrinsic motivation. Teachers' intrinsic reasons included overall enjoyment of teaching (i.e., "I love teaching bilingually"), being suited to the career (i.e., "I have the skills"), being intellectually stimulated (i.e., "I am challenged"), a desire to work with children or young people (i.e., "I want to work with kids"), and enjoying the company of children and youth (i.e., "I enjoy learning about what they think"). Only one teacher shared being extrinsically motivated by having summer breaks. These findings support scholarship (Fray \& Gore, 2018; Heinz, 2015; Kwok et al., 2022; Watt et al., 2017) conducted with predominantly White, female preservice and in-service teacher-participants, which found that, in the United States, most teachers enter the profession for altruistic and intrinsic reasons.

## Motivational Processes and Society: The Feedback Loop

Defining characteristics of motivation for transformative justice across teacherparticipants included: (1) becoming aware of social injustices in education and societies, (2) examining realizations or awakenings related to identity exploration, and (3) engaging in
disrupting the (re)production of identified injustices. This cycle encapsulates Erikson's transactional approach (Erikson, 1958, 1959, 1968). For the teachers of Color, society had a direct impact on their ethnic-racial identity formation, as early as kindergarten. By middle childhood, most teachers of Color had already experienced marginalization and prejudice directed at them by their teachers (see Theme 1) or family members (see Theme 2). However, teachers reacted against this messaging as they became adolescents. During adolescence and young adulthood, teachers further explored and resolved their ethnic-racial identities, and developed critical consciousness. Mentors, college courses, and service-related experiences were lucrative to this process (see Themes 2-3). During young adulthood teachers further explored and resolved aspects of their ethnic-racial identity with assistance from elements of critical consciousness, such as critical awareness and political efficacy (see Themes 4-6). Thereupon, entering the profession to engage in Latinx community efforts and bilingual teaching to fight for a more equitable future for children of Color and immigrant children.

## Factors that Cultivated and Strengthened Aspects of Ethnic-Racial Identity and Critical

## Consciousness

Opportunities for cultivating and strengthening teachers' ethnic-racial identity, critical consciousness, and bilingual language development included a social component and occurred in school, the community, or familial spaces (see Table 2.7). College courses, community-based internships, community-service jobs, volunteering or working as a teacher's assistant all helped teachers experience ethnic-racial identity awakenings, explorations, and resolutions, while also promoting critical awareness, political efficacy, and critical action. Essential components across opportunities were (1) having role models, peers, and mentors from similar social groups that share their cultures, languages, and histories, (2) learning about the histories of their social group
and contemporary social issues that they (potential bilingual teachers) might be (un)familiar with, and (3) working with community members to address social issues. Scholarship on bilingual teacher recruitment has reached similar conclusions (Gauna et al., 2020; Cervantessoon, 2018).

Moreover, this study found that opportunities that had a community-service element in school spaces strengthened teachers' identities as bilingual activists (ethnic-racial identity), beliefs about serving and empowering their community (political efficacy), and awareness of educational and linguistic injustices directly impacting their community (critical awareness). For example, in Carlos' case, college provided an internship opportunity that encouraged him to work with a Spanish-speaking parent community to establish Spanish communication between parents and their children's school. School information was conveyed in English and not accessible to parents. As a collaborative partner, he brokered exchanges between the school and the parent community using his bilingual skills and cultural knowledge.

Similarly, Leeman, Rabin and Roman-Mendoza (2011) found that critical servicelearning university programs, such as the one Carlos participated in, build students' language awareness through community-based opportunities, and strengthen their identities as language experts. Relatedly, this study found that

Table 2.7
Formative Teacher Experiences Across Bilingual Teacher Pipeline, Birth to Adulthood

| Positive Experience | Developmental Period | Location | Mentor/ Role Model | Teacher- Participant |
| :---: | :---: | :---: | :---: | :---: |
| AP Spanish | Adolescence | High School | Peers | Julia, Fatima |
| Soccer | Adolescence | High School | Coach, Peers | Liliana |
| Teacher's Assistant | Early Adolescence to Early Adulthood | Spanish Bilingual Maintenance Classroom | Spanish Bilingual Teacher; Principal | Julia, Carlos |
| Chicano Studies Course, History Course, Foreign Language Course | Late Adolescence | Undergraduate School | Instructor, Peers | Ana, Zoe, Graciela |
| Community- <br> Based Internship /Job | Late Adolescence to Adulthood | An Elementary School in Brooklyn, NY; Adult School Instructor | Parent Community | Carlos, Maite |
| Study Abroad | Early Adulthood | Spain, Costa Rica, Guatemala | Alma Flor Ada - Educator, Activist, and Writer [Teacher Education Professor] | Maya, Liliana, Fatima |
| Visiting Family | Middle childhood to Adulthood [Present] | Mexico |  | Liliana, Julia |
| Family Conversations | Birth - Adulthood [Present] | Home (phone calls, dinner table) |  | Ana, Julia, Liliana, Fatima, Paty |
| Literacy in Spanish | Birth to Childhood | Home | Grandparents, Parents | Paty |

[^0]during the interview those experiences were not recalled.
students who participate in service-learning opportunities earlier (in primary and secondary school) also benefit. Julia's experience as a teacher's assistant invigorated her commitment to building her Spanish
language skills because she realized that bilingual teaching is the only way she can prevent children from experiencing the alienation and isolation she felt in English immersion classrooms.

## Evidence of Structural and Systemic Ethnic-Racial Prejudice

Teachers experienced ethnic-racial prejudice in primary and secondary school before the passage of Proposition 227, during its enactment (1998-2016), and after it was amended and repealed by 2016's Proposition 58 (see Theme 1). Findings show that teachers who were in primary or secondary school in the early aughts, were as susceptible to experiencing ethnic-racial prejudice (e.g., dehumanization) as their colleagues who were enrolled in primary or secondary school in the 1970s to 1990s. Experiences of dehumanization included: (1) feeling that their home language, ethnicity/race, and culture were unacceptable in civic/public spaces, (2) being disregarded by educators for not knowing English, and (3) experiencing loss of culture and language. These findings point to the structural and systemic nature of deculturalization. To recap, deculturalization is the process of stripping away the cultures and languages of children and youth in school spaces by dominant groups (Spring, 2021). It is a century-old process that continues to be a fixture in all aspects of American schooling (ibid), and, as this study found, it also perpetuates structural ethnic-racial prejudice.

## Ethnic-Racial Prejudice Had Long-Term Impacts on Teacher Wellbeing

Teachers' primary and secondary school experiences impacted their wellbeing. Teachers expressed feeling invisible, embarrassment, and shame as children (Theme 1), adolescents (Theme 2), and adults (Theme 5 and 6). Many teachers also shared feeling tremendous loss: language loss, cultural loss, and loss of self. Scholarship studying teachers of Color's trajectories
similarly noted that early experiences of discrimination and marginalization bring forth feelings of language loss and shame, which impact teacher wellbeing (Winstead \& Wang, 2017; Gauna \& Beaudry, 2016). Recently, Souto-Manning and Winn (2019) called on the field of teacher education to "Suspend Harm as An Ethical Imperative." In this, they argue that teacher education has sponsored inferiority and deficit paradigm views of children and youth of color. Teacher educators, in particular, have espoused "explicit and implicit beliefs that children of Color are not as good or as capable as White children" when preparing preservice teachers (ibid, p. 311). They contend that the manifestation of these beliefs in practice can be "emotionally damaging, physically harmful, disrespectful, degrading, dangerous, exploitative, or intimidating to children," which this study attests to.

Furthermore, teachers shared that teaching in Spanish, working with children who share characteristics with them, and having conversations with their students about students' ethnicracial identity as it relates to their bilingualism, led them to process some of the trauma they endured as children and youth. In addition, teachers drew on their own personal experiences to inform their beliefs and approaches to teaching in the bilingual program. Reflecting on these experiences, teachers talked of the need to ensure that students are not dehumanized in the classroom, and expressed their commitment to developing students' sense of pride about who they are. To do this, teachers described: 1) reflecting on the ethnic-racial prejudice they endured as children, adolescents, and adults; 2) becoming aware of the prejudice their students and their students' families may be experiencing or have experienced; and 3) understanding that prejudice is multidimensional, intersecting with race, ethnicity, culture, and socioeconomics among other descriptors.

## Limitations and Future Directions

While the retrospective interview proved successful at gathering teacher insights about
their lived experiences, an interview series might provide researchers and participants more time to explore certain topics in depth. The teacher sample was rigorous for this study's design, however, future research exploring these topics with a more diverse sample of teachers (e.g., age, gender, ethnicity, race, language) would be fruitful for the field. Furthermore, there might be something unique about teaching at a community school. Teachers who work at community schools may already be action-oriented, as such, future studies might consider recruiting a larger sample of teachers from various school types in addition to community schools.

Teacher motivation and identity is a fairly new field. More research about what motivates adolescents and adults of Color to pursue teaching as a viable career option is warranted to develop more nuanced and complex understandings of how motivation for transformative justice unfolds. Moreover, because of the negative long-term impact of prejudice on bilingual teachers of Color, it is paramount to investigate and understand how it manifests in teachers' lives and teaching practice.

## Conclusion

All bilingual teachers of Color in this study experienced ethnic-racial prejudice in elementary and secondary school. These experiences had long-term impacts on teachers' wellbeing. However, developmental assets, such as ethnic-racial identity, critical consciousness, and bilingual acquisition, provided teachers with tools to process prejudice as adolescents and adults. These assets coupled with opportunities to engage with their ethnic-racial social group in positive ways cultivated teachers' identity-based motivation for transformative justice. Positive social interactions with peers, teacher mentors, and parents were also lucrative in pushing teachers to become active participants for social change as bilingual teachers in a Spanish maintenance bilingual community program.

## Reference

Azoulay, A. (2018, February 21). Message from Ms. Audrey Azoulay director-general of UNESCO, on the occasion of international mother language day. United Nations Educational, Scientific and Cultural Organization. https://unesdoc.unesco.org/ark:/48223/pf0000380593_eng

Bailey II, J. A. (2003). Self-image, self-concept, and self-identity revisited. Journal of the National Medical Association, 95(5), 383.

Carver-Thomas, D. (2018). Diversifying the Teaching Profession: How to Recruit and Retain Teachers of Color. Learning Policy Institute.

Cervantes-Soon, C. G. (2018). Using a xicana feminist framework in bilingual teacher preparation: Toward an anticolonial path, The Urban Review, 50, 857-888. https://doi.org/10.1007/s11256-018-0478-5

Crenshaw, K. (1991). Mapping the margins: Intersectionality, identity politics, and violence against women of color. Stanford Law Review, 43, 1241-1299.

Crenshaw. K. (2015, September 24). Why intersectionality can't wait. The Washington Post. https://www.washingtonpost.com/news/in-theory/wp/2015/09/24/why-intersectionality-cant-wait/

Cross, W. E., Jr. (1971). The Negro-to-Black conversion experience. Black. World, 20, 13-27.
De León, A. \& Calvert, R. A. (2021, January 27). "Segregation," Handbook of Texas Online. https://www.tshaonline.org/handbook/entries/segregation.

Diemer, M. A., Rapa, L. J., Voight, A. M., \& McWhirter, E. H. (2016). Critical consciousness: A developmental approach to addressing marginalization and oppression. Child Development Perspectives, 10(4), 216-221.

Erikson, E. H. (1958). Young man Luther: A study in psychoanalysis and history. Norton.
Erikson, E. H. (1959). Identity and the life cycle. Norton.
Erikson, E. H. (1968). Youth and crisis. Norton.
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. https://doi.org/10.1017/S0267190517000162

Flores, N. and Rosa, J., 2015. Undoing appropriateness: Raciolinguistic ideologies and language diversity in education. Harvard educational review, 85(2), pp.149-171.

Fray, L., \& Gore, J. (2018). Why people choose teaching: A scoping review of empirical studies, 2007-2016. Teaching and Teacher Education, 75, 153-163. https://doi.org/10.1016/j.tate.2018.06.009

Galindo, R. (1996). Reframing the past in the present: Chicana teacher role identity as a bridging identity. Education and Urban Society, 29(1), 85-102. https://doi.org/10.1177/0013124596029001007

Gauna, L. M., Beaudry, C., \& Cooper, J. (2022) The leaking Spanish bilingual education teacher pipeline: Stories of PK-20 challenges told by Latinx becoming bilingual teachers in the U.S. Journal of Latinos and Education. https://doi.org/10.1080/15348431.2022.2057989

Gauna, L. M., \& Beaudry, C. E. (2016). The little Mexican girl that could: An immigrant child becoming a bilingual teacher. Journal of Family Strengths, 16(1), 6.

Goodson, I. (1992). Studying teachers' lives. Teachers' College Press.
Graham, A., \& Erwin, K. D. (2011). " I don't think Black men teach because of how they get treated as students": High-achieving African American boys' perceptions of teaching as a career option. Journal of Negro Education, 80(3), 398-416.

Heidegger, M. (1962/1927). Being and time. Blackwell.
Heinz, M. (2015) Why choose teaching? An international review of empirical studies exploring student teachers' career motivations and levels of commitment to teaching, Educational Research and Evaluation, 21(3), 258-297, https://doi.org/10.1080/13803611.2015.1018278

Hennessy-Fiske, M. (2022, February 3). Saving the school where kids were paddled for speaking Spanish. The Los Angeles Times. https://www.latimes.com/world-nation/story/2022-02-03/speak-spanish-get-paddled-texas-school-segregation-mexican-americans

Hernández, A. M., \& Alfaro, C. (2020). Naming and confronting the challenges of bilingual teacher preparation: A dilemma for dual language education in California-lessons learned. NABE Journal of Research and Practice, 10(2), 31-46.

King, S. H. (1993). Why did we choose teaching careers and what will enable us to stay?: Insights from one cohort of the African American teaching pool. The Journal of Negro Education, 62(4), 475-492.

Kwok, A., Rios, A., \& Kwok, M. (2022) Pre-service teachers' motivations to enter the profession, Journal of Curriculum Studies, 54(4), 576-597. https://doi.org/10.1080/00220272.2022.2025624

Leeman, J., Rabin, L., \& Román-Mendoza, E. (2011). Identity and activism in heritage language education. The Modern Language Journal, 95(4), 481-495.

MacSwan, J., Rolstad, K., \& Glass, G. V. (2002). Do some school-age children have no language? Some problems of construct validity in the Pre-LAS espanol, Bilingual Research Journal, 26(2), 395-420.

Marks, A. K., Szalacha, L. A., Lamarre, M., Boyd, M. J., \& García Coll, C. (2007). Emerging ethnic identity and interethnic group social preferences in middle childhood: Findings from the Children of Immigrants Development in Context (CIDC) study. International Journal of Behavioral Development, 31(5), 501-513.

Mathews, C. J., Medina, M. A., Bañales, J., Pinetta, B. J., Marchand, A. D., Agi, A. C., ... \& Rivas-Drake, D. (2020). Mapping the intersections of adolescents' ethnic-racial identity and critical consciousness. Adolescent Research Review, 5(4), 363-379.

McKenzie, P., Weldon, P. R., Rowley, G., Murphy, M., \& McMillan, J. (2014). Staff in Australia's schools 2013: Main report on the survey.

Neville, H. A., \& Cross, W. E., Jr. (2017). Racial awakening: Epiphanies and encounters in Black racial identity. Cultural Diversity and Ethnic Minority Psychology, 23(1), 102108. https://doi.org/10.1037/cdp0000105

Oyserman, D., \& Destin, M. (2010). Identity-based motivation: Implications for intervention. The Counseling Psychologist, 38(7), 1001-1043.

Phinney, J. S. (1989). Stages of ethnic identity development in minority group adolescents. Journal of Early Adolescence, 9(1-2), 34-49.

Phinney, J. S. (1993). A three-stage model of ethnic identity development in adolescence. In M.
E. Bernal \& G. P. Knight (Eds.), Ethnic identity: Formation and transmission among Hispanics and other minorities (pp. 61-79). State University of New York Press.

Quintana, S. M. (2007). Racial and ethnic identity: Developmental perspectives and research. Journal of Counseling Psychology, 54(3), 259-270. https://doi.org/10.1037/00220167.54.3.259

Rapa, L. J., Diemer, M. A., \& Bañales, J. (2018). Critical action as a pathway to social mobility among marginalized youth. Developmental Psychology, 54(1), 127-137.
https://doi.org/10.1037/dev0000414
Rogers, L. O. (2018). Who am I, who are we? Erikson and a transactional approach to identity research. Identity, 18(4), 284-294. https://doi.org/10.1080/15283488.2018.1523728

Rosa, J. D. (2016). Standardization, racialization, languagelessness: Raciolinguistic ideologies across communicative contexts. Journal of Linguistic Anthropology, 26(2), 162-183. https://doi.org/10.1111/jola. 12116

Rosa, J., \& Flores, N. (2017). Unsettling race and language: Toward a raciolinguistic perspective. Language in society, 46(5), 621-647. https://doi.org/10.1017/S0047404517000562

Rumbaut, R. G. (2005). Sites of belonging: Acculturation, discrimination, and ethnic identity among children of immigrants. In T. S. Weiner, (Ed.), Discovering successful pathways in children's development: Mixed methods in the study of childhood and family life (pp. 111-164). University of Chicago Press.

Smith, J. A., Flowers, P., \& Larkin, M. (2009). Interpretative phenomenological analysis: Theory, method, and research. Sage.

Steketee, A., Williams, M. T., Hopper, L. M., Valencia, B. T., Printz, D., \& Hooper, L. M. (2021). Racial and language microaggressions in the school ecology. Perspectives on Psychological Science, 16(5), 1075-1098. https://doi.org/10.1177/1745691621995740

StoryCorps (Producer). (2017, October 20). Everybody was very quiet when they buried Mr. Spanish [MP3]. https://storycorps.org/stories/jessi-silva-and-maggie-marquez-171020/

Su (1997) Teaching as a profession and as a career: Minority candidates' perspectives, Teaching \& Teacher Education, 13(3), 325340.

Umaña-Taylor, A. J., Douglass, S., Updegraff, K. A., \& Marsiglia, F. F. (2018). A small-scale randomized efficacy trial of the Identity Project: Promoting adolescents' ethnic-racial identity exploration and resolution. Child development, 89(3), 862-870. https://doi.org/10.1111/cdev. 12755

Watt, H. M., Richardson, P. W., \& Smith, K. (Eds.). (2017). Global perspectives on teacher motivation.

Winstead, L. \& Wang, C. (2017). From ELLs to bilingual teachers Spanish-English speaking Latino teachers' experiences of language shame \& loss, Multicultural Education, 24, 16 25.

## CHAPTER 3

Study 2:
Visualizing Longitudinal Reading Growth: A Mixed Methods Study of the Impact of Classroom Language Use, Student Motivational Processes, and School Programming on Spanish and English Reading Trajectories


#### Abstract

This study employed an embedded sequential mixed-methods design, such that a qualitative strand is embedded within a quantitative design. Quantitative, longitudinal descriptive analysis and calculations of proportions of students exceeding certain benchmark values was employed to identify overall patterns of English and Spanish reading change for different bi/multilingual student groups of predominantly Latinx and Indigenous heritage ( $\mathrm{N}=$ 393). Additionally, using a smaller sample size ( $\mathrm{n}=230$ ), student psychosocial covariates (i.e., motivation, socioemotional self-concept) were examined using descriptive analysis across two time points (fourth and fifth grade) to explain overall reading patterns. Qualitatively, portraiture analysis was utilized to further explore two students' perspectives about their reading growth over a two-year span (fourth to fifth grade). Findings revealed the school was effective at supporting English and Spanish reading development: The proportion of students reading at or above grade level in Spanish and English at fifth grade (spring) increased across student cohorts, and students' motivation to learn Spanish and English increased between the fourth (spring) and fifth (spring) grades. The qualitative findings found that students' investment in developing their home/heritage languages depends on the language modality (e.g., reading versus speaking). By the end of the fifth grade, students described having a more complex understanding about their bilingualism that goes beyond language preference and performance.


## Introduction

In the United States, bi/multilingual students' home/heritage language atrophies by the third-immigrant generation (the grandchildren of foreign-born grandparents; Rumbaut, 2014), even when enrolled in bilingual elementary schools (Lasagabaster, 2017). However, for some children and youth of Mexican heritage, Spanish language shifts may begin as early as the firstor second-immigrant generation (Suárez-Orozco \& Suárez-Orozco, 2001). The first-immigrant generation is representative of children who are foreign born, while the second-immigrant generation are children who are born in the United States, but have at least one foreign-born parent (Rumbaut, 2014). Certainly, there are enormous benefits to the acquisition of English proficiency, but there are also significant economic, educational, social, and personal costs in the accompanying loss of the home/heritage language (Agirdag, 2014).

Schooling plays an impactful role in home/heritage language development and atrophy. For children of immigrant-origin and Latinx heritage, school spaces often become the purveyors of acculturation and/or assimilation (Suárez-Orozco \& Suárez-Orozco 2001; Suárez-Orozco et al., 2008). Acculturation refers to the exchange of ideas, behaviors and values between cultures; assimilation is the adaptation of the dominant culture's practices, beliefs, and values at the expense of one's own culture. Both processes have been found to perpetuate ideologies that being a user of English is perhaps more American than being a bilingual user (Birman \& Addae, 2015).

In effect, children and youth are more likely to become predominant users of English, if they attend schools that employ acculturative and/or assimilationist approaches (Marks \& Pieloch, 2015). Nonetheless, the notion that everyone in America (foreign born or not) has the right to speak their heritage tongues privately or publicly, practice their religion, and convey
cultures (and social identities) specific to them as individuals and as part of different social groups unabashedly, is quintessentially American (Bill of Rights, 1789).

Conversely, schools that employ multicultural and multilingual practices are more likely to support students' bilingual and psychosocial development (Bailey \& Osipova, 2016; Lee \& Klugman, 2013; Suarez-Orozco et al., 2015). Presently, however, multicultural content is currently being debated in political spheres through discourse opposing critical race theory (The National Association for Multicultural Education, 2022; The Editors, 2022). Lawmakers across the United States have proposed state bills that prohibit teachers and students from teaching and learning about content that addresses equity, multiculturalism, social justice, and cultural awareness to name a few (Wilson, 2021). Still, considerable research tell us that:
the study of the social, political, economic and historical perspectives of our nation's diverse racial and ethnic groups, help foster cross-cultural understanding among both students of Color and White students and aids students in valuing their own cultural identity while appreciating the differences around them (Pringle, 2020, iv).

Concepts inherent in multicultural education (Banks \& Banks, 2019).
Regarding multilingual education, an established body of work has found that students do best when they are learning new languages and further developing the languages they know (Combs et al., 2011; Genesee et al., 2005; Rumbaut et al., 2006). This is because decades of research have established that all the languages a student has are active and interact with each other when they are reading, hearing, and speaking in one language alone, indicating a permeable system across language boundaries (Grosjean, 1998, Kroll et al., 2014; Tabors \& Snow, 2001).

However, most research and policy on bi/multilingual education focuses on students' English reading achievement (Steele et al., 2017), an effective English acquisition process, and higher standardized test scores in both languages (Lindholm-Leary \& Block, 2010; Umansky \& Reardon, 2014). Less research has examined the influence school has on students' home/heritage language development (for some exceptions see: Babino, 2017; Bailey \& Osipova, 2016; Bailey et al., 2008; Collins et al., 2014; Griffin et al., 2019). Additionally, it is unclear how school influences students' motivation and their sense of self as they relate to learning their home/heritage language in addition to English (for an exception see Bailey, 2022).

To address these gaps, this mixed-methods study aims to graphically explore whether different groups (e.g., student cohorts, students with EL designations) look fairly similar or not with respect to growth in English and Spanish reading by (1) focusing on medians for students in different groupings, and (2) calculating the proportions of students in each grouping that exceed high levels of English and Spanish reading proficiency. Additionally, student factors (e.g., motivation, self-concept) were examined across two time points to identify whether the school enhanced (a) students' motivation to learn Spanish and/or English and (b) a positive academic and socioemotional self-concept. Qualitatively, a sample of student cases from the quantitative analyses are selected to further investigate students' insights about and their attitudes and experiences with reading in Spanish and English.

## Theoretical Framework

Theoretically, a complex systems perspective guides this study (Larsen-Freeman \& Cameron, 2012). Recently, de Bot (2016) conceptualized dynamic systems theory (also known as complex adaptive theory) utilizing a multi-competence perspective (Cook, 2016). Together,
these frameworks postulate that changes in language development occur as components of one language interact with components of another language, as well as other internal and external factors. This perspective is applicable to reading development, meaning that the productive and receptive skills and understanding the student develops in one language in a specific context may greatly influence reading development in the other and vice versa (Grosjean, 1998; Hulstijn, 2015).

Moreover, research on language maintenance and atrophy from a multi-competence perspective has stressed the importance for a wider approach that examines students' languages and the factors of attrition (e.g., and motivational processes) to understand these change patterns (Hirata-Edds \& Peters, 2016). In addition, messages conveyed at home and at school by way of practices, beliefs, values, and what teachers and parents say and do about languages may provide insight as to why these change patterns occur (Bailey \& Osipova, 2016; Griffin et al., 2019; Palmer \& Martínez, 2013; Potowski, 2007).

Exploring both teachers' and parents' insights on students' reading change patterns is beyond the scope of this specific study. However, this study does examine students' thoughts on their experiences developing the languages they are learning in school and at home, as well as their perspectives on what they believe their teachers and families expect of them. For in-depth examinations of teachers' beliefs and values, see Chapter 2, and for an exploration of teachers' classroom policy and practices, see Chapter 4 . For a synthesis of all three studies, see Chapter 5.

## Literature Review

## Spanish and English Reading Development Across the Primary School Grades

While the research literature regarding language-growth trajectories is burgeoning, few studies have examined the bi/multilingual-reading trajectories of a predominantly bi/multilingual

Latinx sample of diverse learners (e.g., English learner, learner with gifted or disability designations) across the elementary-school grades (kindergarten to fifth grade). However, there are seminal empirical studies that have provided a foundation for future work.

Relyea and Amendum's (2020) study examined the extent to which kindergarten Spanish reading and English-oral proficiency affected students' English-reading growth trajectories through fourth grade among a nationally representative sample of Spanish-speaking bilingual students $(N=312)$. They found that strong early Spanish reading competence moderates greater English-reading growth and English-oral proficiency. In other words, students' strong Spanishreading competence, over time, enhances English-reading growth and strengthens lower Englishoral proficiency, helping students catch up to their counterparts and surpass them later. Most importantly, they found that initially well-developed Spanish-reading competence plays a greater role in English-reading development than English-oral proficiency.

Grimm, Solari, and Gerber's (2018) study examined the contributions of a variety of Spanish and English bilingual measures to English literacy development with Spanish-speaking bilingual students from third to eighth grade. They found that although their sample scored below average in English literacy compared to the overall population of students in California, student-participants did make the greatest gains between the fourth and fifth grade, plateauing thereafter. Similar to Relyea and Amendum's study, they found that early Spanish literacy (e.g., Spanish onset and vocabulary), in addition to early English literacy (English letter knowledge and vocabulary) predicts third grade literacy and that vocabulary (in English and Spanish) predicts eighth grade English literacy achievement.

Rojas and Iglesias' (2013) study examined the Spanish and English oral-language growth trajectories of students learning English as a new language ( $N=1,723$ ) to determine the shape of
students' language growth trajectories during the first three years of formal schooling. They found that Spanish-language growth was curvilinear and that English-language growth was linear. The curvilinear trajectories for Spanish indicated acceleration during kindergarten, deceleration to an almost flat trajectory during first grade, and additional acceleration during second grade. The linear trajectories for English indicated consistent positive growth within each academic year but slower growth during the summers. Furthermore, the growth rate of English was discontinuous whereas the growth rate for Spanish was continuous. Lastly, they found that regardless of the language and measure used, female students outperformed their male counterparts, with the difference in English more evident during the spring semester.

From this seminal work, it becomes apparent that Spanish and English reading development is dynamic, and is highly influenced by the other, and by contextual factors related to school and home.

## Development of Bilingual Reading Competency Profiles in Primary School

What about bilingual-reading development? What supports it over time? What does its growth look like across the primary school grades?

Collins and colleagues (2014) investigated the dual-language profiles of Latinx children of immigrant origin $(N=163)$ at kindergarten and second grade. Students were grouped in language-competency profiles, such as "dual proficient," "Spanish proficient," and "English proficient," as well as "low-performing profiles," including "borderline proficient" and "limited proficient." Findings revealed that the majority of children demonstrated a "low performing profile" while in kindergarten, but by second grade, the majority of children had "competent profiles." Thus, there was substantial change in students' profiles during the first three years of formal schooling, as Rojas and Iglesias (2013) also found. Findings revealed that children with
competent profiles in kindergarten either remained competent or gained additional competences in other languages. They also found that students in the "low-performing" "borderline" proficient group in kindergarten were most likely to remain in this profile group or become English proficient. Of note, findings revealed that bilingual students need sufficient time and support in the home and in school to fully develop in both of their languages.

Babino's (2017) study examined the Spanish and English reading trajectories of Spanish heritage speakers $(N=170)$ enrolled in two schools (from second to fifth grade). Findings revealed that across schools, most students in the second grade were reading in the "biliteracy zone." However, during the third to fourth grade transition, the percentage of students in the "biliteracy zone" decreased, followed by an increase of students in the "biliteracy zone" by the fifth grade.

Key takeaways: Bilingual-reading development (in Spanish and English), appears to be discontinuous rather than continuous due to abrupt increases and decreases during the primary school grades. It may also have curvilinear (i.e., Spanish) and linear (i.e., English) growth patterns.

## Student Motivation, Self-concept, and Reading Development in School Contexts

Recent studies have found that reading proficiency may be predictive of students' future psychosocial development and wellbeing. For example, McArthur and colleagues (2022) explored the relationship between reading and emotional health utilizing data from four longitudinal databases from the United Kingdom ( $n=7,870$ ), the United States ( $n s=8,001$ and 7,160), and Australia ( $n=768$ ). Structural equation modeling analysis found that emotional health at age five was not related to reading at age seven, but that reading at age
seven was related to emotional health at age nine or eleven. They also found that reading behaviors and attention may be related across development.

With regard to behavior as it relates to self-concept, Niehaus and Adelson (2013) examined the measurement and interpretation of self-concept with a diverse population of students learning English as a new language (also known as EL students) in addition to English-speaking children ( $n=11,020$ ). EL student subgroups included Spanish-speaking students with an EL designation $(n=1,277)$ and students from Asian language backgrounds with an EL designation $(n=546)$. Data stemmed from the Early Childhood Longitudinal Study, Kindergarten Class of 1998-99, specifically student responses from the Self-Description Questionnaire-1 (SDQ-1; Marsh 1990). Findings revealed that Spanish-speaking students reported higher academic self-concept in reading, mathematics, and all school subjects compared to native English-speaking children. Students who were speakers of Asian languages reported higher academic self-concept than native English-speakers only in the subject of mathematics. They also found that Spanish-speaking students reported significantly more internalizing and externalizing problems compared to native English-speaking students. Students who were speakers of Asian languages reported fewer externalizing problems and rated themselves significantly lower on peer relationships.

These findings are important to this study. They show that that early reading ability may be predictive of emotional health (e.g., anxiety) in later elementary-school grades. They also indicate that students who are Spanish-speakers and learning English as a new language are likely to have a strong sense of academic self-concept in all school subjects including reading, but may also have high socio-emotional self-concept, such as internalizing and externalizing problem behaviors.

## Student Motivation to Learn Spanish and English in Bi/Multilingual Learning Spaces

As discussed in Chapter 1, additive bilingual programs vary in how they enhance students' investment in bilingualism, specifically the home language portion of students' bilingualism. Scholars argue that there is a general belief that all additive bilingual schools are purveyors of multiculturalism and multilingualism, or "inherently culturally relevant" but that is not necessarily true (Chavez-Moreno, 2022). To practice equitable programming requires critical awareness and action on the part of the school regardless of the program model or type. Without criticality, a program can do much harm.

Babino and Stewart's (2017) study speaks to this. They found that fifth grade students $(\mathrm{N}=63)$ in a Spanish maintenance bilingual program reported preferring English both academically and socially. Block's (2023) study compared fifth grade Latinx students' ( $n=31$ ) attitudes in a dual language bilingual program to their attitudes in first grade. Students $(n=21)$ enrolled in an English immersion program were also included in the study as a comparison group. Findings revealed that across both programs there were significant decreases in students' enjoyment of reading in Spanish and of speaking with friends in Spanish, and an increase in overall preference for English. Furthermore, students' enjoyment of English reading increased if they were enrolled in the dual language bilingual program, and decreased if they were enrolled in the English immersion program. These findings point to the importance for schools to evaluate how their programs (e.g., instruction, curriculum, teaching) support and enhance bi/multilingual students' enjoyment of and investment in the languages they are culturally and ethnically connected to.

What about students' understanding of their bi/multilingualism? Bailey's (in press) longitudinal study explored young children's language attitudes in a dual-language immersion
( $n=21$ ) and English immersion $(n=34)$ classroom from kindergarten to the third grade. Students were given a story prompt and asked to complete it. When describing the language choices story-stem characters made, kindergarteners in the dual-language immersion program provided reasons that facilitated connection or communication between characters. In contrast, kindergarteners in the English immersion program provided more "utilitarian reasons," such as using language to improve completion of or performance on tasks (ibid, p. 19). Furthermore, more kindergarteners in the dual-language immersion program than in the English-immersion program were able to reconcile the language barrier between their story-stem characters and provide realistic solutions, a trend which continued into the third grade.

Of particular importance, overall, students in the dual-language immersion program considered and described how the characters from the story-stems might feel when encountering a language barrier. In contrast, students in the English-immersion program did not convey this social-emotional prowess. Thus, findings revealed that students in the duallanguage immersion program had a more "metalinguistic or metacommunicative understanding of bilingualism" than their peers in the English immersion program (p. 20).

In short, if the program is intentional about enhancing students' investment in their home languages, and if it provides opportunities for students to reflect on their bilingualism, bi/multilingual students, by the end of the fifth grade, may have a more complex understanding about their bilingualism that goes beyond language preference and performance.

## Present Study

This study employs an embedded sequential mixed-methods design (Creswell \& Plano Clark, 2017), such that a qualitative strand is embedded within a quantitative design. In this study, the quantitative data and the qualitative supporting data were collected concurrently. The
quantitative data was analyzed first, followed by the analysis of the qualitative supporting data to explain some of the observed reading growth change patterns from students' perspectives. Thus, the quantitative data analysis provides reading growth change patterns, and the qualitative supporting data "makes sense of the processes" from students' point of view (Bryman, 2006).

Quantitatively, longitudinal descriptive analysis and calculations of proportions of students exceeding certain benchmark values is employed to identify overall patterns of English and Spanish reading change for different student subgroups and student cohorts of bi/multilingual students of predominately Latinx and Indigenous heritage. Descriptive longitudinal analyses includes the exploration of box-and-whisker plots and spaghetti plots with a focus on medians. Also of interest is the examination of (1) students' initial (first grade spring) and final statuses (fifth grade spring), (2) students' transition from the lower elementary grade (first grade to third grade) to the upper elementary grades (fourth and fifth grades), and (3) identifying students' Spanish reading growth shape.

Using a smaller sample size $(\mathrm{n}=230)$, student psychosocial covariates (i.e., motivation, socioemotional self-concept) were examined using descriptive analysis to identity students' perceptions about their academic and social competence, learning behavior, motivation, and language use over a two-year span (fourth to fifth grade).

Qualitatively, portraiture analysis is utilized to capture "the richness, complexity, and dimensionality" of the "meanings" students (selected from the quantitative analysis , $\mathrm{n}=2$ ) attached to their reading growth over a two-year span (fourth to fifth grade) (LawrenceLightfoot \& Davis, 1997, p. 3, 15). This approach requires the researcher as a portraitist to capture the detail of a unique experience and within it discover universal themes that evoke identification by the reader. This analytical process is similar to how a novelist draws the scene,
defines relationships between characters, and creates action (Lawrence-Lightfoot \& Davis, 1997). It is also analogous to how a painter studies a subject, each painted brush stroke seeking to capture its subject's essence, movement, story, or feeling. Unlike a novelist or a painter, the research adds systematic scrutiny to the fold to ameliorate bias.

The aim of the qualitative analysis is to "make sense" of the selected student's reading growth trajectory (or process) from their perspective (Bryman, 2006). Furthermore, Seltzer and Rose (2011) note that in efforts to estimate and understand the effects of educational programs, it is important that quantitative and qualitative methods be used in sync. To do this, artifacts from the selected students are narrated using text and visual aids to convey students' attitudes and motivations about reading in Spanish and English, as well as their self-perception (e.g., how they describe themselves) about their reading proficiency, growth, and learning. Artifacts gathered include students' responses from reflective classroom tasks, as well as responses to school surveys. These portraits provide a nuanced explanation as to why students at the end of fifth grade may have more, less, or steady Spanish and English reading growth than other students (as identified by the quantitative analyses).

## Research Questions

1. Quantitative: What are the longitudinal reading trajectories of students in a developing dual language program?
2. Quantitative: What proportions of students (in different groupings) met or exceeded grade-level benchmark expectations by the fifth grade?
3. Quantitative: What are students' perceptions about their academic and social competence, learning behavior, motivation, and language use in the fourth and fifth grade?
4. Qualitative: What do students (from a subsample) think about their bilingualism and their biliteracy development across the fourth and fifth grades?

## Methods

## School Program

School context plays a part in students' reading growth. As students develop, so do their schools (at the program level) and their teachers (at the classroom level). Thus, when studying the reading development of multiple cohorts of students, it is important to note the school's history and evolution. Each cohort of students may have had different learning experiences, because all school programs experience change, such as teacher and staff retention, implementation of new curriculum or instructional practices, and new federal mandates/policies, to name a few. The Union Community School has experienced the kind of program changes one would find at any school (i.e., some teachers leave and others stay), as well as changes unique to community schools.

Community schools are bound to their local community (e.g., students, families) not just to curriculum, instructional approaches, assessment, research, and policy (Daniel et al., 2019). Thus, an essential element to community schooling is adapting educational tools and policy mandates to best support the communities they serve. Specifically, the school applies a community-based language approach, which involves teachers, staff, students, and parents (re)imagining how their Spanish maintenance bilingual program and classroom practices may be structured to best serve their student community (Cerda et al., in review).

Program adaptation from a community-based language approach is not a timesaving process. It has taken teachers about ten years to develop appropriate pedagogy, curricula, and assessments that are responsive to their student community, while also adjusting to District
policy. Teachers gained expertise and new insights over time as they worked together to adjust to District and Federal mandates, as well as modify and create curricula, assessment tools, and instructional approaches and strategies for their specific student community. This study was influenced by this school policy, and accordingly, cohort effects were examined quantitatively, to determine the impact this policy may have had on students' English and Spanish reading development over time.

## Student Participants

Six cohorts of students ( $\mathrm{N}=393$; male, $\mathrm{n}=199,50.64 \%$ ) participated in this study. Overall, most participating students are of Latinx heritage ( $n=367,90.84 \%$ ), several are gifted learners $(\mathrm{n}=58,14.76 \%)$ and/or receive special education support $(\mathrm{n}=48,12.21 \%)$. Most students were enrolled from kindergarten to fifth grade (73.53\%). These students are locally referred to by teachers and staff as "homegrown" students.

Utilizing school records, I identified students' language designation by the end of their fifth-grade year. Most participating students $(\mathrm{n}=174,44.27 \%)$ were identified by the school as having reclassified from an English Learner (EL) status to a Fluent English Proficient (RFEP) status by the end of the fifth grade. Of the remaining student participants, $40.97 \%(\mathrm{n}=161)$ were identified as English learner (EL) students, and $14.76 \%(\mathrm{n}=58)$ as English-only (EO) students. Regardless of language designation (EL, RFEP, EO), participating students reported speaking two ( $\mathrm{n}=222,56.49 \%$ ) (e.g., Spanish and English) or three languages ( $\mathrm{n}=171,43.51 \%$ ) (e.g., Zapoteco) on the Language Experience Self-Assessment (LESA) survey.

Students' English language designation is determined early in their schooling career. Districts require parents to first complete a home language survey. If the parent indicates that the student utilizes a language other than English, then the student's level of English proficiency is
assessed. If the assessment determines that the student meets English proficiency requirements, then they receive an initial fluent English proficiency (IFEP) designation, and are grouped with students who have an English Only (EO) designation. However, if the assessment determines that the student does not meet the English proficiency requirements, they receive an English learner (EL) designation.

The school is mandated to provide bi/multilingual EL students with specific services until English proficiency is reached. To reclassify, students need: (1) to pass the English Language Proficiency Assessments for California (ELPAC) with a Level 4, (2) teacher evaluations indicating curriculum mastery, (3) parental opinion and consultation, and (4) to demonstrate comparable basic English skills to English proficient students (e.g., test scores from standardized tests such as the Smarter Balanced English Language Arts Test).

## Measures and Variables

## Spanish and English Reading Assessment Measures

To measure English reading grade-level performance, Fountas and Pinnell's (2010/2017) Benchmark Assessment System 1 (BAS 1) (kindergarten to second grade) and Benchmark Assessment System 2 (BAS 2) (third to fifth grade) were used. To measure Spanish reading grade-level performance, Fountas and Pinnell's (2010/2017) Sistema de evaluación de la lectura (SEL 1) (kindergarten to second grade) and the school's own instrument, Evaluación de la lectura en Español (ELE) (third to fifth grade) were used. The Spanish and English reading measures evaluate reading fluency (the percentage of words students read accurately) and reading comprehension (ability to fully comprehend a leveled text). Assessment materials include leveled assessment books and assessment scoring forms (see Technical Appendix for information about test materials and reliability and validity).

The ELE was developed by teachers over two academic years (2012-2014) because Fountas and Pinnell did not (and still does not) have a SEL 2 for the upper elementary grades in Spanish (third to fifth grade). Teachers modeled the ELE after the Fountas and Pinnell English and Spanish reading measures (BAS $1 \& 2$ and SEL 1 respectively) because they wanted a cohesive and reliable assessment system.

With comparable assessment protocols and scoring rubric they felt they could more accurately monitor students' longitudinal progress in Spanish and English from kindergarten to fifth grade. Teachers also felt confident in the data collected across all measures, but specifically between the SEL 1 and ELE. The decision to create the ELE, instead of purchasing a Spanish reading assessment from a different reading company, ensured that all three measures, the BAS 1 \& 2, SEL 1, and the ELE tested both decoding and reading comprehension skills in similar ways.

Scale for Spanish and English Reading Level Scores. The ELE and the Fountas and Pinnell BAS (BAS $1 \& 2$ ) and SEL (SEL 1) assessment systems evaluate students' reading levels on a developmental continuum, also known as the F\&P Text Level Gradient ${ }^{\mathrm{TM}}$. The continuum ranges from "A" (1) to " $Z$ " (26). However, the Union Community School teachers added a little "a" to the scale to identify students who are reading below "A," but have prereading concept skills (e.g., how to hold a book, read text from left to right) and may know some letter (or blended) sounds. Thus, the developmental continuum at the Union Community School ranges from " a " to " $Z$ " for BAS, SEL, and ELE. Each reading level is based on ten text factors: genre and form, text structure, content, themes and ideas, language and literary features, sentence complexity, vocabulary, words, illustrations, and book and print features. The BAS, SEL, and ELE assessments all aim to identify a student's "just right" reading level, also known as an independent reading level.

English and Spanish Reading Outcome Variable. Continuous scales for Spanish and English reading range from $0(a)$ to $26(Z)$, and are coded as follows: " $a$ " $=0, " A "=1$, " $B "=2$, $" C "=3, " D "=4, \ldots " Z "=26$. Exploratory factor analysis was conducted to discover the factor structure of the measure and to examine its internal reliability (see Technical Appendix). During the analysis, an issue with singularity occurred, as identified by the determinant value which was less than 0.00001 . Singularity occurs when variables are perfectly correlated. Applying the process of elimination, the kindergarten grade-level data points ( $s 1$ and $s 2$ ) and the first-grade spring grade-level data point (s3) were identified as the culprits. Proportion calculations of reading scores below (developing) and meeting/exceeding benchmarks were examined (See Table 3.1), indicating that most Spanish scores were below grade-level expectations. This information coupled with the factor analysis process of eliminating analysis, it became clear that scores for these measurement occasions were extremely correlated (values were in extreme proximity to one another indicating very little variance).

## Table 3.1

Proportion of Spanish Reading Values Below Grade-Level Benchmark Expectations

| Spanish Reading | (Below) Developing | Meeting/Exceeding Grade- <br> Level Benchmarks |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Measurement <br> Occasion | $\%$ | $n$ | $\%$ | $n$ |
| Kindergarten fall <br> (n $=257)$ | 94.94 | 244 | 5.06 | 13 |
| Kindergarten spring <br> $(\mathrm{n}=257)$ | 98.83 | 254 | 1.17 | 3 |
| First grade fall <br> $(\mathrm{n}=286)$ | 65.03 | 186 | 34.97 | 100 |

## District Records

## Language Learning and Learning Differences Student Subgroup

This information was retrieved from the District. The District identifies students by three English language groups: students with English Learner (EL) designation, students with reclassified fluent English Proficient (RFEP), and students with English Only (EO) designation. In this sample, all students from these three groups are either bilingual or multilingual users, and as such, I have added "bi/multilingual" to the District designation. Some of these students are also gifted or have a disability.

To account for this diversity, five groups were created (see Table 3.2): (1) bi/multilingual students with a RFEP designation; (2) bi/multilingual students with an EL designation; (3) bi/multilingual students with an EO designation; (4) bi/multilingual students with a disability and English proficiency designation; and (5) bi/multilingual students with a gifted and English proficiency designation.

Five binary variables were created, one for each student group. For example, the variable for the "bi/multilingual students with a RFEP designation group" is coded, $1=y e s$, the student has a RFEP designation, $0=$ no, the student does not have a RFEP designation

## School Program

"Cohort," a categorical variable, linked students' longitudinal data to their cohort. There are six cohorts in total. The categorical variable is coded ordinally as follows: Cohort $2022=1$, Cohort $2023=2$, Cohort $2024=3 \ldots$ Cohort $2027=6$. Cohorts are numbered chronologically, meaning that Cohort 1 was enrolled a year before Cohort 2 and so forth.

## Table 3.2

Students' Language Development and Learning Designations from their Fifth Grade Year ( $N=$ 377)

|  | English Reading |  |  |  |  | Spanish Reading |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Student Designations in the Fifth Grade | $N$ | 1 | 2 | 3 | $N$ | 1 | 2 | 3 |
|  | $N=284$ | $n=185$ | $n=61$ | $n=38$ | $N=277$ | $n=128$ | $n=94$ | $n=55$ |
| Students with a RFEP Designation | 106 | 86 | 18 | 2 | 106 | 58 | 37 | 11 |
| Students with an EL Designation | 80 | 33 | 22 | 25 | 76 | 26 | 32 | 18 |
| Students with an EO Designation | 19 | 13 | 6 | 0 | 18 | 7 | 4 | 7 |
| Students with a Disability and English Proficiency Designation | 32 | 11 | 11 | 10 | 32 | 6 | 12 | 14 |
| Students with a Gifted and English Proficiency Designation | 47 | 42 | 4 | 1 | 45 | 31 | 9 | 5 |
| Students Missing Fifth Grade Observations | 93 |  |  |  | 100 |  |  |  |

Note. Ns differ in Spanish and English because some students may have reading data for English reading at the last measurement occasion (fifth grade spring) and not have reading data for Spanish on that same occasion and vice versa. They are included in the subsample if they have a reading score.

## Language Experience Self-Assessment [LESA] Survey

The LESA is a student survey created by myself and teachers during the course of this dissertation. It is intended for elementary school students in the third to fifth grades. The aim of this survey is to encourage student reflection about how they utilize Spanish and English in their home and in school with different people. The LESA asked students specific questions related to their Spanish and English: frequency of use, motivation, and perceived competence.

The LESA original scales (i.e., frequency of use) and open-ended items ("Why do you speak Spanish at home?") were developed in a Den 3 classroom. The open ended "complete this sentence" prompt was created by Mr. Daniel Sotelo, a Den 3 teacher. Both the original scales and the open-ended prompts were piloted in four Den 3 classrooms in the Spring of 2016.

Additionally, measures that assess student self-concept such as the Self-Description Questionnaire (SDQ) and the English Language Learner Motivation Scale, Pre-College (ELLMS), were included in the survey.

Frequency of Language Use. Items were rated on a 5-point Likert-style scale, $1=$ "never" to 5 = "always." Sample items included: "How often do you hear the following languages at home?" and "How often do you speak the following languages at school?" Spanish items were created to mirror the English items. Exploratory factor analysis of the measure was conducted with the fourth-grade data first, then the fifth-grade data to discover the factor structure of the measure across grades and to examine its internal reliability. See Technical Appendix.

Fourth Grade. Each subscale is the mean score of four items. Listwise deletion based on all items in the $\boldsymbol{\alpha}$ procedure. Subscales included: (1) Frequency of English use in school (Cronbach's Alpha, $\boldsymbol{\alpha}=0.87 ; \mathrm{n}=100$ ); (2) Frequency of English use in the home (Cronbach's Alpha, $\boldsymbol{\alpha}=0.75 ; \mathrm{n}=99$ ); (3) Frequency of Spanish use in school (Cronbach's Alpha, $\boldsymbol{\alpha}=0.88 ; \mathrm{n}$ $=98$ ); and, (4) Frequency of Spanish use in the home (Cronbach's Alpha, $\boldsymbol{\alpha}=0.85 ; \mathrm{n}=99$ ).

Fifth Grade. Each subscale is the mean score of four items. Listwise deletion based on all items in the $\boldsymbol{\alpha}$ procedure. Subscales included: (1) Frequency of English use in school (Cronbach's Alpha, $\boldsymbol{\alpha}=0.91 ; \mathrm{n}=121$ ); (2) Frequency of English in the home (Cronbach's Alpha, $\boldsymbol{\alpha}=0.82 ; \mathrm{n}=120$ ); (3) Frequency of Spanish in school (Cronbach's Alpha, $\boldsymbol{\alpha}=0.89 ; \mathrm{n}=$ 121); (4) Frequency of Spanish in the home (Cronbach's Alpha, $\boldsymbol{\alpha}=0.79 ; n=120$ ).

## Self-Description Questionnaire, SDQ

The SDQ is an instrument originally designed by Marsh et al. (1983). Drawing from Shavelson's work, Marsh et al. (1983) operationalized self-concept as "an individual's
perception of self-formed through experiences with the environment, interactions with significant others, and attributions of his or her own behavior" (p. 173). An adapted version of the Self-Descriptive Questionnaire-I (SDQ-1; Marsh, 1990) has been included in The Early Childhood Longitudinal Study (ECLS) program's longitudinal studies (ECLS-K: 1999, ELCS-K: 2011). The ECLS follows a nationally representative sample of children from kindergarten to either fifth or eighth grade. The scales utilized by the ECLS include: reading, math, school subjects, peer relations, externalizing problem behaviors, and internalizing problem behaviors.

Exploratory factor analysis of the SDQ-1 fourth and fifth grade items was conducted to confirm whether the items from both the fifth and fourth grade samples were representative of the same four subscales as in the ELCS SDQ-1 version and to examine the measure's internal reliability (see Appendix). The four subscales are: (1) perceived interest/competence in all school subjects, (2) perceived interest/ competence in peer relations, (3) externalizing problem behaviors, and (4) internalizing problem behaviors. Items were rated on a 4-point Likert-style scale, $1=$ "not at all true" to $4=$ "very true." See Technical Appendix for exploratory factor analyses of subscales for fourth and fifth grade data.

Fourth Grade. Each subscale is the mean score of its items. Listwise deletion based on all items in the $\boldsymbol{\alpha}$ procedure. Subscales included: (1) perceived interest/competence in all school subjects (six items; Cronbach's Alpha, $\boldsymbol{\alpha}=0.86 ; n=156$ ); (2) perceived interest/competence in peer relations (six items; Cronbach's Alpha, $\boldsymbol{\alpha}=0.76, n=152$ ); (3) externalizing problem behaviors (five items; Cronbach's Alpha, $\boldsymbol{\alpha}=0.84, n=156$ ). (4) internalizing problem behaviors (eight items, Cronbach's Alpha, $\boldsymbol{\alpha}=0.84, n=155$ ).

Fifth Grade. Each subscale is the mean score of its items. Listwise deletion based on all items in the $\boldsymbol{\alpha}$ procedure. Subscales included: (1) perceived interest/competence in all school
subjects (six items; Cronbach's Alpha, $\boldsymbol{\alpha}=0.88 ; n=173$ ); (2) perceived interest/competence in peer relations (six items; Cronbach's Alpha, $\boldsymbol{\alpha}=0.83 ; n=164$ ); (3) externalizing problem behaviors (five items; Cronbach's Alpha, $\boldsymbol{\alpha}=0.83 ; n=170$ ); (4) internalizing problem behaviors (eight items; Cronbach's Alpha, $\boldsymbol{\alpha}=0.85, n=171$ ).

## The English Language Learner Motivation Scale (ELLMS): Pre-College

The ELLMS Pre-College (Ardasheva, Tong, \& Tretter, 2012) was utilized to measure students' motivation to learn English and Spanish. This measure assesses students' intrinsic motivation and external regulation to learn English as a second language. Items about the motivation to learn Spanish were modeled after the original items. During the LESA pilot teachers reviewed items and identified items students had trouble with and recommended their omission. Eight items from the ELLMS were adapted.

Items were rated on a 5 -point Likert-style scale, $1=$ strongly disagree to $5=$ strongly agree. Sample items include: "It is fun to learn English," "I want to show my teachers that I can learn English," and "Everybody in school has to learn English." Spanish items were created to mirror the English items. Exploratory factor analysis of the adapted ELLMS: Pre-College fourth and fifth grade items was conducted to discover the factor structure of the measure and to examine its internal reliability (see Technical Appendix).

Fourth Grade Motivation. Each subscale is the mean score of eight items. Listwise deletion based on all items in the $\boldsymbol{\alpha}$ procedure. Subscales included: (1) English motivation (Cronbach's Alpha, $\boldsymbol{\alpha}=0.88, n=166$ ); (2) Spanish motivation (Cronbach's Alpha, $\boldsymbol{\alpha}=0.85 ; n$ $=161)$.

Fifth Grade Motivation. Each subscale is the mean score of eight items. Listwise deletion based on all items in the $\boldsymbol{\alpha}$ procedure. Subscales included: (1) English motivation
(Cronbach's Alpha, $\boldsymbol{\alpha}=0.88 ; n=177$ ); (2) Spanish motivation variable (Cronbach's Alpha, $\boldsymbol{\alpha}=$ $0.87, n=183)$.

## Reader Identity Self-Assessment (RISA)

The RISA is a community-based self-assessment tool designed by myself and Union School Community teachers (Cerda et al., 2019). This self-assessment is utilized by students to document, monitor, and evaluate their bilingual reading progress and reflect on their bi/multilingual reader identity. As a formative assessment, this community-based self-assessment tool provides students, parents and teachers with feedback about students' perceptions about their bilingual reading progress and $\mathrm{bi} /$ multilingual reader identity.

This assessment is administered in the fall and in the spring. Sometimes teachers administered a shorter version in the winter. The fall and spring assessment is composed of multiple tasks.

Fall RISA. First, students in the fourth and fifth grades graph their Spanish reading levels (kindergarten to their current grade) and English reading levels (first grade to their current grade) onto two bar graphs. Then, they analyze their bar graphs, making conclusions about factors that may have impacted their bilingual reading growth (see Figure 3.1). Students respond to prompts to guide their initial analysis: "My reading data shows me...," "To me this means...."

Second, students utilize their reading logs to set reading goals, prepare a plan, and describe the reading practices needed to realize their goals (see Figure 3.2). At this time, students also identify the support they will need from their parents and teachers to accomplish their plan.

Figure 3.1
Fifth grade student holding her Spanish (left) and English (right) reading bar graphs


Note. The photo was included with permission from the student and their parents.

## Figure 3.2

Den 3 Student holding their reading log


Note. The reading log categories from left to right: date (fecha), title and author (título y autor), genre (género), start page (página de início), end page (página final), pages read (páginas leídas), start time (commence), end time (terminé), minutes read (minutos leídos), interest (interés). Above the log, the student wrote their English and Spanish reading goals and plans. The photo was included with permission from the student and their parents.

As a final step, students reflect on their bi/multilingual reader identity. Students report whether they identify as monolingual, bilingual, or multilingual readers and then respond to a
series of prompts: "Why do you read in two or more languages?" "I want to be the kind of bi/multilingual reader who..." "How do you feel about reading in two or more languages?

Spring RISA. First, students update their longitudinal bar graphs by adding their spring reading levels in both languages, and analyze their bilingual reading progress once more. Then, they describe why they met (or did not meet) their reading goals, and how they managed obstacles. Students end their reflection by responding to the bi/multilingual reader identity prompts again.

Student quotations from the RISA will be utilized to create student portraits of their biliteracy, growth motivation, and self-concept.

## Procedures

All data gathering strategies were approved by the University's Institutional Review Board (IRB) and the participating school's Research and Accountability Committee. See Chapter 1 for more detailed information about ethical procedures. Union Community School teachers in the elementary school administer reading assessments (i.e., BAS, SEL, and ELE) twice a year, in the fall and spring, to individual students. Each assessment takes about 20 to 30 minutes. Students are typically tested during independent reading. Sometimes staff or myself (as a graduate student researcher and research partner) supported teachers by testing students outside the classroom in a reading/intervention room.

After testing students, teachers recorded their students' Spanish and English reading levels onto an Excel workbook or Schoology (an LMS system). The assistant principal or a lead teacher would share teachers' Excel workbooks with me on a USB thumb drive. One of my responsibilities as a graduate student researcher and research partner (2014-2019 2021-2023 school years) was to consolidate the data and merge it into the school's longitudinal reading
database located in a secure server. I developed the longitudinal database in 2015, and mostly managed it until 2023. During the 2019-2020 school year, the longitudinal database was managed by another graduate student researcher. Data collection paused in the spring of 2020, as the Covid-19 pandemic became a global crisis and a stay-at-home order was declared.

In the fall of 2019, I retrieved Spanish and English reading data (kindergarten to fifth grade), which included student cohorts 2022 to 2027 . The cohort numbers represent the graduation year students are expected to graduate from high school. I focused on these student cohorts because I had managed their data and these cohorts had the most complete English and Spanish reading data. Originally, I had intended to retrieve cohort 2026's fifth grade reading data and Cohort 2027's fourth grade data, but as previously mentioned, instruction came to halt after the Covid-19 stay-at-home order was declared.

Mr. Alvaro (pseudonym), a Den 3 teacher, and I designed the RISA and LESA selfassessment tools and administered these paper prototypes in his classroom during the 2014-2015 school year. The following year, the Den 3 teacher team and I further developed and piloted the RISA and LESA as tasks students would complete online.

The RISA in Den 3 was administered twice a year in the fall and spring. The RISA was created using Google Forms. Students' RISA responses were automatically saved as a Google Document and in a Google sheet. The RISA is a classroom tool. It is utilized by teachers and students during student-family-teacher conferences and for formative assessment purposes. The RISA was administered during a five-year period. It was not administered in the spring of 2020 because of the Covid-19 Pandemic. I retrieved the RISA data in the summer of 2020.

The LESA in Den 3 was administered once a year in the spring. It was created using Qualtrics, a survey software program. LESA responses were automatically saved by Qualtrics as
a PDF and in an Excel Workbook. The LESA was administered four times (spring 2016 - spring 2019). It was not administered in the spring of 2020 because of the Covid-19 pandemic. I retrieved the LESA data in the summer of 2020.

Students and teachers were given a unique identification number. A master key with teachers' and students' District identification number and this study's unique identification number was kept in a secure place until all the data were de-identified. Teachers' and students' original identification numbers were replaced with the new unique identification number and all other identifiable data, such as names, were deleted from the study data set. Once the data set was complete and de-identified, the master key was destroyed (permanently deleted).

## Sampling Approach

## Quantitative Component

This study utilized a convenience sampling approach to identify eligible student participants from the Spanish maintenance bilingual program. This approach is a type of nonprobability sampling, which involves a sample being drawn from the population on hand (Schensul, Schensul, \& LeCompte, 2013). Inclusion criteria required students' Spanish reading score to have been obtained from the ELE. Thus, student cohort data prior to cohort 2022 was excluded.

Of the eligible student cohorts (cohort 2022 to 2027), student participants had to have at least one reading test score. Therefore, even though some students were missing English and/or Spanish reading outcome variable data for a particular measurement occasion (time point), they were still eligible to participate, if they had at least one English or Spanish reading test score for any of the eligible occasions.

Of the $N=393$ students, only data collected in the spring of the first grade and ending in the spring of the fifth grade, were eligible (nine measurement occasions). This study's first measurement occasion begins in the spring of the first grade because this is when students' Spanish and English reading are tested by teachers. Prior to this time, teachers solely tested students' Spanish reading, since the language of instruction in kindergarten and first grade is mostly in Spanish. Sixteen students were omitted because they were only enrolled in kindergarten and as such these students only had reading data from kindergarten. The final sample, $\mathrm{N}=377$, was used to examine research questions one, two, and three and is referred to as sample one. To address research question three, of the $N=377$ students from sample one, only students who had taken the LESA in the fourth grade and/or fifth grade, were eligible to participate, $n=230$ students. This sample is referred to as sample two. See Tables 3.3-3.6 for student background information.

## Qualitative Component

Two students from cohort 2026 who were reading at grade level by the end of the fifth grade in Spanish and English were purposively selected. Students from cohort 2026 were selected because from a program development perspective, this cohort showed the most improvement. Students who met fifth grade expectations for the final status (spring) were selected to identify what students who were successful at achieving bilingual reading proficiency think about being bilingual speakers and readers. Furthermore, to be eligible for selection students had to have completed the LESA and the RISA in the fourth and fifth grades.

Table 3.3
Count of Students' Ethnic/Racial Background

| Ethnic/Racial Description | Sample 1, $\boldsymbol{n}$ | Sample 2, $\boldsymbol{n}$ |
| :--- | :---: | :---: |
| Two or more ethnicity/race | 1 | 1 |
| African American, Black | 7 | 1 |
| American Indian, Alaska | 1 |  |
| Native | 14 | 111 |
| Asian | 4 | 3 |
| Filipino | 343 | 208 |
| Hispanic | 7 | 5 |
| White |  |  |

Table 3.4
Count of Where Students Were Born

| Birth Country | Sample 1, $\boldsymbol{n}$ | Sample 2, $\boldsymbol{n}$ |
| :--- | :---: | :---: |
| Bangladesh | 1 | 1 |
| El Salvador | 10 | 5 |
| Guatemala | 7 | 5 |
| Honduras | 2 | 2 |
| Indonesia | 1 | 1 |
| Mexico | 4 | 3 |
| Nigeria | 2 |  |
| Northern Mariana Islands | 1 | 1 |
| Philippines | 4 | 3 |
| Syrian Arab Republic | 1 | 1 |
| United States | 315 | 208 |
| Venezuela | 2 |  |
| Did Not Respond | 27 |  |

Table 3.5
Count of the Different English Development and Learning Designations Students Receive
Support for in School

| Students English Development and Learning Designations | Sample $1(N=377)$ |
| :---: | :---: |
| Bi/multilingual Students with an EL Designation | 113 |
| Students with an EL Designation | 106 |
| Students with a Newcomer Designation | 7 |
| Bi/multilingual Students with a RFEP Designation | 125 |
| Students with a RFEP Designation | 125 |
| Bi/multilingual Students with an EO Designation | 32 |
| Students with an EO Designation | 8 |
| Students with a PSEL/IFEP Designation | 24 |
| Bi/multilingual Students with a Disability and English Proficiency |  |
| Designation | 47 |
| Students with a Disability and EL Designation | 34 |
| Students with a Disability and PSEL/EO Designation | 5 |
| Students with a Disability and RFEP Designation | 8 |
| Bi/multilingual Students with a Gifted and English Proficiency |  |
| Designation | 55 |
| Students with a Gifted and EL Designation | 7 |
| Students with a Gifted and EO Designation | 5 |
| Students with a Gifted and PSEL/IFEP Designation | 5 |
| Students with a Gifted and RFEP Designation | 34 |
| Students with a Gifted PSEL/EO Designation | 4 |

$\overline{\text { Note. EL }=\text { English Learner; RFEP = Reclassified Fluent English Proficient; EO = English Only (or dominant); }}$ IFEP $=$ Initially Fluent English Proficient; PSEL = Probable Standard English Learner. PSEL students also have a language classification of EO or IFEP, and self-report as one of the following ethnic-racial categories: African American/Black, Hispanic (Mexican-American), Pacific Islander, or American Indian/ Alaskan Native.

Table 3.6
Count of the Kinds of Disabilities and Giftedness Students Receive Support for in School
Description of Disabilities and Giftedness ..... $N$
Bi/multilingual Students with a Disability and English Proficiency Designation ..... 44
Autism ..... 4
Hard of Hearing ..... 1
Other Health Impairment ..... 6
Specific Learning Disability ..... 29
Speech or Language Impairment ..... 1
Visual Impairment ..... 1
Emotional Disturbance ..... 2
Bi/multilingual Students with a Gifted and English Proficiency Designation ..... 55
Academic Ability (Language Arts) ..... 6
Academic Ability (Math) ..... 5
High Achievement ..... 11
High Achievement and Academic Ability (Language Arts) ..... 1
High Achievement and Intellectual Ability ..... 3
Intellectual Ability ..... 29

## Quantitative and Qualitative Data Analyses

This section includes descriptions of (1) missing quantitative data, (2) quantitative variables and psychometric foundational analysis, (3) quantitative descriptives plan, and (4) plans for analysis organized by research question.

## Missing Quantitative Data

To address research questions one and two, $N=377$ bi/multilingual students' Spanish and English data were analyzed. Most students had four or more measurement occasions of Spanish ( $79.31 \%, n=299$ students) and English reading data ( $81.17 \%, n=306$ students). Less than $1 \%$ of students were missing English ( $n=2$ students) and Spanish reading data ( $n=3$ students). Missing data in these cases means that students were not tested by their teachers. See Table 3.7. Students were nested in 20 classrooms. On average, there were about 45 students in each classroom. Students were also nested in cohorts: cohort $2022(n=54)$, cohort 2023 ( $n=$ $68)$, cohort $2024(n=69)$, cohort $2025(n=80)$, cohort $2026(n=60)$, and cohort $2027(n=46)$.

To address research question three, $n=230$ bi/multilingual students' Spanish and English data were analyzed. This is a smaller sample because students had to have taken the LESA survey. Students' responses to the LESA survey produced the covariate data necessary for this particular analysis. Most students had four or more observations of Spanish $(94.78 \%, n=218$ students) and English reading data ( $95.65 \%, n=220$ students). See Table 3.8. Students were nested in 19 classrooms. On average, there were about 32 students in each classroom. Students were also nested in cohorts: cohort $2023(n=47)$, cohort $2024(n=58)$, cohort $2025(n=50)$, cohort $2026(n=44)$, and cohort $2027(n=31)$. For sample one and two, cohort 2027 fifth grade spring (2020) English and Spanish data is unavailable because students were not tested due to the Covid-19 Pandemic stay-at-home order. For sample one only, Cohort 2022 is missing Spanish
data for measurement occasion 5 because teachers did not test students during that term. Cohort 2022 data is not in sample two because student data did not meet eligibility requirements.

Table 3.7
Number of English and Spanish Reading Observations per Student

| Number of Observations | Sample $1(N=377)$ |  |  |  | Sample $2(n=230)$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | English |  | Spanish |  | English |  | Spanish |  |
|  | N | \% | N | \% | N | \% | n | \% |
| 0 | 2 | 0.53 | 3 | 0.80 |  |  |  |  |
| 1 | 29 | 7.69 | 31 | 8.22 | 1 | 0.43 | 1 | 0.43 |
| 2 | 17 | 4.51 | 20 | 5.31 | 6 | 2.61 | 8 | 3.48 |
| 3 | 23 | 6.10 | 24 | 6.37 | 3 | 1.30 | 3 | 1.30 |
| > 4 | 306 | 81.17 | 299 | 79.31 | 220 | 95.65 | 218 | 94.78 |

Note. 0 occasions $=$ student does not have any English or Spanish reading data occasions. For example, a student may have Spanish occasions but not English occasions and vice versa. All students have at least one occasion in either English or Spanish reading.

## Quantitative Descriptives

Utilizing IBM SPSS Statistics, a thorough examination of the variables (Spanish and English reading) was conducted to characterize central tendency and variation within variables, as well as identify patterns, nonlinear relationships, potential outliers, and miscodes (data input error). For instance, univariate descriptives (e.g., kurtosis, skewness) were reviewed to obtain a sense of the shape of the distribution of values for each variable (e.g., normal, skewed toward large values), and to identify data errors (e.g., unusual minimum and maximum scores) (Grimm et al., 2017).

## Research Question 1 Analysis Plan (Quantitative): What do the longitudinal reading trajectories of students in a developing dual language program look like?

Box-and-whisker plots of English and Spanish reading were created in IBM SPSS Statistics to explore the medians and spread at each measurement occasion within and between the six cohorts and student groups: (a) gender (female, male), (b) English language development (El, RFEP, EO), and exceptionality (disability, giftedness). For a given box-and-whisker plot, the horizontal line within the box is the median score for the group of students represented in that plot, half of which scored above the median (horizontal line), and the other half of students scored below it (e.g., Figure 3.4). The lower and upper ends of the box correspond, respectively, to the 25 th percentile and 75 th percentile of the distribution of scores for the group of students represented in the plot. The difference in the magnitudes of the student scores corresponding to the upper and lower ends of the box is termed the interquartile range (IQR). The vertical lines (or "whiskers") extend to the highest observed score (among the students in the plot) that is within a distance of 1.5 IQRs above the upper end of the box, and to the lowest observed score that is within 1.5 IQRs below the box. Scores more than 1.5 IQRs above the box, or more than 1.5 IQRs below the box, are viewed as outliers and appear as solid dots.

Spaghetti plots were utilized to identify individual change within and between cohorts and student groups. Spaghetti plots are quantitative tools that are used in longitudinal studies to show the shapes of the trajectories of individuals or groups over time. These plots are typically used to obtain a sense of the patterns or time trends of an individual or group. Time trends may be identified by observing the shape of the line (e.g., linear on nonlinear; continuous or discontinuous) and patterns between groups may be observed by comparing overall shape of the individual lines, where the lines begin (initial status), and where the lines end (final status). The
word "spaghetti" in spaghetti plot refers to how the individual trajectories look once they are plotted, i.e., they typically look like spaghetti noodles thrown on the wall to make sure the pasta is al dente.

Spaghetti plots were created using R Studio (2023.06.0, Build 421, Mountain Hydrangea release 583b465e, 2023-06-05 for Windows). Medians for each cohort and student group at each measurement occasion were used to construct an overall trajectory for each cohort and student group. Overall, the longitudinal descriptive analysis focused on medians because they are robust to outliers (Tabachnick \& Fidell, 2013) and the English and Spanish reading data across measurement occasions contained outliers, which will be examined in further detail in the Findings section.

In addition to (1) a smoothed line to see what the trajectory trend looks like for each cohort and student group, we also have (2) confidence bands (i.e., a $95 \%$ "prediction interval"). There is a $95 \%$ chance that the true trajectory for a given person lies within the $95 \%$ confidence interval for that person, and a $95 \%$ chance that the true trajectory for a given group lies within the $95 \%$ confidence interval for that group.

When analyzing the spaghetti plots, time and functional form were examined because individual students, cohort groups, and student groups may not progress similarly over time. For example, growth trajectories may progress at a constant rate, indicative of linear growth (A). Or they may have a decelerating quadratic functional forms (B), indicating that students are progressing at a constant or accelerated rate and then slow down. Trajectories may sometimes have cubic functional forms (C), which appear as a curvy line, slowing down, and then progressing again. See Figure 3.3.

Figure 3.3
Visual Examples of the Three Functional Forms Evaluated
A. Linear
B. Decelerating Quadratic

C. Cubic


Research Question 2 Analysis Plan (Quantitative): What proportions of students (in different groupings) met or exceeded grade-level benchmark expectations by the fifth grade?

To calculate the proportion of students meeting or exceeding grade-level benchmark expectations for fifth grade (reading values 20 to 22), the sum of students who were reading at or above the value of " 20 " (i.e., fifth grade expectation) was divided by the total number of students at that measurement occasion (final time point), multiplied by 100. This calculation was conducted with the Spanish and English reading data for each of the six cohorts and student groups: (a) gender (female, male), (b) English language development (El, RFEP, EO), and exceptionality (disability, giftedness).

## Research Question 3 Analysis Plan (Quantitative): What are students' perceptions about

 their academic and social competence, learning behavior, motivation, and language use in the fourth and fifth grade?Utilizing IBM SPSS Statistics, a thorough examination of the variables was conducted to characterize central tendency and variation within variables. Of particular interest was the
examination of these descriptives to describe students' perceptions about their academic and social competence, learning behavior or socioemotional self-concept, motivation to learn English and Spanish, and frequency of language use in school and in the home across a two-year span from the fourth to fifth grade. Specifically, univariate descriptives (e.g., kurtosis) were reviewed to identify the distribution of the data (i.e., kurtosis, skewness), which provides key information about students' responses to certain questions (Grimm et al., 2017).

## Research Question 4 Analysis Plan (Qualitative): What do students (from a subsample) think about their bilingualism and their biliteracy development across the fourth and fifth grades?

Two portraits were created using data from the LESA and RISA when students were in the fourth and fifth grade. Open-ended items from the LESA and responses from the RISA were consolidated to form one text block. The LESA items selected asked students' about the languages used at home and at school, and how they felt using languages with specific people, and RISA responses about students' reading growth were selected. Once all the qualitative data was consolidated, a portrait was written for each individual, in first person. Per LawrenceLightfoot and Davis' (1997) recommendations, I stayed as close to the student's original narrative as possible. I added conjunctions and transitional words and phrases to connect ideas within and across sentences, and used punctuation to help craft students' narratives. Line plots of their bilingual growth were included to add contextual dimension to the portrait and link the portrait back to the quantitative findings.

## Quantitative Findings

## Descriptives for the English and Spanish Reading Measurement Occasions

The descriptive statistics of English and Spanish reading levels at each measurement occasion indicated that sample size did not change dramatically across occasions. Most students remained enrolled from first to the fifth grade, and nearly all students had complete longitudinal data. The data appeared error free, and the median and mean across English and Spanish reading measurement occasions increased suggesting linear growth (Table $3.8-3.9$ ), however, the shape of the trajectories will be explored and examined in the results section for research question one and two.

There were minimum values for grades second, fourth, and fifth that were less than the value " 3 ," indicating that some students were emergent readers in the upper elementary school grades. This is not uncommon, especially in schools that do not have enrollment restrictions regarding home/heritage language proficiency, such as the Union Community School. In contrast, some schools require students to take a Spanish entrance exam or have prior Spanish (pre-)schooling experience. Furthermore, the Union Community School enrolls many students who have recently immigrated. These students may be emerging English readers, and in some special cases, may also be emerging English and Spanish readers if they experienced interrupted education in their countries of birth.

Table 3.8
Descriptives of English and Spanish Reading Levels at Each Measurement Occasion ( $N=377$ )

| Occasions | N | Minimum | Maximum | Range | Mode | Median | Mean | Std. Deviation | Skewness | Kurtosis |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| e4 | 252 | 0 | 21 | 21 | 0 | 4 | 4.59 | 3.85 | 0.80 | 0.40 |
| e5 | 273 | 0 | 23 | 23 | 9 | 5 | 6.14 | 4.07 | 0.70 | 0.67 |
| e6 | 292 | 0 | 23 | 23 | 12 | 10 | 9.04 | 4.02 | -0.02 | -0.08 |
| e7 | 288 | 1 | 23 | 22 | 14 | 11 | 10.8 | 3.68 | -0.26 | 0.30 |
| e8 | 301 | 0 | 24 | 24 | 15 | 14 | 13.16 | 3.68 | -0.82 | 1.39 |
| e9 | 286 | 0 | 24 | 24 | 16 | 16 | 14.69 | 3.77 | -1.44 | 2.97 |
| e10 | 289 | 0 | 24 | 24 | 18 | 18 | 16.69 | 3.97 | -1.90 | 4.98 |
| el1 | 282 | 0 | 26 | 26 | 18 | 19 | 18.04 | 3.69 | -1.77 | 5.31 |
| e12 | 250 | 2 | 26 | 24 | 20 | 20 | 19.82 | 3.47 | -1.64 | 5.13 |
| s4 | 287 | 0 | 16 | 16 | 10 | 8 | 8.15 | 3.20 | -0.33 | 0.31 |
| s5 | 290 | 0 | 17 | 17 | 10 | 10 | 9.09 | 3.61 | -0.59 | -0.01 |
| s6 | 298 | 0 | 23 | 23 | 12 | 12 | 11.25 | 3.60 | -0.79 | 1.17 |
| s7 | 292 | 0 | 24 | 24 | 14 | 13.50 | 12.58 | 3.56 | -0.86 | 1.86 |
| s8 | 300 | 0 | 25 | 25 | 15 | 15 | 14.23 | 3.69 | -0.79 | 3.48 |
| s9 | 221 | 1 | 21 | 20 | 16 | 16 | 14.93 | 3.35 | -1.98 | 5.16 |
| s10 | 268 | 1 | 26 | 25 | 18 | 17 | 16.67 | 3.22 | -1.31 | 4.81 |
| s11 | 273 | 0 | 26 | 26 | 18 | 18 | 17.41 | 3.47 | -1.55 | 5.32 |
| s12 | 243 | 3 | 26 | 23 | 20 | 19 | 18.86 | 3.52 | -1.03 | 3.30 |

Note. e4 to e12 = English measurement occasions; s 4 to $\mathrm{s} 12=$ Spanish measurement occasion; The lowest minimum score is 0 and the highest maximum score is 26.

Table 3.9
Sample sizes (ns) of Measurement Occasions by Cohort

| Measurement Occasion | Cohort 2022 | Cohort 2023 | Cohort 2024 | Cohort 2025 | Cohort 2026 | Cohort 2027 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| e4 | 10 | 53 | 51 | 60 | 46 | 32 |
| e5 | 27 | 53 | 58 | 56 | 45 | 34 |
| e6 | 42 | 55 | 61 | 55 | 43 | 36 |
| e7 | 49 | 55 | 58 | 48 | 43 | 35 |
| e8 | 49 | 60 | 59 | 52 | 45 | 36 |
| e9 | 52 | 56 | 54 | 50 | 40 | 33 |
| e10 | 53 | 56 | 55 | 51 | 41 | 33 |
| el1 | 49 | 52 | 58 | 49 | 42 | 32 |
| e12 | 49 | 51 | 58 | 50 | 42 | 0 |
| s4 | 37 | 53 | 56 | 63 | 46 | 32 |
| s5 | 43 | 54 | 59 | 55 | 45 | 34 |
| s6 | 46 | 56 | 62 | 55 | 43 | 36 |
| s7 | 49 | 57 | 59 | 49 | 43 | 35 |
| s8 | 48 | 60 | 59 | 52 | 45 | 36 |
| s9 | 0 | 45 | 54 | 50 | 39 | 32 |
| s10 | 42 | 45 | 55 | 51 | 42 | 33 |
| s11 | 42 | 51 | 58 | 49 | 41 | 32 |
| s12 | 42 | 51 | 58 | 50 | 42 | 0 |

Note. The value of 0 indicates that data are missing for that particular measurement occasion. For example, cohort 2022 at measurement occasion "s9" and cohort 2027 at measurement occasion s12 are missing data. Data for cohort 2022 at measurement occasion " $s 9$ " is missing because teachers in Den 3 agreed to not test students' Spanish reading proficiency, and data for cohort 2027 at measurement occasion "s12" is missing because students were not tested due to the Covid-19 pandemic stay at home order.

## Research Question 1: What are the longitudinal reading trajectories of students in a developing dual language program?

The findings in this section first examine and describe: (1) students' English and Spanish reading trajectories; (2) subgroups of students' reading trajectories in both languages; and (3) students' reading trajectories in both languages nested in six different cohorts.

Longitudinal Reading Trajectories of All Students ( $N=377$ )
The box-and-whisker plots show that the English (Figure 3.4) and Spanish (Figure 3.5) reading data are quite different from each other. For example, at most measurement occasions, the English reading data were spread out and not clustered around the median (Figure 3.4), whereas the Spanish reading data across measurement occasions was in closer proximity to the corresponding medians (Figure 3.5). We also see that the English reading data had the most outliers below the whiskers at the last five measurement occasions (fourth to fifth grade time points) (Figure 3.4), whereas the Spanish reading data had outliers above and below the whiskers across all nine measurement occasions (Figure 3.5).

## Male $(n=194)$ and Female $(n=183)$ Students

According to the medians, male students' English (Figure 3.6) and Spanish (Figure 3.7) reading was progressing slightly below their female counterparts. However, the medians for both female and male students' Spanish reading increased substantially between the first and second measurement occasions (second grade fall to second grade spring) (see Figure 3.7). This shows that between the first and second grade transition (which includes the summer break), male and female students' medians visibly increased. Additionally, the medians for both student groups decreased on the seventh measurement occasion (i.e., fifth grade, fall). It is the only transition where the medians appreciably decreased after a summer break. These patterns are not as visible
when focusing on male and female medians for English reading across the nine measurement occasions (Figure 3.6).

However, upon analyzing the smooth line and confidence bands of male and female students' spaghetti plots for English (Figure 3.8) and Spanish reading (Figure 3.9), the lines appear slightly quadratic in form, almost indistinguishable from a linear form. While the decrease between the sixth and seventh time points is still visible (i.e., pink dots are medians for English reading and red dots are medians for Spanish reading), the smooth lines, confidence bands, and the individual spaghetti plots representing each student case, appear continuous not discontinuous.

## Students with English Language Designations and Exceptionalities

There were major differences between the medians of the different student groups at initial status (first grade spring) and final status (fifth grade spring) for both languages. For example, the medians for all student groups were below an English reading value of " 10 " at initial status, indicating that many students in each group were reading below the grade-level expectation in English. However, the medians for group 2 (RFEP designation), group 3 (EO designation), and group 5 (gifted and English language development designation) at final status (fifth grade spring) were above a value of " 20 " indicating that about half of the students in these groups were reading at or above grade-level expectations in English. See Figure 3.10.

Regarding Spanish reading, the median for group 5 (gifted and English language development designation) was above a value of " 10 " at initial status (first grade spring), indicating that about half of the students in this group were reading at or above grade-level expectations in Spanish, while groups 1 to 4 had medians at initial status below a value of " 10 ." By the spring of the fifth grade (final status), group 2 (RFEP designation) and group 5 (gifted
with English language designation) had medians above a value of " 20 ," indicating that about half of the students in these groups were reading at or above grade-level expectations in Spanish. See Figure 3.12.

The English reading box-and-whisker plots between student groups show that there were notable similarities and differences across the spread of the data at different measurement occasions (Figure 3.10). For example, groups 1 to 4 (i.e., EL designation, RFEP designation, EO designation, students with a disability and an English language development designation) had long boxes and whiskers at the first three measurement occasions (first grade spring, second grade fall, and second grade spring).

In contrast, group 5 (students with a gifted and English language development designation) had long boxes and whiskers at the first two measurement occasions. Group 2 (RFEP designation) had boxes and whiskers that shortened across measurement occasions. Group 1 (EL designation) and group 4 (disability designation) had boxes and whiskers that remained fairly long across measurement occasions, with group 4 (disability designation) having the longest boxes and whiskers over time. Long boxes and whiskers indicate that students are spread out around the median rather than clustered in close proximity to the median. The shorter the boxes and whiskers are, the more compact the data is around the median, indicating less variability within students in a particular group.

Group 1 (EL designation), group 3 (EO designation), and group 5 (gifted and English language development designation) have boxes and whiskers that are initially long, then short, and then long again by the final measurement occasion. This hyperbola shape can be visibly seen in the confidence bands in Figure 3.11. Additionally, the shape of the English reading growth line for each student group varies quite a lot. Group 1 (EL designation) and group 3 (EO
designation) had clear decelerating quadratic forms. Group 2 (RFEP designation) had a very slight, quadratic decelerating form that is almost indistinguishable from a linear form. Group 4 (disability and English language development designation) and group 5 (gifted and English language development designation) had linear forms. See Figures 3.10 and 3.11.

Similarly, the Spanish reading box-and-whisker plots of student groups illustrates interesting patterns of change within and between student groups (Figure 3.12). For example, group 1 (EL designation), group 2 (RFEP designation), and group 5 (gifted and English language development designation) have boxes and whiskers that begin long, shorten, and then are log again by the final measurement occasion. The spread of the data form a hyperbola shape which can be seen in the confidence bands in Figure 3.13. In contrast, group 3 (EO designation) has whiskers that shorten across measurement occasions but the boxes remain long, and group 4 (disability and English language development designation) has whiskers and boxes that begin long but shorten across measurement occasions (Figure 3.12).

The shape of the student groups' Spanish growth trajectories varied. Group 1 (EL designation) and group 2 (RFEP designation) appeared to have a slight decelerating quadratic form, almost indistinguishable from a linear form. Group 3 (EO designation) had a mostly linear form. Group 4 (disability and English language development designation) and group 5 (gifted and English language development designation) had " S " shaped lines (Figure 3.13).

## Figure 3.4

Boxplots of Students' English Reading Levels at Each Occasion ( $N=377$ students)


Note. The x-axis represents measurement occasions for English reading, "e": e4 = first grade, spring; e5 = second grade, fall; e6 = second grade, spring; e7 = third grade, fall; e8 = third grade, spring, e9 = fourth grade, fall; e10 = fourth grade, spring; e11 = fifth grade, fall; e12 = fifth grade, spring.

Figure 3.5
Boxplots of Spanish Reading Levels at Each Occasion ( $N=377$ students)


Note. The x -axis represents measurement occasions for Spanish reading, " $\mathrm{s} ": \mathrm{s} 4=$ first grade, spring; $\mathrm{s} 5=$ second grade, fall; $\mathrm{s} 6=$ second grade, spring; $\mathrm{s} 7=$ third grade, fall; $\mathrm{s} 8=$ third grade, spring, $\mathrm{s} 9=$ fourth grade, fall; $\mathrm{s} 10=$ fourth grade, spring; $\mathrm{s} 11=$ fifth grade, fall; $\mathrm{s} 12=$ fifth grade, spring.

Figure 3.6
Box-and-Whisker-Plots of Female $(n=183)$ and Male $(n=194)$ Students' English Reading Proficiency from First to Fifth Grade


Note. $0=$ female; $1=$ male. The x -axis represents nine measurement occasions, $0=$ first grade, spring; $1=$ second grade, fall; $2=$ second grade, spring; $3=$ third grade, fall; $4=$ third grade, spring, $5=$ fourth grade, fall; $6=$ fourth grade, spring; $7=$ fifth grade, fall; $8=$ fifth grade, spring.

## Figure 3.7

Box-and-Whisker-Plots of Female $(n=183)$ and Male $(n=194)$ Students'Spanish Reading

## Proficiency from First to Fifth Grade



Note. $0=$ female; $1=$ male. The x -axis represents nine measurement occasions, $0=$ first grade, spring; $1=$ second grade, fall; $2=$ second grade, spring; $3=$ third grade, fall; $4=$ third grade, spring, $5=$ fourth grade, fall; $6=$ fourth grade, spring; $7=$ fifth grade, fall; $8=$ fifth grade, spring.

## Figure 3.8

Spaghetti Plots of Female $(n=183)$ and Male $(n=194)$ Students' English Reading Proficiency from First to Fifth Grade


Note. $0=$ female; $1=$ male. Pink dots represents the medians. The blue line is the estimated curve line of all of the individual plots for a group. The gray shadow around the blue curve line is the confidence band. The x -axis represents nine measurement occasions, $0=$ first grade, spring; $1=$ second grade, fall; $2=$ second grade, spring; $3=$ third grade, fall; $4=$ third grade, spring, $5=$ fourth grade, fall; $6=$ fourth grade, spring; $7=$ fifth grade, fall; $8=$ fifth grade, spring.

Figure 3.9
Spaghetti Plots of Female $(n=183)$ and Male $(n=194)$ Students'Spanish Reading Proficiency from First to Fifth Grade


Note. $0=$ female; $1=$ male. Red dots represents the medians. The blue line is the estimated curve line of all of the individual plots for a group. The gray shadow around the blue curve line is the confidence band. The x -axis represent nine measurement occasions, $0=$ first grade, spring; $1=$ second grade, fall; $2=$ second grade, spring; $3=$ third grade, fall; $4=$ third grade, spring, $5=$ fourth grade, fall; $6=$ fourth grade, spring; $7=$ fifth grade, fall; $8=$ fifth grade, spring.

Figure 3.10
Box-and-Whisker-Plots of Student Subgroups' English Reading Proficiency from First to Fifth

## Grade



Note. The x -axis represents nine measurement occasions, $0=$ first grade, spring; $1=$ second grade, fall; $2=$ second grade, spring; $3=$ third grade, fall; $4=$ third grade, spring, $5=$ fourth grade, fall; $6=$ fourth grade, spring; $7=$ fifth grade, fall; $8=$ fifth grade, spring.
$1=$ Students with an EL designation $(\mathrm{n}=113)$
$2=$ Students with an RFEP designation $(\mathrm{n}=125)$

3 = Students with an EO (IFEP/PSEL) designation ( $\mathrm{n}=37$ )
4 = Students with a disability and an English language development designation ( $\mathrm{n}=47$ )
$5=$ Students with a gifted and an English language development designation ( $\mathrm{n}=55$ )

## Figure 3.11

Spaghetti Plots of Student Subgroups' English Reading Proficiency from First to Fifth Grade


Note. Pink dots represents the medians. The blue line is the estimated curve line of all of the individual plots for a group. The gray shadow around the blue curve line is the confidence band. The $x$-axis represents nine measurement occasions, $0=$ first grade, spring; $1=$ second grade, fall; $2=$ second grade, spring; $3=$ third grade, fall; $4=$ third grade, spring, $5=$ fourth grade, fall; $6=$ fourth grade, spring; $7=$ fifth grade, fall; $8=$ fifth grade, spring. $1=$ Students with an EL designation $(\mathrm{n}=113)$
$2=$ Students with an RFEP designation $(\mathrm{n}=125)$
$3=$ Students with an EO (IFEP/PSEL) designation $(\mathrm{n}=37)$
$4=$ Students with a disability and an English language development designation $(\mathrm{n}=47)$
$5=$ Students with a gifted and an English language development designation $(\mathrm{n}=55)$

## Figure 3.12

Box-and-Whisker-Plots of Student Subgroups' Spanish Reading Proficiency from First to Fifth

## Grade



Note. The x -axis represents nine measurement occasions, $0=$ first grade, spring; $1=$ second grade, fall; $2=$ second grade, spring; $3=$ third grade, fall; $4=$ third grade, spring, $5=$ fourth grade, fall; $6=$ fourth grade, spring; $7=$ fifth grade, fall; $8=$ fifth grade, spring.

1 = Students with an EL designation $(\mathrm{n}=113)$
$2=$ Students with an RFEP designation $(\mathrm{n}=125)$

3 = Students with an EO (IFEP/PSEL) designation ( $\mathrm{n}=37$ )
4 = Students with a disability and an English language development designation ( $\mathrm{n}=47$ )
5 = Students with a gifted and an English language development designation ( $\mathrm{n}=55$ )

## Figure 3.13

## Spaghetti Plots of Student Subgroups' Spanish Reading Proficiency from First to Fifth Grade



Note. Red dots represents the medians. The blue line is the estimated curve line of all of the individual plots for a group. The gray shadow around the blue curve line is the confidence band. The x -axis represents nine measurement occasions, $0=$ first grade, spring; $1=$ second grade, fall; $2=$ second grade, spring; $3=$ third grade, fall; $4=$ third grade, spring, $5=$ fourth grade, fall; $6=$ fourth grade, spring; $7=$ fifth grade, fall; $8=$ fifth grade, spring.
$1=$ Students with an EL designation $(\mathrm{n}=113)$
$2=$ Students with an RFEP designation $(\mathrm{n}=125)$
3 = Students with an EO (IFEP/PSEL) designation ( $\mathrm{n}=37$ )
$4=$ Students with a disability and an English language development designation ( $\mathrm{n}=47$ )
$5=$ Students with a gifted and an English language development designation $(\mathrm{n}=55)$

## Students Nested in Cohorts

Box-and-whisker-plots show that students' English (Figure 3.14) and Spanish (Figure 3.15) reading progressed similarly across the six cohorts, as is indicated by the median (horizontal line in each box at each measurement occasion). All cohorts had English and Spanish reading outliers at each measurement occasion. Outliers are visually represented as solid dots below and above the whiskers in the box-and-whisker-plots. Cohorts 2025, 2026, and 2027 stood out. Their medians for English (Figure 3.14) and Spanish ( Figure 3.15) reading were slightly higher than the medians for the other cohorts. Furthermore, their boxes shortened across measurement occasions, indicating that students' reading scores between the 25 th and 75 th quartiles (the box) were closer together. This compression of data points across measurements shows reading proficiency in both languages improved across cohorts, with the last three cohorts showcasing the most improvement.

Figure 3.16 visually captures this development another way. For instance, even though the medians for the six cohorts varied at the first measurement occasion (first grade spring), by the last measurement occasion (fifth grade spring), the medians are closer together. The medians for English reading at the last measurement occasion (fifth grade spring) range from 20 to 21, and are indicative of fifth grade proficiency, specifically, fifth grade fall proficiency (i.e., " 20 ") and fifth grade mid-year proficiency (i.e., "21"). A level of "22" denotes grade-level proficiency for the last measurement occasion (fifth grade spring).

In contrast, the medians for Spanish reading at the last measurement occasion (fifth grade spring) range from 19 to 20 , representing fourth grade spring proficiency and fifth grade fall proficiency respectively. Strikingly, while the medians for Spanish reading in the spring of the first grade (first measurement occasion) were higher than the medians for English, by the spring
of the fifth grade (last measurement occasion), most medians for Spanish reading were one full grade level lower than the medians for English reading. However, cohort 2026's median (for Spanish), and possibly, cohort 2027's median (for Spanish), were exceptions. Lastly, and most unexpectedly, there appears to be a crossroads at the fourth-grade fall measurement occasion, with medians for English reading (from most cohorts) surpassing the medians for Spanish reading from that point onward (see Figure 3.16).

There were some observable differences between the medians across cohorts at each measurement occasion for English (Figure 3.17) and Spanish reading (Figure 3.18).

For example, with regard to students' English reading (at the end of the first grade), cohorts 2022, 2025, and 2026 had higher medians that were equivalent to a first-grade mid-year proficiency, while cohorts 2023, 2024, and 2027 had medians that approximated a kindergarten end-of-the-year proficiency. Nonetheless, most students in cohorts 2023, 2024, 2025, and 2022 graduated from the fifth grade reading at the same English reading level, "20," which is a fifth grade, fall, proficiency level. See Figure 3.17.

The medians for cohorts 2025, 2026 and 2027 were striking, increasing every spring after the first measurement occasion. The median for cohort 2026 at the last measurement occasion (fifth grade spring) was higher than all other cohorts, indicating that most students in this cohort were reading at a fifth-grade mid-year proficiency. Also of note, the medians for cohorts 2025 and 2027 did not decrease or slow down between fourth grade spring and fifth grade fall, as the other cohorts did, but rather increased steadily (Figure 3.17)

Regarding students' Spanish reading levels, cohort 2022's median at the end of the first grade was higher than the medians for the other cohorts at that particular measurement occasion (Figure 3.18), with students reading on target in Spanish (meeting the expected first grade spring
proficiency benchmark). However, while the medians for cohorts 2023, 2024, 2025, 2026, and 2027 were slightly lower than cohort 2022's, their medians indicated that students were reading at a first-grade reading level (equivalent to a first grade, mid-year, proficiency benchmark).

Interestingly, the median for cohort 2025 increased sharply in the fall of the fourth grade, the median for cohort 2027 increased sharply in the spring of the fourth grade, and the medians for cohorts 2025, 2026, and 2027 increased again in the spring of the fifth grade (see Figures 3.16 and 3.20).

The medians for cohorts 2022 and 2026 at the last measurement occasion (fifth grade), indicated that students were reading at a similar Spanish reading level (equivalent to a fifth grade, fall proficiency benchmark), with cohort 2027 seemingly following suit (see Figure 3.18). The medians for cohorts 2023, 2024, and 2025 at the last measurement occasion, were slightly below the medians for cohort 2022 and 2026, approximating a fourth-grade reading proficiency in Spanish (for the end-of-the-year benchmark).

Student cohorts' English (Figure 3.19) and Spanish (Figure 3.20) reading growth trajectories appeared to have a variety of shapes. For example, cohort 2022, cohort 2023, cohort 2024, and cohort 2026 had linear English reading growth trajectories, while cohort 2025 had a decelerating quadratic form. The shape for cohort 2026's English reading growth trajectory was hard to discern because it is missing data for the last measurement occasion, nevertheless, it appeared to have a decelerating quadratic form. In contrast, for Spanish reading, cohort 2024, cohort 2025, cohort 2026, and cohort 2027 had linear reading growth trajectories, whereas cohort 2022 and cohort 2023 had "S" shaped growth trajectories.

## Figure 3.14

Box-and-Whisker-Plots of English Reading Proficiency by Student Cohort


Note. For sample sizes of measurement occasions in each cohort, see Table 3.9. The $x$-axis represents nine measurement occasions, $0=$ first grade, spring; $1=$ second grade, fall; $2=$ second grade, spring; $3=$ third grade, fall; $4=$ third grade, spring, $5=$ fourth grade, fall; $6=$ fourth grade, spring; $7=$ fifth grade, fall; $8=$ fifth grade, spring. Cohort 2027 is missing data for the last measurement occasion because of the stay-at-home order during the Covid-19 pandemic.

## Figure 3.15

Box-and-Whisker-Plots of Spanish Reading Proficiency by Student Cohort


Note. For sample sizes of measurement occasions in each cohort, see Table 3.9. The x -axis represents nine measurement occasions, $0=$ first grade, spring; $1=$ second grade, fall; $2=$ second grade, spring; $3=$ third grade, fall; $4=$ third grade, spring, $5=$ fourth grade, fall; $6=$ fourth grade, spring; $7=$ fifth grade, fall; $8=$ fifth grade, spring. Cohort 2022 is missing Spanish data for measurement occasion 5 because teachers did not test students during that term. Cohort 2027 is missing data for the last measurement occasion because of the stay-at-home order during the Covid-19 pandemic.

## Figure 3.16

Median Line Plots of Spanish and English Reading Proficiency by Student Cohort


Note. For sample sizes of measurement occasions in each cohort, see Table 3.9. The x -axis represents nine measurement occasions, $0=$ first grade, spring; $1=$ second grade, fall; $2=$ second grade, spring; $3=$ third grade, fall; $4=$ third grade, spring, $5=$ fourth grade, fall; $6=$ fourth grade, spring; $7=$ fifth grade, fall; $8=$ fifth grade, spring. Cohort 2022 is missing Spanish data for measurement occasion 5 because teachers did not test students during that term. Cohort 2027 is missing all data for the last measurement occasion because of the stay-at-home order during the Covid-19 pandemic.

## Figure 3.17

Median Line Plots of English Reading Proficiency by Student Cohort


Note. For sample sizes of measurement occasions in each cohort, see Table 3.9. Cohort 2027 is missing data for the last measurement occasion because of the stay-at-home order during the Covid-19 pandemic.

## Figure 3.18

Median Line Plots of Spanish Reading Proficiency by Student Cohort


Note. For sample sizes of measurement occasions in each cohort, see Table 3.9. Cohort 2022 is missing Spanish data for measurement occasion 5 because teachers did not test students during that term. Cohort 2027 is missing data for the last measurement occasion because of the stay-at-home order during the Covid-19 pandemic.

## Figure 3.19

Spaghetti-Plots of English Reading Proficiency by Student Cohort


Note. $1=$ cohort 2022; $2=$ cohort 2023; $3=$ cohort 2024; $4=$ cohort 2025; $5=$ cohort 2026; $6=$ cohort 2027. Cohort 2027 is missing data for the last measurement occasion because of the stay-at-home order during the Covid-19 pandemic. Pink dots represents the medians. The blue line is the estimated curve line of all of the individual plots. The gray shadow around the blue curve line is the confidence band. For sample sizes of measurement occasions in each cohort, see Table 3.9. The $x$-axis represents nine measurement occasions, $0=$ first grade, spring; $1=$ second grade, fall; $2=$ second grade, spring; $3=$ third grade, fall; $4=$ third grade, spring, $5=$ fourth grade, fall; $6=$ fourth grade, spring; $7=$ fifth grade, fall; $8=$ fifth grade, spring.

Figure 3.20

## Spaghetti-Plots of Spanish Reading Proficiency by Student Cohort



Note. $1=$ cohort 2022; $2=$ cohort 2023; $3=$ cohort 2024; $4=$ cohort 2025; $5=$ cohort 2026; $6=$ cohort 2027. Cohort 2022 is missing Spanish data for measurement occasion 5 because teachers did not test students during that term. Cohort 2027 is missing data for the last measurement occasion because of the stay-at-home order during the Covid-19 pandemic. Red dots represents the medians. The blue line is the estimated curve line of all of the individual plots. The gray shadow around the blue curve line is the confidence band. For sample sizes of measurement occasions in each cohort, see Table 3.9. The x -axis represents nine measurement occasions, $0=$ first grade, spring; $1=$ second grade, fall; $2=$ second grade, spring; $3=$ third grade, fall; $4=$ third grade, spring, $5=$ fourth grade, fall; $6=$ fourth grade, spring; $7=$ fifth grade, fall; $8=$ fifth grade, spring.

## Research Question 2: What proportions of students (in different groupings) met or exceeded grade-level benchmark expectations by the fifth grade? <br> Students with an English Language Development and/or Exceptional Designation

Students with a RFEP designation had the largest proportions of students who met or exceeded grade-level benchmark expectations by the fifth grade for English (Figure 3.21) and Spanish reading (Figure 3.22). Students with gifted and English language development (e.g., EL, RFEP, or EO) designations were the second group to have the most students meeting or exceeding fifth grade English and Spanish expectations, followed by students with an EL designation. Students with an EO designation and students with both a disability and English language development designations had the smallest proportions of students meeting/exceeding grade-level expectations.

## Student Cohorts

Proportions of students who met or exceed fifth grade expectation in English (Figure 3.23) and Spanish (Figure 3.24) were calculated for five of the six cohorts: 2022, 2023, 2024, and 2025. Cohort 2026 was omitted from this analysis because students were not tested at the last measurement occasion because of the Covid-19 stay at home order. Cohort 2025 and 2026 had the largest proportion of students meeting or exceeding fifth grade English and Spanish exceptions. Furthermore, both proportion figures, similar to the cohort box-and-whisker plots and spaghetti plots, show that over time, each subsequent cohort appears to increase the number of students meeting/exceeding expectations.

## Figure 3.21

Proportion of Students Developing (78 of 250) or Meeting/Exceeding (172 of 250) Fifth Grade Benchmark Expectations in English


■EL Designation

- RFEP Designation
$\square E O$ Designation
$\square$ Disability and ELD Designations
$\square$ Gifted and ELD Designations

Note. Starting from the inner ring outward: Developing Spanish Readers; Meeting/Exceeding Spanish Proficiency. Data from final status (fifth grade, spring). ELD = English Language Development (EL, RFEP, EO).

Figure 3.22
Proportion of Students Developing ( $n=123$ of 243) or Meeting/Exceeding ( $n=120$ of 243)
Fifth Grade Benchmark Expectations in Spanish


Note. Starting from the inner ring outward: Developing Spanish Readers; Meeting/Exceeding Spanish Proficiency. Data from final status (fifth grade, spring). ELD = English Language Development (EL, RFEP, EO).

Figure 3.23
Proportion of Students in Cohorts Developing ( $n=78$ of 243) or Meeting/Exceeding ( $n=1720 f$ 243) Fifth Grade Benchmark Expectations in English


Note. Starting from the inner ring outward: cohort 222, cohort 2023, cohort 2024, cohort 2025, cohort 2026. Data from final status (fifth grade, spring).

## Figure 3.24

Proportion of Students in Cohorts Developing ( $n=123$ of 243) or Meeting/Exceeding ( $n=120$ of 243) Fifth Grade Benchmark Expectations in Spanish


Note. Starting from the inner ring outward: cohort 222, cohort 2023, cohort 2024, cohort 2025, cohort 2026. Data from final status (fifth grade, spring).

## Research Question 3: What are students' perceptions about their academic and social competence, learning behavior, motivation, and language use in the fourth and fifth grade?

Most of the psychosocial and language frequency covariates had distributions that were negatively skewed. In particular, these distributions indicated that students had a strong sense of self-regarding overall interest/competence in school and peer relations, and were highly motivated to continue learning Spanish and English. In contrast, the external and internal problem behavior subscales were positively skewed, which indicated that students reported having lower external and internal problematic behavior (i.e., "not at all true;" "strongly disagree").

Moreover, the frequency of English use in school subscales for fourth and fifth grade had distributions that were very skewed with short thick tails, resulting in large kurtosis statistics. These distributions indicated that most students in this study reported "always" using English in school in the fourth and fifth grades, skewing the data dramatically. The short tails of these distributions represented those students who reported using English "sometimes" and "most of the time." See Table 3.10.

Table 3.10
Descriptive Statistics of Psychosocial Variables

| Scale | Grade | $N$ | Minimum | Maximum | Range | Mode | Median | Mean | Std. <br> Deviation | Skewness | Kurtosis |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Spanish Motivation | 4 | 166 | 1.83 | 5.00 | 3.17 | 5.00 | 4.06 | 3.97 | 0.74 | -0.64 | -0.06 |
|  | 5 | 183 | 1.00 | 5.00 | 4.00 | 5.00 | 4.13 | 4.08 | 0.76 | -1.22 | 2.57 |
| English Motivation | 4 | 161 | 1.50 | 5.00 | 3.50 | 5.00 | 4.38 | 4.20 | 0.74 | -1.28 | 1.85 |
|  | 5 | 177 | 1.50 | 5.00 | 3.50 | 5.00 | 4.50 | 4.43 | 0.57 | -1.45 | 3.49 |
| Perceived Interest/ <br> Competence in All School Subjects | 4 | 160 | 1.00 | 4.00 | 3.00 | 3.50 | 3.00 | 2.94 | 0.72 | -0.49 | -0.57 |
|  | 5 | 175 | 1.00 | 4.00 | 3.00 | 3.12 | 3.00 | 2.90 | 0.71 | -0.51 | -0.16 |
| Perceived Interest/ Competence in Peer Relations | 4 | 160 | 1.00 | 4.00 | 3.00 | 2.67 | 2.82 | 2.78 | 0.68 | -0.16 | -0.55 |
|  | 5 | 175 | 1.17 | 4.00 | 2.83 | 2.67 | 2.67 | 2.80 | 0.73 | -0.05 | -0.68 |
| Externalizing Problem Behaviors | 4 | 160 | 1.00 | 4.00 | 3.00 | 1.40 | 1.80 | 2.10 | 0.87 | 0.67 | -0.60 |
|  | 5 | 175 | 1.00 | 4.00 | 3.00 | 1.60 | 1.75 | 1.94 | 0.79 | 1.06 | 0.39 |
| Internalizing Problem Behaviors | 4 | 160 | 1.00 | 4.00 | 3.00 | 2.63 | 2.31 | 2.42 | 0.80 | 0.33 | -0.77 |
|  | 5 | 175 | 1.00 | 4.00 | 3.00 | 1.38 | 2.25 | 2.34 | 0.77 | 0.40 | -0.55 |
| Frequency of English Use in the Home | 4 | 157 | 1.00 | 5.00 | 4.00 | 5.00 | 4.50 | 4.29 | 0.82 | -1.38 | 2.12 |
|  | 5 | 170 | 2.00 | 5.00 | 3.00 | 5.00 | 4.50 | 4.36 | 0.71 | -1.04 | 0.44 |
| Frequency of Spanish Use in the Home | 4 | 157 | 1.00 | 5.00 | 4.00 | 5.00 | 4.75 | 4.29 | 0.89 | -1.32 | 1.15 |
|  | 5 | 170 | 1.00 | 5.00 | 4.00 | 5.00 | 4.75 | 4.36 | 0.83 | -1.57 | 2.28 |
| Frequency of English Use in School | 4 | 156 | 1.00 | 5.00 | 4.00 | 5.00 | 5.00 | 4.66 | 0.60 | -2.80 | 11.39 |
|  | 5 | 170 | 1.50 | 5.00 | 3.50 | 5.00 | 5.00 | 4.75 | 0.48 | -3.17 | 14.71 |
| Frequency of Spanish Use in School | 4 | 156 | 2.25 | 5.00 | 2.75 | 5.00 | 4.50 | 4.26 | 0.77 | -0.76 | -0.40 |
|  | 5 | 170 | 2.00 | 5.00 | 3.00 | 5.00 | 4.50 | 4.33 | 0.76 | -0.95 | -0.02 |

## Qualitative Findings

Research Question 4: What do students (from a subsample) think about their bilingualism and their biliteracy development across the fourth and fifth grades?

Portraiture analysis was utilized to capture "the richness, complexity, and dimensionality" of the "meanings" Ricardo and Lorena attached to their reading growth in the fourth and fifth grades (Lawrence-Lightfoot \& Davis, 1997, p. 3, 15). The general aim of this analysis was to "make sense" of the selected student's reading growth trajectory (or process) from their perspective (Bryman, 2006). Students' responses from the LESA and RISA were selected and utilized to narrate students' attitudes and motivations about reading in Spanish and English, as well as their self-perception (e.g., how they describe themselves) about their reading proficiency, growth, and learning.

## Ricardo

## Fourth Grade

When I was in fourth grade, I listened to and spoke Spanish at home so I could be a bilingual person and understand people better, especially my grandparents. And I also listened to and spoke English so I could learn to be bilingual, understand my parents, and get to know people.

At school, I listened to Spanish and English to become a bilingual person. I listened to English to learn new things. I spoke Spanish so I could understand my family and friends better, and I spoke English to communicate with friends and family. I read in Spanish and English to understand both languages.

My reading data, in the fall of my fourth-grade year, showed me that my English was getting higher and leveling up. To me this meant that I was reading a lot and focusing a lot. This
mattered to me because I was very close to reaching a level "Z." I wanted to be the kind of bilingual reader who read a lot and focused on their reading. I felt great when I read.

While in fourth grade, I wanted my teacher to know that I would have liked to have spoken English and Spanish every day, and that I thought speaking both languages was a great way to communicate with friends. And I wanted my parents to know that I didn't like speaking Spanish and that I didn't know many words in Spanish, but I thought English was cool and that when I learned a new word in English I sometimes used it in a way I wasn't supposed to.

Figure 3.25
Ricardo's (pseudonym) Dual Proficient Reading Profile


Note. Ricardo was not tested in Spanish in the fall of this second-grade year, which explains the gap between the Spanish data point at first grade (spring) and second grade (spring) data point.

## Fifth Grade

In fifth grade, I spoke English at home because I sometimes felt uncomfortable speaking Spanish at home, and I did not mind if my parents cared or not about how I felt. I heard English at school because most people and kids spoke it, and I spoke it because I mostly did not like speaking Spanish.

Looking at my reading data, in the fall of my fifth-grade year, made me realize that I have been practicing two languages my entire life because the data showed me all of my Spanish and English levels since I was a kindergartener, and that I had been growing as a reader and practicing a lot. Through the years, I became smarter with reading. I think I improved my reading because I read a lot of books that were my level and I inferred as I read.

While in fifth grade, I wanted to be the kind of bilingual reader who went to the library and searched for words in Korean because I wanted to learn more than four languages. I knew some words in German and Korean, but I did not know how to read German or Korean. I felt proud being a bilingual reader because I had learned two languages since I was little and because my parents came from a Spanish region.

## Lorena

## Fourth Grade

When I was in fourth grade, I heard Zapoteco in my house because my whole family speaks Zapoteco except for me and my brother. The reason they speak Zapoteco is because they are from Oaxaca, San Mateo in Mexico. People who live there speak Zapoteco most of the time, so my family didn't know any other language. I taught them Spanish. I also spoke English at home because it helped me understand school tasks that were hard for me to do at home by
myself. People at home were busy so they could not help me. I needed to help myself by using what I know.

At school, during recess and lunch, I would hear teachers, principals, friends, and my peers speak English. In class we would talk with each other in English, and I would hear Spanish when my classmates' talked to me. In class, I talked in Spanish because we spoke it every day, except for Wednesdays; we did not speak Spanish then. I spoke English at school because I understood English a lot more than Spanish, but I also spoke Spanish because I knew that speaking more than one language is better for the mind. I read in three languages so I could think differently, discover more, and to grow more as a reader.

My reading data, from the fall of my fourth-grade year, made me realize that I was growing as a reader and that I was supported as a reader. I had great teachers that helped me and supported my education for college. I noticed that my reading grew as my reading in both languages leveled up. It helped me to know that my reading was advancing for college, so I could grow up to be who I wanted to be. This mattered to me because I want to be a veterinarian and I might get the chance to be one.

My growth was important because it meant I got to read books that were at a higher level. It also meant I had a better chance for a better future. I wanted to be the kind of multilingual reader who would grow up to be who they want to be and reach her goal. And, a multilingual reader who could learn from a book and use what she knows about the book to make the world a better place. I felt good because looking at my bar graphs made me a better reader. It made me think about how important school is. It made me think about how I need to become a better reader.

Figure 3.26
Lorena's (pseudonym) Dual Proficient Reading Profile


Note. Lorena was not tested in Spanish or English in the first grade (spring). She was a fifth grader when the first stay-at-home order was initiated because of Covid-19, hence the missing fifth grade (spring) data point.

While in fourth grade, I wanted my teacher to know that I liked listening to English because I knew English better than Spanish, Zapotec and French. I also wanted my teacher to know that I kind of appreciated that she was kind of learning Spanish. I got used to her Spanish. I would have liked to have told her that I was more used to speaking English than Spanish, and that I needed to learn more Spanish to get better at it and maybe get more used to speaking it. I wanted my parents to know that I wanted to learn Zapoteco, so I could understand them and so they could understand me too. I would say words in Spanish, but they would not understand me.

I wanted my parents to learn English because if they needed help with something, people might not be able to help them with their problem.

## Fifth Grade

In fifth grade, I read in three languages because it helped me be a better reader, and because in this school I had to read in English and Spanish. I read Zapoteco because it is an important language in my family. My reading data showed me that I had grown as a reader of English. It showed me that I learned to read English, even though I started reading and testing in English as a second grader. This made me realize I was a good reader.

The last thing my reading data showed me was that I was learning Spanish and English equally. To me, this meant that I was an independent reader, and that I was learning both languages normally. This mattered to me because I had been learning English for two years (in second and third grade). Another reason it mattered to me was because English is a very important language to know in the United States, and my family cannot guide me.

While in fifth grade, I wanted to be the kind of multilingual reader who grows their reading level easily in three languages, is fluent in three languages, and uses what she knows in three languages to help her in school. At the time, I felt stressed because there were three languages packed in my head, but I also felt proud because I had grown as a reader. I never would have thought that I could have grown so much as a reader.

## Key Takeaways

These portraits provided nuance and complexity to the quantitative analysis. For example, Ricardo, who became a dual proficient reader by the end of the fifth grade, became reluctant to utilize Spanish to communicate with others within a one-year span (fourth grade spring to fifth grade spring). Yet, he was very committed to reading in Spanish and English, and
to learning how to read other languages. He also recognized the importance of being bilingual, particularly developing as a reader of two languages, and knowing that one of his languages is connected to his parents' country of birth.

Lorena's narrative highlights how she navigated her personal and academic commitments by utilizing the languages she is learning in school to help her at home. For example, her family mostly speaks Zapoteco and she does not know the language, so she teaches her parents Spanish to facilitate communication between them. She uses English to help her complete her school work. Learning to read and speak Zapoteco was salient and central to Lorena in the fourth and fifth grades. She describes Zapoteco as important to her family, indicating that the language is not just important to her. In the fourth and fifth grades, she was committed to developing all three languages -- Spanish, English, and Zapoteco. However, seeing her English reading progress was especially momentous because she was aware that English is an "important language to know in the United States, and" her "family cannot guide" her.

## Discussion

Utilizing a complex systems (Larsen-Freeman \& Cameron, 2012) and multicompetence perspective (Cook, 2016), this mixed-methods study quantitatively examined longitudinal descriptive analysis and calculations of proportions of students exceeding certain benchmark values to identify overall patterns of English and Spanish reading change for different bi/multilingual student groups. Additionally, student psychosocial covariates (i.e., motivation, socioemotional self-concept) were examined using descriptive analysis across two time points (fourth and fifth grade) to explain overall reading patterns. Then, qualitatively, Ricardo and Lorena's bilingual reading trajectories were explored to understand students' thoughts about developing as bilingual and or multilingual readers.

## Everyone Grows Over Time (Just Differently)

Most notably, individual students, student groups, and student cohorts had growth trajectories that showed substantial growth in English and Spanish reading. However, groups varied in functional form. That is the shape of the growth trajectories varied by student group and student cohort. For example, while EL designated students' English and Spanish reading trajectories appeared to have decelerating quadratic forms, their Spanish growth form was almost indistinguishable from a linear form. These findings indicate that perhaps EL designated students may benefit from dual language programming in middle school to promote steady reading growth in English and Spanish. This is especially salient knowing that students English and Spanish reading appear to be growing in close proximity to each other.

EO designated students had an English reading trajectory that was a decelerating quadratic form and a Spanish reading trajectory that appeared mostly linear. This is an interesting finding because EO students are usually more English dominant than Spanish dominant because they are learning Spanish as a heritage language not a home language.

Most notably, students with disabilities or gifted designations had linear English reading growth trajectories, indicative of steady, continuous growth. Both student groups had " $S$ " shaped Spanish reading trajectories. In other words, both student groups had Spanish trajectories that had increases of growth followed by slower growth.

Also noteworthy, is the fact that although most students began (kindergarten fall) reading in Spanish below grade-level benchmark expectation, students' trajectories in both language show tremendous growth.

The Transition into the Upper Elementary Grades are Very Important to Bilingual Reading Development

Notably, the medians for cohorts 2025, 2026, 2027 increased in the upper elementary grades (fourth to fifth grade). For example: The median for cohort 2025 increased sharply in the fall of the fourth grade, the median for cohort 2027 increased sharply in the spring of the fourth grade, and the medians for cohorts 2025, 2026, and 2027 increased again in the spring of the fifth grade. This indicates that the fourth and fifth grades are especially important in strengthening Spanish reading growth and preventing stagnation or deceleration, especially since research has established that Spanish reading appears to decelerate or slow down after the fourth grade (Babino, 2017; Yu \& Bailey, in review).

## The Bilingual Program Improved Over Time

Furthermore, the proportion of students meeting or exceeding fifth grade English and Spanish reading expectations increased over time. Cohort 2026 had the largest proportions of students reading in English and Spanish at or above grade-level by the end of the fifth grade.

Furthermore, students were highly motivated to learn Spanish and English in the fourth and fifth grades. They also reported having a strong sense of self-regarding overall interest/competence in school and peer relations. These finding contrasts recent literature that suggests that as students of Latinx heritage become less motivated with learning Spanish in school, their interest with learning English in school increases substantially by the time they reach the upper elementary school grades (Babino \& Stewart, 2017).

Furthermore, students reported having lower external and internal problematic behavior (i.e., "not at all true;" "strongly disagree"), which is remarkable considering research has found that although students of Latinx heritage have a positive self-concept, they also experience high external and internal behavior problem (socioemotional self-concept).

Regarding language use in school, students' frequency of Spanish and English increased between the fourth and fifth grades. Reported frequency of language use in the home varied. While students' frequency of English use at home increased, their frequency of Spanish use at home decreased between the fourth and fifth grades.

This trend is evident in Ricardo's portrait. He goes from not being very fond of speaking Spanish (in the home or in school) as a fourth grader, to being somewhat averse to it as a fifth grader. Yet, he was also very proud of being a bilingual reader and seemed interested in continuing to develop his Spanish reading while also learning more languages. These findings do not quite support the current research on Latinx students' attitudinal shifts towards the preference for English academically and socially as others have found (e.g., Babino \& Stewart, 2017; Block, 2023).

## Conclusion

This study speaks to the importance of analyzing longitudinal and bilingual achievement data with a bi/multilingual student sample to identity the different and unexpected ways groups of students develop their home/heritage languages, including English. Furthermore, examining program development using longitudinal student data teachers have collected with great care, and finding positive program improvement is a testament to what is possible when teachers hold each other accountable. These findings align with best case scenarios, that postulate that if a bilingual program is going to be highly successful promoting and protecting students home/heritage languages it must cultivate an environment that encourages students' attitudes and motivations (investments) toward both of their languages.

## References

Agirdag, O. (2014). The long-term effects of bilingualism on children of immigration: student bilingualism and future earnings. International Journal of Bilingual Education and Bilingualism, 17(4), 449-464.

Anderson, D. (2012). Hierarchical linear modeling (HLM): An introduction to key concepts within cross-sectional and growth modeling frameworks. Oregon: Behavioral Research \& Teaching.

Ardasheva, Y., Tong, S. S., \& Tretter, T. R. (2012). Validating the English language learner motivation scale (ELLMS): Pre-college to measure language learning motivational orientations among young ELLs. Learning and Individual Differences, 22(4), 473-483.

Babino, A. (2017). Same program, distinctive development: Exploring the biliteracy trajectories of two dual language schools. Bilingual Research Journal, (40)2, 169-186.

Babino, A., \& Stewart, M. A. (2017). "I like English better": Latino dual language students' investment in Spanish, English, and bilingualism. Journal of Latinos and Education, 16(1), 18-29. https://doi.org/10.1080/15348431.2016.1179186

Bailey, A. L. (2022). Young children's language attitudes with implications for identity in a US dual-language immersion classroom. (pp. 321-340). In W. Ayres-Bennett \& L. G. Fisher (Eds.), Multilingualism and Identity: Interdisciplinary Perspectives. Cambridge University Press.

Bailey, A. L., Moughamian, A. C., \& Dingle, M. (2008). The contribution of Spanish-language narration to the assessment of early academic performance of Latino students. In A. McCabe, A. L. Bailey, \& G. Melzi (Eds.), Spanish-language narration and literacy:

Culture, cognition, and emotion, (pp. 296-331). Cambridge, UK: Cambridge University Press.

Bailey, A. L., \& Osipova, A. V. (2016). Children's multilingual development and education: Fostering linguistic resources in home and school contexts. Cambridge University Press.

Banks, J. A., \& Banks, C. A. M. (Eds.). (2019). Multicultural education: Issues and perspectives (10th ed.). John Wiley \& Sons.

Bartlett M. S. (1954). A further note on the multiplying factors for various chi-square approximations in factor analysis. Journal of the Royal Statistical Society, Series B, 16, 296-298.

Bearse, C., \& de Jong, E. J. (2008). Cultural and linguistic investment: Adolescents in a secondary two- way immersion program. Equity \& Excellence in Education, 41(3), 325340.

Birman, D., \& Addae, D. (2015). Acculturation. In C. Suárez-Orozco, M. M. Abo-Zena, \& A. K. Marks (Eds.), Transitions: The development of children of immigrants (pp. 122-141). New York University Press.

Bryman, A. (2006). Integrating quantitative and qualitative research: How is it done? Qualitative Research, 6(1), 97-113.

Block, N. C. (2023). Students' attitudinal development in a dual language bilingual education program from grade 1 to grade 5. Bilingual Research Journal, 45, 337-357.

Brymam, A. (2006). Integrating quantitative and qualitative research. Journal of Mixed Methods Research, l(1), 8-22.

Cerda, J., Darriet, C., Quartz, K. H., Kim, Q., McNaughton, I., \& Jiménez, R. (in review). Building on community assets: A school's journey developing a TK-12 community language approach.

Chávez-Moreno, L. C. (2022). Racist and raciolinguistic teacher ideologies: When bilingual education is "inherently culturally relevant" for Latinxs. The Urban Review, 54(4), 554575.

Cohen, J., Cohen, P., West, S. G., \& Aiken, L. S. (2003). Applied multiple regression/correlation analysis for the behavioral sciences (3rd ed.). Lawrence Erlbaum Associates.

Collins, B. A., O'Conner, E. E., Suárez-Orozco, C., Nieto-Castañon, A., \& Toppelberg, C. O. (2014). Dual language profiles of Latino children of immigrants: Stability and change over the early school years. Applied Psycholinguistics, 35(3), 581-620. https://doi.org/10.1017/S0142716412000513

Combs, M. C., Gonzalez, L. C., \& Moll, L. C. (2011). U.S. Latinos and the learning of English: The metonymy of language policy. In T. L. McCarty (Ed.), Ethnography and language policy (pp. 185-204). Routledge.

Comrey, A. L., \& Lee, H. B. (1992). A first course in factor analysis (2 ${ }^{\text {nd }}$. Ed.). Erlbaum.
Cook, V. (2016). Premise of multi-competence. In V. Cook \& L. Wei (Eds.), The Cambridge handbook of linguistic multi-competence, (pp. 1-25). Cambridge University Press.

Creswell, J. W., \& Plano Clark, V. L. (2017). Designing and conducting mixed methods research (2nd ed.). Sage.

Daniel, J., Quartz, K. H., \& Oakes, J. (2019). Teaching in community schools: Creating conditions for deeper learning. Review of Research in Education, 43(1), 453-480.
de Bot, K. (2016). Multi-competence and dynamic/complex systems. In V. Cook, \& L. Wei (Eds.), The Cambridge handbook of linguistic multi-competence, (pp. 125-141). Cambridge University Press.

Editors. (February 2022). Teaching about Racism Is Essential for Education, Scientific American, 10(2), 326. doi:10.1038/scientificamerican0222-10

Fountas \& Pinnell A to Z Benchmark Assessment System. (2011). Field study of reliability and validity for sistema de evaluación de la lectura, grados $K-2$, niveles $A-N$. Heinemann.

Fountas \& Pinnell A to Z Benchmark Assessment System. (2012). Field study of reliability and validity of the Fountas \& Pinnell benchmark assessment systems 1 and 2. Heinemann.

Genesee, F., Lindholm-Leary, K., Saunders, W., \& Christian, D. (2005). English language learners in US schools: An overview of research findings. Journal of Education for Students Placed At Risk, 10(4), 363-385. https://doi.org/10.1207/s15327671espr1004_2

Griffin, K. M., Bailey, A. L., \& Mistry, R. S. (2019). What educators of young dual language immersion students learn from a bilingual approach to assessment. Early language learning and teacher education: International research and practice, 242-261.

Grimm, R. P., Solari, E. J., \& Gerber, M. M. (2018). A longitudinal investigation of reading development from kindergarten to grade eight in a Spanish-speaking bilingual population. Reading and Writing, 31, 559-581.

Grimm, K. J., Ram, N., \& Estabrook, R. (2017). Growth modeling: Structural equation and multilevel modeling approaches. Guilford Publications.

Gómez-Bellengé, F., Rodgers, E., Wang, C., \& Schulz, M. (2005, April). Examination of the validity of the Observation Survey with a comparison to ITBS. In annual meeting of the American Educational Research Association, Montreal, Quebec, CN.

Gómez-Bellengé, F. X., \& Thompson, J. R. (2005). US norms for tasks of an observation survey of early literacy achievement. Reading Recovery/Descubriendo la Lectura, National Data Evaluation Center. The Ohio State University College of Education, School of Teaching and Learning, Reading Recovery. NDEC, 2.

Grosjean, F. (1998). Studying bilinguals: Methodological and conceptual issues. Bilingualism: Language and Cognition, 1(02), 131-149.

Hirata-Edds, T., \& Peter, L. (2016). Multi-competence and endangered language. In V. Cook, \& L. Wei (Eds.), The Cambridge handbook of linguistic multi-competence, (pp. 321-337). Cambridge University Press.

Hoyle, R. H., \& Gottfredson, N. C. (2015). Sample size considerations in prevention research applications of multilevel modeling and structural equation modeling. Prevention Science, 16, 987-996. https://doi.org/10.1007/s11121-014-0489-8

Hulstijn, J. H. (2015). Language proficiency in native and non-native speakers: Theory and research. (Vol. 41), John Benjamins Publishing.

Kroll, J. F., Bobb, S. C., \& Hoshino, N. (2014). Two languages in mind: Bilingualism as a tool to investigate language, cognition, and the brain. Current directions in psychological science, 23(3), 159-163.

Larsen-Freeman, D. \& Cameron, L. (2012). Complex systems and applied linguistics. Oxford University Press.

Lasagabaster, D. (2017). Language learning motivation and language attitudes in multilingual Spain from an international perspective. The Modern Language Journal, 101(3), 583596.

Lawrence-Lightfoot, S. and Davis, J.H., (1997). The art and science of portraiture. Jossey-Bass.

Lee, J. C., \& Klugman, J. (2013). Latino school concentration and academic performance among Latino children. Social Science Quarterly, 94(4), 977-1015.

Lee, E., \& Hong, S. (2021). Adequate sample sizes for a three-level growth model. Frontiers in Psychology, 12, 685496. https://doi.org/10.3389/fpsyg.2021.685496

Lindholm-Leary, K., \& Block, N. (2010). Achievement in predominantly low SES/Hispanic dual language schools. International Journal of Bilingual Education and Bilingualism, 13(1), 43-60. https://doi.org/10.1080/13670050902777546

Lindholm-Leary, K. (2016). Bilingualism and Academic Achievement in Children in Dual Language Programs. In E. Nicoladis \& S. Montanari (Eds.), Bilingualism across the lifespan: Factors moderating language proficiency, (pp. 203-223). American Psychological Association.

Marks, A., Pieloch, K., Suárez-Orozco, C. \& Abo-Zena, M. (2015). 2. School Contexts. In C. Suárez-Orozco, M. Abo-Zena \& A. Marks (Ed.), Transitions: The Development of Children of Immigrants (pp. 47-60). New York University

Press. https://doi.org/10.18574/nyu/9780814770948.003.0008
Marsh, H. W., Relich, J. D., \& Smith, I. D. (1983). Self-concept: The construct validity of interpretations based upon the SDQ. Journal of Personality and social psychology, 45(1), 173.

Marsh, H. W. (1990). The structure of academic self-concept: The Marsh/Shavelson model. Journal of Educational psychology, 82(4), 623.

Marsh, H. W., \& Hattie, J. (1996). Theoretical perspectives on the structure of self-concept. In B. A. Bracken (Ed.), Handbook of self-concept: Developmental, social, and clinical considerations (pp. 38-90). John Wiley \& Sons.

McArthur, G., Badcock, N., Castles, A., \& Robidoux, S. (2022). Tracking the relations between children's reading and emotional health across time: Evidence from four large longitudinal studies. Reading Research Quarterly, 57(2), 555-585.
https://doi.org/10.1002/rrq. 426
McCormick E. M. (2021). Multi-Level Multi-Growth Models: New opportunities for addressing developmental theory using advanced longitudinal designs with planned missingness. Developmental Cognitive Neuroscience, 51, 101001. https://doi.org/10.1016/j.den.2021.101001

National Association for Multicultural Education. (2022). NAME Statement on Critical Race Theory (CRT). https://nameorg.org/news_manager.php?page=24929

Niehaus, K., \& Adelson, J. L. (2013). Self-concept and native language background: A study of measurement invariance and cross-group comparisons in third grade. Journal of Educational Psychology, 105(1), 226-240. https://doi.org/10.1037/a0030556

Palmer, D., \& Martínez, R. A. (2013). Teacher agency in bilingual spaces: A fresh look at preparing teachers to educate Latina/o bilingual children. Review of Research in Education, 37(1), 269-297.

Potowski, K. (2007). Language and identity in a dual immersion school (vol. 63). Multilingual Matters.

Pringle, R. S. (2020). Foreword. In: Sleeter, C. E. \& Zavala, M. What the research says about ethnic studies (iv). National Education Association.

Raudenbush, S. W., \& Bryk, A. S. (2002). Hierarchical linear models: Applications and data analysis methods (Vol. 1). Sage.

Relyea, J. E., \& Amendum, S. J. (2020). English reading growth in Spanish-speaking bilingual students: Moderating effect of English proficiency on cross-linguistic influence. Child Development, 91(4), 1150-1165.

Rojas, R., \& Iglesias, A. (2013). The language growth of Spanish-speaking English language learners. Child development, 84(2), 630-646. 10.1111/j.1467-8624.2012.01871.x

Rumbaut, R. R. G., Massey, D. D. S., \& Bean, F. F. D. (2006). Linguistic life expectancies: Immigrant language retention in southern California. Population and Development Review, 32(3), 447-460.

Rumbaut, R. G. (2014). English plus: Exploring the socioeconomic benefits of bilingualism in southern California. The bilingual advantage: Language, literacy, and the labor market, 182-205.

Schensul, S. L., Schensul, J. J., \& LeCompte, M. D. (2013). Essential ethnographic methods: A mixed methods approach (Vol. 3). Rowman \& Littlefield.

Seltzer, M. \& Rose, M. (2011). Constructing analyses: The development of thoughtfulness in working with quantitative methods. In C. Conrad \& R. Serlin (Eds.), Handbook for research in education: Engaging ideas and enriching inquiry, (2nd ed.) (pp. 245262). Sage.

Singer, J. D., \& Willett, J. B. (2003). Applied longitudinal data analysis: Modeling change and event occurrence. Oxford University Press.

Steele, J. L., Slater, R., Zamarro, G., Miller, T., Li, J. J., Burkhauser, S. \& Bacon, M. (2017). Dual-language immersion programs raise student achievement in English, Santa Monica, Calif.: RAND Corporation, RB-9903, 2017.

Suárez-Orozco, C., \& Suárez-Orozco, M. M. (2001). Children of immigration. Harvard University Press.

Suárez-Orozco, C., Suárez-Orozco, M. M., \& Todorova, I. (2008). Learning a new land: Immigrant students in American society. Harvard University Press.

Tabachnick, B. G., \& Fidell, L. S. (2013). Using multivariate statistics (Vol. 6). Pearson.
Tabors, P. O., \& Snow, C. E. (2001). Young bilingual children and early literacy development. Handbook of early literacy research, 1, 159-178.

Umansky, I., \& Reardon, S. F. (2014). Reclassification patterns among Latino English learner students in bilingual, dual immersion, and English immersion classrooms. American Educational Research Journal, 51(5), 1-34.

United States. (1789) Bill of Rights. [Place of Publication Not Identified: Publisher Not Identified, -09-25] [Image] Retrieved from the Library of Congress, https://www.loc.gov/item/2021667570/

Wilson. R. (2021, September 29). 'Woke,' 'multiculturalism,' 'equity': Wisconsin GOP proposes banning words from school. The Hill. https://thehill.com/homenews/state-watch/574567-woke-multiculturalism-equity-wisconsin-gop-proposes-banning-words from/

## CHAPTER 4

## STUDY 3:

How Teachers Responsively Adapt Practice to Support Disciplinary Content and Bilingual Language Learning for Linguistically Diverse Students


#### Abstract

Utilizing phenomenological epistemology and drawing from perspectives on language teaching and learning, this study examined the adaptations bi/multilingual teachers made to their practice and knowledge base to meet diverse students' needs and leverage their assets. Inductive and deductive codes were applied to teacher $(\mathrm{N}=13)$ semi-structured interview transcripts. Findings revealed that teacher-led professional development and student feedback were central to teachers' adaptation process. Furthermore, teacher adaptation did not end in the moment. Teachers reflected on the adaptive experience afterwards, which often led them to further modify instruction and/or curriculum.


## Introduction

Classrooms are socially complex learning environments. They are complex because they are composed of teachers and students, who have different backgrounds (racial, ethnic, cultural and linguistic), in addition to unique histories, beliefs, experiences, and expertise, and whose teaching and learning are bound by the cultural-historical milieu of a school and society. For an educator to effectively navigate these learning contexts and provide all students with an equitable education, flexibility, reflexivity, creativity, and criticality in their pedagogical approaches are recommended (Corso, 2008; Johnston et al., 2016). Adaptive teaching, when teachers utilize pedagogical knowledge to adjust their teaching to the social, linguistic, cultural, and instructional needs and assets of individual students (Parsons et al., 2018), has been found to be a viable approach to ensure all students, specifically English learner (EL) students (who are developing English as a new language at school) are learning the disciplinary content and language skills necessary to move their learning forward (Von Esch \& Kavanagh, 2018).

Indeed, extant literature has concluded (Bransford et al., 2005; Hatano \& Oura, 2003; Lucas, 2011; Stigler \& Miller, 2018) and empirically based teaching frameworks (Danielson, 2011) and teaching standards (Council of State School Officers, 2011) have explained that adaptability is essential to quality teaching. Furthermore, scholars (Lucas, 2011) note that quality teaching for students who are learning English as a new language would require teacher adaptability, that is teachers equipped to make informed decisions about how and when to implement instructional strategies within the unpredictable context of the classroom. Still, little research has explored what and how mechanisms specific to adaptive teaching converge or diverge to foster, encourage, or hinder adaptive teaching in complex settings (Parsons et al., 2018), such as dual-language classrooms, where students are formally learning disciplinary
content and language skills in two or more languages. Describing what mechanisms influence adaptive teaching and understanding the why and the how would help deepen our understanding of how to better equip dual-language schools and teachers to responsively support student learning.

Equally important, adaptive teaching (see Dozier et al., 2011; Johnston et al., 2016) shares key tenets with teaching for social justice (see Dover 2013), which is an outgrowth of the following conceptual and pedagogical philosophies: democratic education (see Dewey, 1916), critical education (see Freire 1970) multicultural education (see Banks 1995), culturally relevant/responsive/ sustaining education (see Gay, 2000; Ladson-Billings, 1995; Nieto, 2004; Paris 2012), and social justice education (Adams et. al., 1997; McDonald \& Zeichner, 2009).

Shared tenets include: drawing on students' assets, building sustaining mutualistic relationships with families, applying insights shared by families to extend understanding of learners, actively (re)examining conceptualizations about diverse learners, and questioning the knowledge gathered from classroom data for equality and equity (i.e., using a critical lens to unmask or unmake oppressive systems, also known as problem-posing) (Duffy, 2009; Dozier et al., 2011; Johnston et al., 2016). Thus, it would be difficult to implement adaptive pedagogical approaches without providing in-service and preservice teachers with comprehensive training in teaching for social justice to increase their understanding of teaching standards, frameworks, curricula, and pedagogies that address adaptability.

To date, various teacher education and professional development programs advocate for the pedagogical philosophies that constitute teaching for justice (Parkhouse et al., 2019). On the one hand, coursework and/or professional development on multicultural education, differentiated instruction (an instructional approach analogous to adaptive teaching; Parsons et al., 2018), and
teaching for social justice have mostly focused on training pre-service and in-service White teachers to teach diverse students with little success (Liu \& Ball, 2019; Liu, 2015, 2017). On the other hand, less attention has been given to the preparation and professional development of teachers of Color to teach diverse learners (Liu \& Ball, 2019) and how teachers of Color, specifically multilingual teachers of Color utilize knowledge and beliefs to modify pedagogical practices (Kohli, 2016) when teaching disciplinary content using Spanish and/or English as the medium of instruction.

To address these gaps, this phenomenological study draws on language-program planning (Valdés, 2018) and language policy (Ruiz, 1984) perspectives to examine teachers' retrospective narrative-based accounts (from semi-structured interviews) about their experiences teaching and learning. The aim of this study is to understand the ways in which teachers of diverse backgrounds, who teach in a social-justice oriented, community-based, Spanish maintenance bilingual program, deliberately developed pedagogical practices to responsively support learning for linguistically diverse students. Teacher deliberations are operationalized as "the decisions made by teachers individually and/or collectively, informed by, and in some cases, a manifestation of, state and institutional policies, practices, and ideologies" (Cerda et al., in review).

## Theoretical Framework

Conceptually, this study utilizes Valdés' (2018) framework on the curricularization of language/s, which identifies the macro mechanisms or systems, such as policies, ideologies, and core program elements, that may influence the way that language is standardized and transformed into an academic subject when it is taught in school. Importantly, in recognizing the influence of macro mechanisms on the process of curricularization, this framework provides the
opportunity to critically examine the ways in which pedagogical and structural elements of language-program models are or are not providing equitable learning opportunities for linguistically diverse children whose languages and/or dialects have been marginalized and/or racialized in school settings. Thus, teachers' decisions (as local policy) were examined because local policy similar to state and/or federal policy informs the curricularization of language (McCarty, 2015). Describing what mechanisms influence adaptive teaching would help deepen our understanding of how to further support schools and teachers, as well as students and their families.

Theoretically, underlying assumptions about language that are present within decisions made were examined utilizing Ruiz's (1984) language orientations theory. Ruiz defines language orientations as ideologies about language that are conveyed in policy (Ruiz, 2010). In other words, language orientations explain what people think is possible with language. In this, Ruiz argues that language can be viewed as a problem to be solved, as a right to be protected, or as a resource to be nurtured. For example, when language is viewed as a problem, language policies (or decisions) favor transitioning students to the majority language as soon as possible. When language is viewed as a right, decisions are made to protect students from raciolinguistic discrimination to ensure the continued use and development of students' home/heritage language in school spaces. The "language-as-resource" orientation, while taking as granted "language-asright," positions language as a tool that can be developed for the benefit of both speakers and non-speakers of a language community by seeking to elevate both the status and the utility of the language.

Ruiz and others (Hult \& Hornberger, 2016) identify important criticisms to language orientations. For example, Ruiz (1984) described how entities may not comply with guaranteeing
a group's right to a language, and Hult and Hornberger (2016) summarized how the "language-as-resource" framing might be used to justify logics of exploitation of heritage speakers, evoking "language-as-a-problem" orientation. Recently, Cerda and colleagues (in review), in articulating a community-based language approach, proposed adding an orientation, language-as-liberation. When language is viewed from a liberatory perspective, students are actively encouraged to take control of their language learning. From this orientation, language teaching and learning are viewed through a growth framework, always in a state of process, changing and growing.

In this study, I explore teacher adaptations, with the knowledge that multiple orientations co-exist in policy and practice. Orientations may be competing (such as "language-as-problem" versus "language-as-resource"), but they are not incompatible (Cerda et al., in review). Thus, examining them offers a glimpse of the salient values present when decisions are made to adapt classroom practices.

## Literature Review

## Adaptive Teaching or Differentiation or Both? What Is It?

Despite the variation in terminology across disciplines and instructional contexts (e.g., literacy, science, mathematics), there is a consensus on what adaptive teaching is: A teacher's reflective response to stimulus (or stimuli) during planning (before or after teaching) and in the midst of teaching to support students' linguistic, cultural, and instructional needs (see Parsons et al., 2018) and assets (Johnston et al., 2016). Despite this clarity, there are constructs, such as differentiation, that seem to conceptually overlap with adaptive teaching.

Corno (2008) explains that differentiation is an instructional approach that may be implemented in the classroom regardless of whether the teacher is adaptive or not. Conceptualizations of differentiation stem from ideas around accommodation, which focus on
tailoring instruction to accommodate the needs of a range of learners by using myriad strategies for individualizing. In practice, the teacher orchestrates multiple small groups, where each student group works on different tasks or variations of a task. According to Corno (2008), there are two orientations that explain why differentiation is implemented in a classroom. On the one hand, teachers differentiate because individual differences are perceived as an "obstacle to overcome", and on the other hand, differentiation is implemented because individual differences are viewed as" opportunities for learning." Adaptive teachers "tend to view learner variation as an opportunity for learning from teaching rather than obstacles to overcome" (Corno 2008, p. 171, emphasis in the original). Furthermore, Corno (2008) noted that teachers who adapted did not plan to differentiate ahead of time. Rather, they differentiated spontaneously in response to students at a particular moment in time.

Relatedly, Parsons and colleagues (2018) describe adaptive teaching as a socially constructed endeavor that draws from teachers' knowledge (e.g., disciplinary-content area knowledge), familiarity with students' learning, teaching methods and practices, as well as teaching philosophies that center students, their families, and their communities. These teacher actions or adaptations are what Gilles and Boyle (2006) call teacher mediating learning behaviors, which are designed to challenge students' understandings, encourage their thinking, and help them connect their ideas to previous learning.

Mediated learning behaviors require teachers to engage in metacognitive thought as they construct and articulate adaptations before, during, and after instruction. In other words, metacognition, defined as "thinking about one's thinking" (Flavell, 1976) connects the ways teachers gather, assess, and monitor their own knowledge to construct and articulate adaptations that fit the social environment of the classroom.

Bridging these scholars’ work (Corno, 2008; Gilles \& Boyle, 2006; Parsons et al., 2018), teacher adaptation appears to occur spontaneously, at the precise moment the teacher observes the student's stimuli. However, after the teacher draws on their knowledge to adapt a specific classroom practice to support students' learning, the adaptive action does not end there. The teacher reflects on what occurs and plans accordingly, adapting further or storing the information until it is relevant again.

## What Are Some Examples of Teacher Adaptations? Can Students Adapt, Too?

According to Vaughn and colleagues’ (2016) conversations with teachers, adaptations may include: introducing new content; inserting a new activity; omitting a planned activity; providing a resource or an example; modeling a skill or inserting a mini lesson; suggesting a different perspective to a student; pulling a small group; changing a group structure; and/or conferring with a student. When they asked teachers why they adapt, teachers responded, to: address student misunderstanding; challenge, elaborate, or enhance student understanding; teach a specific strategy or skill; manage time or behavior promote student participation; and follow student interest, passion, curiosity, or inquiry.

About fifteen years ago, Corno (2008) eloquently stated: "Initially, the teacher meets curricular goals by adapting instruction to students, but ultimately the teaching goal is for students to learn to adapt whatever instruction they are given for themselves" (p. 162). The consensus in the field is that for students to be adaptive, the classroom culture and the physical environment need to accommodate and draw on the diversity of the classroom (Johnston et al, 2016). For students to adapt their learning, they need to know they can use the resources in the classroom freely, and be encouraged to do so (Cerda et al., 2020). This includes modeling for students, and showing them how to use the resources in and outside the classroom.

## Present Study and Research Question

This study is one of several studies (some of which are highlighted in this dissertation, see Chapter 2 and 3) that were conceptualized in partnership with researchers, teachers, and staff to document how the Union Community School has developed its dual language and multilingual programming since opening in 2009. See Chapter 1 for more information about the collaborative effort that motivated the three dissertation studies. For this study, in particular, our collaborative inquiry was fueled by our interest in understanding what specifically led teachers to continue to develop the elementary school's Spanish maintenance bilingual program, while also making adjustments (adaptations) to their practice to meet diverse students' needs and leverage their assets.

Phenomenological epistemology, specifically Smith's (2009) conceptualization of interpretative activity, posits that lived experience, as a phenomenon, can be understood via Heidegger's (2013/1927) logos, the meanings people formulate from experience, to make sense of how things appear or are disguised. Here, the phenomenon under study is teacher adaptations, specifically the adaptations teachers make to their practices and conceptualizations to support the language-learning (in both English and Spanish) and disciplinary content learning of linguistically diverse students. The logos is the examination of teachers' meanings (their rationales or explications) of the phenomenon as multilingual speakers, multilingual language learners, and multilingual educators. Thus, drawing from perspectives on language teaching and learning, this study sought to address the following research question: What adaptations did teachers make to their practice and their knowledge base to meet diverse students' needs and leverage their assets?

## Methods

See Chapter 1, Methods.

## Data Analyses

Using Microsoft Excel, I selected data (text blocks) that were coded with subcodes from the meta code "instructional practice." Of the 322 text blocks, 203 text blocks had 561 instructional practice subcodes. Frequencies exceeded the total number of text blocks because multiple codes were applied to a text block. Using the "filter" feature on Microsoft Excel, I identified which of the selected text blocks were also coded with subcodes from the meta code "change." The newly identified text blocks were reviewed to ensure that the text blocks were representative of changes made to instructional practices. Then, the "instructional practice" codes from the flagged text blocks were re-coded as "instructional practices with changes." Of the 561 "instructional practice" subcodes, 314 "instructional practice" subcodes (55.97\%) were identified as " instructional practices with changes." The "instructional practices with changes" subcodes and their corresponding text were aggregated into teacher groups to identify any emerging patterns.

Teachers' text blocks were grouped by teachers' Dens. The transitional kindergarten teacher's responses were grouped with Den 1 (kindergarten and first grade) since Liliana (all names are pseudonyms) was a Den 1 teacher for many years. The text blocks of Zoe, the sixthgrade teacher text blocks were grouped with Den 3 since she had recently taught in Den 3. Fatima was a Den 3 teacher when she was interviewed, but her responses were grouped with Den 2 because she had mostly taught in Den 2 and had just recently transferred to Den 3.

Once the data was aggregated into the three groups, the frequency of general instructional practices and "instructional practices with change," were tallied for each group and reviewed. The code "instructional practices with change" was renamed to "instructional practice for adaptation."

Figure 4.1 shows the percentage of text blocks that were identified as general instructional practices or instructional practices for adaptation. Most text blocks, originally coded as instructional practices, were mostly about adaptations. Teachers' adaptations were either about changing instruction or about shifting one's perspectives (theoretical and ideological) related to teaching and learning bilingually. The coded text blocks revealed that Den 2 (59\%) and Den 3 (63\%) teachers adapted their classroom practices the most, however Den 1 teachers also mentioned adapting a fair amount (47\%).

## Figure 4.1

Percentage of General Instructional Practices and Teacher Adaptations by Den


Note. Ns for "Instructional Practice Used to Adapt:" Den $1(\mathrm{n}=95)$, Den $2(\mathrm{n}=120)$, Den $3(\mathrm{n}=99)$; Ns for "Instructional Practice:" Den $1(\mathrm{n}=$ 106), Den $2(\mathrm{n}=82)$, Den $3(\mathrm{n}=59)$.

The keywords that were representative of adaptive instructional practices were tallied and aggregated into the three groupings. See Figures 4.2, 4.3, and 4.4. The figures identify visually and numerically which keywords had the most frequencies. The size of the boxes corresponds with the frequency of a practice mentioned by a teacher in a particular group (i.e., Den 1, 2, or 3).

Additionally, frequencies of the keywords were reported to identify the prevalence of the adaptations made by teachers. Prevalence was determined by counting the total number of times subcodes of instructional practices with adaptations appeared in the data. Furthermore, since teachers were not prompted to describe their adaptations during the interview, the prevalence or frequency of the subcodes (about adaptations) that appeared in the data are indicative of the practice's saliency.

Figures $4.2,4.3$, and 4.5 were used to identify five of the most prevalent instructional practices used by each group to adapt classroom instruction. In total there were 15 instructional practices (127 text blocks) identified. The practices were compared between groups to identity which were unique to a group and which were referenced by all three groups.

The three teacher groups described adapting during instruction and during student practice. Interestingly, Den 2 shared some practices with Den 1 (i.e., strategies) and Den 3 (i.e., student groups). Den 1 and Den 3 did not reference the same practices, but they did share practices that were comparable. For example, Den 3 used the read aloud, while Den 1 used shared reading to adapt. Both are balanced literacy approaches.

There were instructional practices utilized for adaptation that were unique to a group (i.e., Den 2 used translanguaging; Den 3 used vocabulary) and were sometimes developmentally appropriate for students in their teaching grade (i.e., Den 1 used play).

Since the coding scheme included Valdés' macro mechanisms (policies, ideologies, and core program elements) that may influence the way that language is standardized and transformed into an academic subject when it is taught in school, other codes (e.g., policy, ideologies, professional development) that were linked to the 127 chosen text blocks were noted.

Then Ruiz's language orientations - language-as-problem, language-as-right, language-as-resource - and Cerda and colleagues' (in review) language-as-liberation, were applied to the 127 text blocks. Ruiz's orientations and Valdés's framework, together, helped critically examine the ways in which the pedagogical/structural elements teachers utilized (chosen or mandated), and the adaptations teachers made about language teaching and learning provided equitable learning opportunities for children of Latinx and immigrant-origin heritage.

The following themes emerged:

1. Teacher modeling, experimenting, and practicing for teacher learning supports adaptation;
2. Without reflection before, during, and after the adaptation, deficit orientations may be perpetuated instead of disrupted;
3. Sometimes to support students' Spanish development, teachers strengthened students' English skills first
4. Without checks and balances there may be missed opportunities for adaptation and Spanish teaching and learning goes to the wayside.

Exemplar quotes were selected from each theme to address the research question: What adaptations did teachers make to their practice and their knowledge base to meet diverse students' needs and leverage their assets?

## Figure 4.2

Transitional Kindergarten and Den 1 (Kindergarten and First Grade): Pedagogical Tools Utilized to Adapt Classroom Practice ( $n=$

## 5 teachers)



Note. Keywords were used when coding for instructional practice. The coding unit of analysis was a text block. One text block could represent multiple keywords from the instructional practice code, as well as other keywords from other relevant codes. The numbers in each box represent frequency (i.e., the number of times the keyword appeared in the data.)

## Figure 4.3

Den 2 (Second and Third Grade): Pedagogical Tools Utilized to Adapt Classroom Practice ( $n=4$ teachers)


Note. Keywords were used when coding for instructional practice. The coding unit of analysis was a text block. One text block could represent multiple keywords from the instructional practice code, as well as other keywords from other relevant codes. The numbers in each box represent frequency (i.e., the number of times the keyword appeared in the data.)

## Figure 4.4

Den 3 (Fourth and Fifth Grade) and Sixth Grade Literacy: Pedagogical Tools Utilized to Adapt Classroom Practice ( $n=4$ teachers)


Note. Keywords were used when coding for instructional practice. The coding unit of analysis was a text block. One text block could represent multiple keywords from the instructional practice code, as well as other keywords from other relevant codes. The numbers in each box represent frequency (i.e., the number of times the keyword appeared in the data.)

## Findings

Language orientations are italicized and include Ruiz's (1984) language-as-problem, language-as-right, and language-as-resource, as well as Cerda and colleagues' (in review), language-as-liberation.

## Theme 1: Teacher Modeling, Experimenting, and Practicing for Teacher Learning

## Supports Adaptation

Formal and informal learning opportunities modeled by teachers, for teachers, encouraged teacher practice and experimentation, and were important to teacher adaptation. For example, Paty, a Den 1 teacher, shared that she once had the opportunity to informally observe the art teacher elicit student language during an Art Walk. An Art Walk is when students showcase their art and are then asked to share their analysis of one another's work, the aim of which is to teach students to observe art, not evaluate it. Naturally, the art teacher asked the class "What do you notice? What do you observe?" not "What do you like?"

One day, Paty applied this strategy impromptu to an activity she had engaged students in before. Sometimes when asking the class a question, she would direct them to "write their answer or draw it," and then share their response with a partner (e.g., think-pair-share). This time, she decided to do an Art Walk to provide students more time to practice their oral language skills in Spanish. Students hung their picture on the wall with Spanish words or a sentence. She then asked students to form partnerships and prompted them to discuss what they noticed and observed. Soon after, she invited the whole class to share their observations, hoping that more students would participate since they had additional opportunities to formulate a response, practice saying it outloud, and receive feedback from a partner. She found students were very responsive and engaged. In this, Paty evoked a language-as-right orientation. She changed an
activity that was already culturally responsive because it provided students who may have varying degrees of language abilities and feelings about using their language, opportunities to practice their language in a safe, uncompromising way.

Other teachers explained that in the Union Community School teachers "get the kind of training, where they actually watch people in the classroom model and are an active participant." When Julia, a Den 2 teacher, began teaching at Union Community School in 2010, Beatrice, a teacher who had taught at the school from 2010 to 2013 led professional development sessions on Readers' and Writers' Workshop, a balanced literacy approach. Julia did not know very much about the workshop, but what she did know, she learned through her teacher education program, which she said did not go in depth on the subject. During the professional development sessions, Beatrice modeled how to teach workshop lessons with all the components of balanced literacy: connection, teaching point, guided practice, independent practice, mid-shop interruption, and closing.

It was unlike any professional development Julia had experienced before. Beatrice asked her teacher-colleagues to imagine they were students and she was their teacher. Julia recalled: "It was just so powerful for her to ask us what we wanted to write about and what we wanted to read about." During the sessions, Beatrice showed her students (i.e., teacher-colleagues) that she wanted to get to know them as readers and writers. Julia remembered:

It blew my mind. I knew that identity was a part of the workshop, but I just thought if the kids picked books at their level, it would be fine and that I would just teach them to read for a certain amount of time (e.g., stamina).

Beatrice modeled how to encourage students to reflect on their reading behaviors and interests, and then asked her teacher-colleagues to reflect on their own reading behaviors and interests. In

Beatrice's session, teacher colleagues were active participants. When Beatrice asked Julia and the other teachers to reflect on their reading behaviors and interests, Julia thought: "This is what I'm asking kids to do -- to be really vulnerable and talk about things that really matter to them and some things are hard [to talk about]." This session provided Julia perspective. She explained: "When I ask kids to do things, I think about how I felt at that moment when [Beatrice] asked me to do that, and, I remember how comfortable people felt about sharing or not." These sessions, with Beatrice, were inspiring for Julia and "really changed" her "perspective and teaching."

A few years later, Julia's third grade students were working on completing the California English language arts standardized test. A student, Albert (pseudonym) approached his teacher, Julia. He held eight fingers up to Julia and explained that as he was reading he encountered eight difficult words, so he would like a different passage, preferably a passage at his reading level. Julia "was really taken aback." She thought: 'Wow, he knows. He knows that it's important to read something that he can read, that he can access, so he can show me what he knows."

Julia explained to Albert that she could not give him a different passage because there is only one test with the same passages that all third graders have to read and answer reading comprehension questions to. Albert responded: "Well, how am I supposed to show you what I know if I can't understand it?" Julia said: "You make a lot of sense. That's the way the state is. I wish I could change the way they test you. The way we test is very different from the way the state is testing you." He didn't understand and he cried, and Julia wanted to cry with him too.

Albert showed Julia that he was very successful at identifying what he needed to learn. She felt proud. After all, she did encourage him and his classmates to do precisely that in class. Indeed, an important part of the curriculum was to teach students to be independent readers by building their academic identities as well as their passion and love for reading, writing,
"everything." She reflected: "I struggled to get him to read, and now he's telling me that he really understands who he is as a reader, and that this isn't appropriate."

This experience gave her perspective and prompted her to converse with her class about unfair testing practices and prepare them for those moments: "Sometimes I'm going to give you all just one test to see where you are, and different people will ask that of you too." This experience reinforced Julia's commitment to cultivate and strengthen students' passion and interest for reading, so that when they encounter moments when they are pushed to question their reader identity (sense of self as a reader), they will resist. She added: "It's great that they want something that's accessible to them, and that they know it should be, but I also have to keep in mind that I do have to talk to them about how the world's going to ask of them different things [...] and prepare them."

In this example, standardized tests, such as the one Albert had to complete, convey language-as-a-problem. How? The test was not made for students like Albert, yet he was required to take a test he knew, his teacher knew, and the state must have known was inappropriate for him because it was above his zone of proximal development. He asked for a different variation that would allow him to showcase his grade-level knowledge, which was a reasonable ask, but that was not an option. What is communicated to Albert is that his language (i.e., reading) is the problem because he cannot access the test.

Julia is positioned to navigate policy by the state that is in direct opposition to her commitment to cultivate Albert's sense of self and knowledge about his learning and growth. She is placed in a difficult position, because, as she shared, she is also required to administer the test. Her solution? She adapted her curriculum by embedding lessons that provided opportunities for her students, such as Albert, to voice concerns and talk about them with the class. These
lessons also provided everyone in class space to explore how tests and test scores are not always the most reliable measures of who they are as students and learners.

Sometimes teachers needed guidance from students before proceeding with an adaptation. When teaching a mathematics unit about fractions, fourth and fifth graders in Carlos's class, told Carlos that "it was easier for them to understand the action of [a mathematics word problem] when the [word] problem is read, written and discussed in Spanish." After students' feedback, Carlos made "it a point to" include "a higher percentage of discussions in Spanish." Coincidentally, this adaptation occurred while teachers were receiving professional learning opportunities about translanguaging, specifically "how kids are coming in and out of different languages."

During these sessions, Carlos realized he had created a translanguaging space for his students, where students could freely engage with their languages in a variety of ways to learn disciplinary content with "no penalties," and still "know there's an expectation: They're going to read, write, and speak in both languages." The adaptation Carlos described was guided by a language-as-liberation orientation. By incorporating students' feedback he is encouraging students to continue to take ownership of their learning. However, Carlos's adaptation also conveys a language-as-resource orientation, by encouraging students to make decisions about how and when they utilize their languages to support their learning.

Theme 2: Without Reflection Before, During, and After the Adaptation, Deficit Orientations May Be Perpetuated Instead of Disrupted

When teachers were interviewed, during the 2018-2019 academic school year, many Den 1 and Den 2 teachers observed that their students were having difficulty with Spanish reading, more than previous years. Many teachers felt that the school's student population was changing,
and that curricula and instructional practices were not relevant or appropriate for these new students. Yet, most teachers held back on adapting pedagogy. They felt they needed time to reflect and learn more about the students' linguistic diversity.

For example, a founding and mentor teacher, Zoe, was unclear about what the issue was exactly, since she felt that as a collective, the elementary school teachers had strong balanced literacy skills, and as such, were equipped to support diverse learners. She said:

With all of those balanced literacy pieces in place, I felt kids' development was moving along well. I don't know what's going on now. There's talk about how it's so different and kids aren't learning to read. Does it have to do with the way the community is changing? Is there more trauma in the community because of the political environment around us? I don't know.

Similar to Zoe, Paty, a Den 1 teacher was not fazed by the perceived shifts in demographics. She shared that student populations "are always changing." However, she had been thinking about the variability in students' experiences related to Spanish language exposure and use. She added: "Even though our program is a [Spanish] maintenance [bilingual program], my students' parents are the first-immigrant generation, and though students are exposed to Spanish and understand a lot of it, their sense of Spanish is much different than an immigrant child's." Paty shared that Den 1 teachers have had to think about "what it means to teach kids who speak Spanish but may not have had the exposure that" teachers "initially thought they did."

This realization shifted her thinking. She explained that the degree to which students are exposed to Spanish, use it, and understand it varies. In effect, Paty utilized her knowledge about English language development to create and incorporate Spanish language development content into the curricula. Because this adaptation was motivated by her commitment to ensure Spanish
teaching is "accessible to kids who either don't speak a lot of Spanish at home or don't hear it a lot," it evoked a language-as-right orientation. Still, Paty understood why many teachers had expressed concerns. Teaching is "a little more complicated" when students' skills and experiences with Spanish and English vary, in addition to their home language (e.g., Zapoteco, Tagalog).

Some teachers desired more professional development focused "on how to support language speakers with different linguistic abilities" who enroll "in the second or third grade." One teacher described these students as "non non" students because of their lack of Spanish and English skills. The teacher shared: "We still want them to learn Spanish, but obviously, it's very different for them compared to kids with similar backgrounds who have been here since kindergarten." She elaborated: "When students begin the program in transitional kindergarten or kindergarten, they develop foundational Spanish skills" by the time they are in Den 2.

The teacher's narrative conveyed conflicting perspectives. On the one hand, the teacher believed students who entered the bilingual program in Den 2 were at a disadvantage compared to their student counterparts who entered the program earlier. On the other hand, she utilized the term "non non" to imply students lacked language, which evoked a language-as-problem orientation. Historically, this term has been used in policy and political arenas to covertly and overtly marginalize and racialize bilingual Latinx students by implying that bilingual students lack intelligence. The teacher, however, may not have been aware of the context behind the word.

Relatedly, a Den 1 teacher very "sincerely" shared that at one point in her career, she felt that Spanish bilingual programs were not appropriate for students who had never been exposed to Spanish and English. She recalled having a student who had recently immigrated from

Bangladesh and remembered thinking: "She shouldn't be in my class or in the bilingual program because she doesn't speak English and Spanish." Nevertheless, by first grade, the student was reading at grade level in Spanish and one reading level below the first grade English benchmark expectation.

She reflected: "Sometimes as teachers we might not necessarily know how to support a student and that awareness may make us feel inadequate." Additionally, the Den 1 teacher felt that at that point in time, she did not have the skills or enough knowledge about multilingual development to teach her student effectively. In the end, however, the program turned out to be just right for the student. She shared: "Sometimes teachers are mistaken because of our shortcomings or misunderstandings." What began as a language-as-problem orientation, shifted to a language as right orientation with experience, reflection, and discussion with colleagues. Students, regardless of prior linguistic skills and exposure, have the right to try and acquire new languages after immigrating to the United States.

Theme 3: Sometimes to Support Students' Spanish Development, Teachers Strengthened Students' English Skills First

Most teachers referenced second language acquisition theories to explain how students’ home/heritage languages (e.g., Spanish) leverage the acquisition of a new language (e.g., English). Julia recalled the first time she observed language transference theory in action: If [students'] Spanish is strong, Krashen says they should be able to transfer skills from the home/heritage language to the new language. Within one fourth-grade year, those kids coming from México whose Spanish was very articulate and developed, were speaking, writing, and reading in English. I was in awe. Students even [attained] past skills that kids who had been learning English [in the states] had attained.

Many teachers began to utilize this theory to support the Spanish development of students who were English dominant or emerging multilingual speakers who were learning English and Spanish as new languages in school. However, although this decision seems intuitive, the literature on two-way immersion programs, which most additive bilingual programs are modeled after, recommends teachers do the opposite. These programs often discourage teachers and students from flexibly utilizing their languages during instructional periods reserved for the teaching and learning of a particular language.

For example, Fatima, a Den 2 teacher, had a newly enrolled student, Adam (pseudonym), who was learning English as a new language. Adam spoke Burmese at home. However, in Den 2, literacy is mostly taught in Spanish. Fatima shared: "When Adam was in my classroom he learned to read in English because when I introduced Spanish, he would start crying." She wondered: "What am I going to do?" And, that is when she recalled Felipe's experience learning to read in Spanish.

When Felipe was in the second grade, he only spoke English in class and his Spanish reading was not progressing, "even though he'd been in the Spanish maintenance bilingual program since kindergarten, and his parents were Spanish dominant in the home." Fatima adapted. She decided to teach Felipe how to read in English first, and strengthen his English reading skills to strengthen his Spanish reading skills. This adaptation was successful. Felipe's Spanish reading improved, which in turn strengthened his confidence in his ability to read in Spanish.

Fatima had an idea. She asked Felipe to sit with Adam and "talk with him about his own experience." She listened in and overheard Felipe share strategies with Adam: "Look Adam, it's
the same thing. Let me show you how I learned. Some of the words are cognates." A few months later, Adam made Spanish reading progress and was no longer upset during Spanish reading.

Fatima shared that her decision to focus on Adam and Felipe's English reading development was unorthodox and controversial to many of her primary school colleagues. She understood why. Without conscious effort to encourage and model Spanish utility, English becomes the dominant language used in school by teachers and students, even if the program is an additive bilingual program, thus invoking a language-as-a-problem orientation.

However, Fatima's decision to adapt local language policy by teaching Adam and Felipe English first, and then Spanish, was not about whether the school is in fact cultivating a bilingual space, but about Adam and Felipe. Both students were emerging readers in both languages, but felt most comfortable with English. She recognized their English skills as an asset, and applied her knowledge about language transference (e.g., skills in one language help learn another language) to teach them to read in English first. Her reasoning: If Adam and Felipe had more English skills and were more at ease when learning to read in English than Spanish, then the obvious choice is to build on their English skills to then support their Spanish reading.

Fatima's logic proved successful. Felipe and Adam learned to read in both languages, they felt positive about reading in both languages, and Felipe became a model of success for Adam.

Another example: Carlos, a couple of years prior, had a student who was a dominant English speaker. He recalled working with the student on a Spanish word study sort. While working with the student, he noticed that the difficulty level of the task was above the student's zone of proximal development. Before working with other students, he quickly adapted the word sort activity for her by adding an extra step to her sort, which entailed previewing cards and
identifying cognates. Carlos remembered explaining to his student that they were going to use her "skills with English vocabulary to help her complete the Spanish word sort." While reviewing the cards he asked her: "What cognates do you see? Let's begin to look at the way the word is constructed." Carlos helped her apply this new strategy when reading in Spanish.

## Theme 4: Without Checks and Balances There are Missed Opportunities for Adaptation

Zoe explained that in Den 3, "they're still working on" the issue of "kids' Spanish reading plateauing, or their Spanish not growing at the same rate as their English." She explained that teachers were not sure what to do after reviewing the bilingual reading data, so they asked students what they recommended via a self-reflection activity. Students shared they needed more Spanish vocabulary. Their responses prompted Zoe and her colleagues to reflect on their reading instruction. She recalled thinking:

Vocabulary is important because obviously your reading is going to drop off if you don't know the words, and then Spanish vocabulary is so dense. The further along you go in Spanish, I guess it's true in English too, you really need to develop advanced tier two vocabulary.

Soon after, Den 3 teachers met to adapt their Spanish reading curriculum. Rather than simply acknowledge student feedback, they completed the loop and acted on it. Teachers added the topic to their team agenda and together they reflected on their current Spanish literacy instruction.

They decided to increase the amount of Spanish read alouds in each unit and created accompanying vocabulary lessons using the book "Bringing Words to Life." Zoe reflected: "I know that the read alouds [are] really important, to keep that model of high-level language around in the environment for kids." Carlos shared: "Read alouds have provided students with more exposure to books written at grade level in Spanish and vocabulary, which is a lot higher
than I'm used to, has helped students further develop their literacy." Den 3 teachers utilized their knowledge of balanced literacy routines and approaches to adapt their Spanish reading units.

Den 3 teachers also adapted their social studies curriculum to include interdisciplinary Spanish units. Previously, social studies, science, and math had been taught mostly in English. Carlos reflected:

This year, we aligned our writing units to what students were learning in social studies. Even though we had a few resources in Spanish, the kids did do a lot of writing in Spanish about the Rancho period. They were reading and writing, and we were having discussions mostly in Spanish. When it came time to execute the English writing unit, students were learning about the Gold Rush, and similar to the Spanish writing unit, they had to write an informational report.

When Den 3 began to examine students' Spanish and English reading data together, they noticed that students were not graduating from the fifth grade as dual proficient readers. This prompted the Den to increase academic rigor in Spanish and encourage discussion in Spanish.

## Discussion

Utilizing theories on language planning (Valdés, 2018) and policy (Ruiz, 1984), this phenomenological study examined teacher interview data to identify and describe the adaptations teachers made to their practice and their knowledge-base to meet diverse students' needs and leverage their assets.

Teachers, within and between Dens, described the importance of teacher-led professional learning experiences, especially those that explicitly modeled the how-to, provided opportunities to practice, and invited the teacher to participate in the experience as a student. The last point was the most important characteristic of the professional learning experience for teachers.

Teachers explained that experiencing professional learning with their students in mind encouraged them to take perspective. That is, as teachers were engaging in the experience as the teachers that they are, they were also thinking about how particular students or groups of students in their class might experience the modeled lesson. For example, if teachers during the workshop are feeling vulnerable when asked a particular question, then students might also feel similarly. Thus, teacher-led professional learning sessions, in addition to building teacher expertise, guided teachers through perspective taking. Interestingly, when teachers described an adaptation, they almost always described the knowledge they required to execute said adaptation, as others have found (Corno, 2008; Gilles \& Boyle, 2006; Parsons et al., 2018).

Furthermore, teacher adaptations focused on strengthening students' academic and socioemotional learning and development. Notably, student feedback was central to teachers' adaptation process. Sometimes, student feedback was initiated by students, and other times, elicited by teachers via self-assessments or surveys. Nevertheless, this process entailed students communicating with their teachers, teachers listening to students, students providing their teachers insight, and teachers following students' lead, adapting instruction along the way. As Corno (2008) and others (Cerda et al., 2020; Johnston et al, 2016) have found, one of the goals of adaptive teaching is to prepare students to be adaptive themselves, and an essential component to student agency is the classroom culture.

Valdes's (2018) framework on the mechanisms of curricularization was helpful at identifying the macro mechanisms that influence local policy, as in Julia and Albert's experience with standardized tests. However, the framework was also helpful at identifying how micro mechanisms (teacher adaptations) are influenced by macro mechanisms found in schools, such as ideologies about learners and perspectives on language teaching and learning. Moreover,

Ruiz's (1984) language orientations complemented Valdez's framework. Without criticality, sometimes adaptations may seem responsive but in actuality still function within the deficit paradigms one was trying to avoid or break down. Together, these theoretical perspectives show how complex and layered one teacher adaptation (and decision) can be.

## Conclusion

Teacher-led professional development and student feedback were central to teachers' adaptation process. Furthermore, teacher adaptation did not end in the moment. Teachers reflected on the adaptive experience afterwards, which often led them to further modify instruction and/or curriculum. A feedback loop of reflection, adaptation, reflection, repeat.

## References

Adams, M., Bell, L. A., \& Griffin, P. (Eds.). (1997). Teaching for diversity and social justice: A sourcebook. Routledge.

Banks J. A. (1996). Multicultural education, transformative knowledge, and action: Historical and contemporary perspectives. Teachers College Press.

Bransford, J., Derry, S., Berliner, D., Hammerness, K., \& Beckett, K. L. (2005). Theories of learning and their roles in teaching. In L. Darling-Hammond \& J. Bransford (Eds.), Preparing teachers for a changing world: What teachers should learn and be able to do (pp. 40-87). Jossey-Bass.

Cerda, J., Bailey, A. L., \& Heritage, M. (2020). Contexts for self- and co-regulated learning in a dual-language elementary school classroom. Language and Education, 34(5), 407-424. https://doi.org/10.1080/09500782.2020.1751194

Cerda, J., Darriet, C., Quartz, K. H., Kim, Q., McNaughton, I., \& Jiménez, R. (in review). Building on community assets: A school's journey developing a TK-12 community language approach.

Corno, L. Y. N. (2008). On teaching adaptively. Educational psychologist, 43(3), 161-173. https://doi.org/10.1080/00461520802178466

Council of Chief State School Officers. (2011). InTASC model core teaching standards: A resource for state dialogue. Washington, DC: Author.

Danielson C. (2011). Enhancing professional practice: A framework for teaching. Alexandria, VA: Association for Supervision and Curriculum Development.

Dewey, J. (1916). Nationalizing education. Journal of Education, 84(16), 425-428.

Dover, A. G. (2013). Teaching for social justice: From conceptual frameworks to classroom practices. Multicultural perspectives, 15(1), 3-11.

Dozier C., Garnett S., Tabatabai S. (2011). Responsive teaching through conversation. The Reading Teacher, 64, 636-638.

Duffy G. G., Miller S. D., Parsons S. A., Meloth M. (2009). Teachers as metacognitive professionals. In Hacker D. J., Dunlosky J., Graesser A. C. (Eds.), Handbook of metacognition in education (pp. 240-256). Erlbaum.

Flavell J. H. (1976). Metacognitive aspects of problem solving. In Resnick L. B. (Ed.), The nature of intelligence (pp. 231-235). Erlbaum.

Freire, P. (1970/2002). Pedagogy of the oppressed. New York, NY: Continuum.
Gay, G. (2000). Culturally responsive teaching: Theory, research, and practice. Teachers College Press.

Gillies R., Boyle M. (2006). Ten Australian elementary teachers’ discourse and reported pedagogical practices during cooperative learning. Elementary School Journal, 106, 429452.

Hatano G., Oura Y. (2003). Commentary: Reconceptualizing school learning using insight from expertise research. Educational Researcher, 32(8), 26-29

Heidegger, M. (1962/1927). Being and time. Blackwell.
Hult, F. M., \& Hornberger, N. H. (2016). Revisiting orientations in language planning: Problem, right, and resource as an analytical heuristic. The Bilingual Review/La Revista Bilingüe, 33(3), 30.

Johnston, P., Dozier, C., \& Smit, J. (2016). How language supports adaptive teaching through a responsive learning culture. Theory Into Practice, 55(3), 189-196. .https://doi.org/10.1080/00405841.2016.1173992

Kohli, R. (2016). Beyond the Demographics: Supporting the Retention, Growth and Leadership Potential of Social Justice Oriented Teachers of Color. In Diversifying the Teaching Force in Transnational Contexts (pp. 103-113). Brill.

Ladson-Billings, G. (1995). Toward a theory of culturally relevant pedagogy. American Education Research Journal, 32, 465-491

Liu, K. (2015). Critical reflection as a framework for transformative learning in teacher education. Educational review, 67(2), 135-157.

Liu, K. (2017). Creating a dialogic space for prospective teacher critical reflection and transformative learning. Reflective Practice, 18(6), 805-820.

Liu, K., \& Ball, A. F. (2019). Critical reflection and generativity: Toward a framework of transformative teacher education for diverse learners. Review of research in Education, 43(1), 68-105.

Lucas T. (Ed.). (2011). Teacher preparation for linguistically diverse classrooms: A resource book for teacher educators. Routledge.

McCarty, T. L. (2015). Ethnography in language planning and policy research. In F. M. Hult \& D. C. Johnson (Eds.), Research methods in language policy and planning: A practical guide (pp. 81-93). Wiley.

McDonald, M., \& Zeichner, K. M. (2009). Social justice teacher education. In W. Ayers, T. Quinn, \& D. Stovall (Eds.), Handbook of social justice in education (pp. 595-610). Routledge

Nieto, S. (2004). Affirming diversity: The sociopolitical context of multicultural education (4th ed.). Longman.

Parkhouse, H., Lu, C. Y., \& Massaro, V. R. (2019). Multicultural education professional development: A review of the literature. Review of Educational Research, 89(3), 416458.

Paris, D. (2012). Culturally sustaining pedagogy: A needed change in stance, terminology, and practice. Educational researcher, 41(3), 93-97.

Parsons, S. A., Vaughn, M., Scales, R. Q., Gallagher, M. A., Parsons, A. W., Davis, S. G., ... \& Allen, M. (2018). Teachers' instructional adaptations: A research synthesis. Review of Educational Research, 88(2), 205-242. https://doi.org/10.3102/0034654317743198

Ruiz, R. (1984). Orientations in language planning. NABE journal, 8(2), 15-34.
Smith, J. A., Flowers, P., \& Larkin, M. (2009). Interpretative phenomenological analysis: Theory, method, and research. Sage.

Stigler, J. W., \& Miller, K. F. (2018). 24 Expertise and Expert Performance in Teaching. The Cambridge handbook of expertise and expert performance, 431.

Valdés, G. (2018). Analyzing the curricularization of language in two-way immersion education: Restating two cautionary notes. Bilingual research journal, 41(4), 388-412.

Von Esch, K. S., \& Kavanagh, S. S. (2018). Preparing mainstream classroom teachers of English learner students: Grounding practice-based designs for teacher learning in theories of adaptive expertise development. Journal of Teacher Education, 69(3), 239-251. https://doi.org/10.1177/002248711771746

## GENERAL DISCUSSION AND CONCLUSION

## CHAPTER 5

## Summary of the Three Studies' Main Findings

This three-study dissertation examined the impact of sociopolitical and school contexts on teachers' and students' bi/multilingual and psychosocial development.

Study 1 explored what motivated Union Community School bi/multilingual teachers ( $N=$ 13) to pursue a bilingual teaching career and teach in a Spanish maintenance bilingual program. Findings revealed that all of the teachers of Color (12 of the 13) in this sample experienced ethnic-racial prejudice in elementary and secondary school. However, developmental assets, such as ethnic-racial identity, critical consciousness, and bilingual acquisition, provided teachers with tools to process prejudice as adolescents and adults. Furthermore, positive social interactions with peers, teacher mentors, and parents facilitated teachers to become active participants for social change as bilingual teachers. These assets coupled with opportunities to engage with their ethnic-racial social group in positive ways cultivated teachers' identity-based motivation for transformative justice.

Study 2 explored how students' $(N=393)$ Spanish and English reading proficiency developed across grades and in cohorts utilizing descriptive longitudinal analyses. Calculations of proportions of students exceeding certain benchmark values to identify overall patterns of English and Spanish reading change for different bi/multilingual student groups were reported Additionally, student psychosocial covariates (i.e., motivation, socioemotional self-concept) were examined using descriptive analysis across two time points (fourth and fifth grade) to explain overall reading patterns $(\mathrm{n}=230)$. Qualitatively, portraiture analyses were utilized to further explore four students' perspectives about their reading growth in the fourth and fifth grade.

Findings suggest that strong Spanish reading competence in the first grade (spring) supports modest Spanish-reading growth, and greater English-reading growth by the end of the fifth grade, even though most students, as kindergarteners, began reading below grade level proficiency in Spanish. Furthermore, the school was effective at supporting English and Spanish reading development: The proportion of students reading at or above grade level in Spanish and English at fifth grade (spring) increased across student cohorts and students’ motivation to learn Spanish and English increased between the fourth (spring) and fifth (spring) grades. Nevertheless, the qualitative findings found that students' investment in developing their home languages depends on the language modality (e.g., reading versus speaking). By the end of the fifth grade, students described having a more complex understanding about their bilingualism that goes beyond language preference and performance.

Study 3 investigated the adaptations all teachers $(N=13)$ made in their classrooms to support students' bilingual and psychosocial development. Findings revealed that bi/multilingual teachers utilize a variety of classroom practices -- such as instructional approaches, balanced literacy routines, activity structures, communicative configurations, and semiotic resources and strategies -- to execute an adaptation. Student feedback was central to this process. Furthermore, teacher adaptation did not end in the moment. Teachers reflected on the adaptive experience afterwards, which often led them to further modify instruction and/or curriculum.

## How the Three Studies Complement Each Other

A key theme across studies was difference. Specifically, the acknowledgment and celebration of difference, such as the difference in schooling and familial experiences related to bilingual language learning (negative and positive), ethnicity and race, bilingual reading growth (Spanish, English, both), motivation to read and/or speak bi/multilingually, and adaptations.

This idea of difference reminded me of early conceptualizations of multiculturalism and multilingualism that were conceived by American scholars from the 20th century. Horace Kallan, a Jewish American scholar, described America not as a "melting pot" but a nation that practices "cultural pluralism." From this perspective, "democracy involves, not the elimination of differences, but the perfection and conservation of differences" (Kallan, 1915). He argued that "conservation of difference" includes the right to conserve home/heritage languages and use them freely in public (e.g., work, school) and private spaces (e.g., home, places of worship), a statement reminiscent of modern takes on multilingualism (see Bailey \& Osipova, 2016). Cultural pluralism also "involves a give and take between radically different types, and a mutual respect and mutual cooperation based on mutual understanding" (Kallan, 1915), a description which evokes multiculturalism (Banks, 1996).

Each study tapped into Kallan's (1915) early ideas of "the perfection and conservation of difference." Although all teachers developed a motivation for transformative justice, how they got there varied. Even though most teachers share background characteristics with their students, their schooling experiences and feelings about being bi/multilingual speakers and learners were different. Because of this difference, conversations between teachers and students about what it means to be bi/multilingual were insightful and healing for both teachers and students.

Students' bilingual reading growth varied between student groups (i.e., dual language reading groups), as did their perspectives about what it means to be a bi/multilingual reader versus a bi/multilingual speaker. For example, students may be enthralled by their capacity to read in Spanish and English, and may even want to learn to read new languages, yet feel negatively about speaking Spanish because they feel uncomfortable speaking it at home and/or school.

Teacher adaptations require difference. To adapt means to create, change, morph, transform. Teachers drew from their knowledge base and previous experiences to support students' bi/multilingual and psychosocial development. Teacher adaptations are reminiscent of every abstractionist mantra. Before Piet Mondrian painted his famed grids, he skillfully painted trees. Over time, the paintings of trees became disconnected curved lines. Then, those disconnected curved lines became blue, yellow, and black lines, crossing and intersecting, forming large and small squares, all on a white canvas. Teachers adapted classroom practices like Mondrian painted abstractions. Their instructional approaches, balanced literacy routines, activity structures, communicative configurations, and semiotic resources and strategies took on a new form when used by teachers (and students) to adapt instruction.

## Implications and Future Directions

This section is organized into two sections: theory and research, and policy and practice.
Within both sections I present implications from the three studies.

## Theory and Research

## Motivation for Transformative Justice: An Emerging Theory

There is a dearth of studies examining the motivation of teachers of Color's motivation to enter the teaching profession. Nonetheless, there are a few seminal studies (Graham \& Erwin, 2011; King, 1993; Su, 1997; Gauna et al., 2022) that have found teachers of Color enter the teaching profession with the desire for social change, often in response to the marginalization and prejudice they experienced in school spaces. Su (1997) and King (1993) were the first scholars to observe that this type of motivation did not fit traditional concepts of motivation (i.e., altruistic, intrinsic, extrinsic). Yet most research, stemming from the field of teacher motivation, has mostly continued to utilize traditional frameworks of motivation (Fray \& Gore, 2018; for an
exception see Gauna et al., 2022) and had predominantly focused on the experiences of White female teachers.

Inspired by these studies, I sought to explore whether the teachers I had collaborated with in the Union Community School also experienced this emerging motivation (see Study 1, Chapter 2). Heeding recommendations from Watt, Richardson, and Smith (2017), I drew on the developmental psychology literature to identify the developmental mechanisms that scholars have determined cultivate the type of motivation Su (1997) and $\operatorname{King}$ (1993) found in their studies. Thus, this work was highly influenced by Oysterman and Destin's (2010) conceptualization of identity-based motivation and Mathews et al.'s (2020) postulation that ethnic-racial identity and critical-consciousness influence each other's development across adolescence and adulthood.

I then utilized developmental (i.e., the transactional approach: Erikson, 1958; 1959; 1968) and intersectional (Crenshaw, 1991) perspectives to explore these mechanisms from teachers' points of view utilizing their retrospective accounts from one semi-structured interview. Teachers recollected their formative experiences, beginning in childhood to the present, that motivated them to consider and sustain a career as bilingual teachers.

Erikson's transactional approach was essential to the analysis of the data. It provided a framework that made evident the developmental processes teachers were describing, because an essential characteristic of a transactional approach is the bidirectional relationship between society and the individual. Society shapes the individual's development and as the individual matures, so does their influence on society. This transaction is a cycle on a constant loop.

An intersectional perspective also guides the analysis from Study 1. It offers a critical lens that I utilized to examine how socio-political and historical perspectives and events shape
individuals' psychosocial development (e.g., ethnic-racial identity), and how the individuals' responses to these perspectives and events also shape society for the next generation.

Overall, I found that the data and the aforementioned theories and frameworks utilized were successful at describing the developmental and transactional processes that produce the motivation of interest, which I specified as a motivation for transformative justice.

Figure 5.1 highlights how this developmental and transactional process manifested for the teacher-participants of Color. First, society had a direct impact on teachers' ethnic-racial identity formation. For example, between early childhood to middle childhood, most teachers of Color had already experienced marginalization and prejudice directed at them by their teachers (see Theme 1) or family members (see Theme 2). Second, teachers reacted against this messaging as they became adolescents. Third, during adolescence and young adulthood, teachers further explored and resolved their ethnic-racial identities and developed critical consciousness. Fourth, mentors, college courses, and service-related experiences were lucrative to this process (see Themes 2-3). Fifth, during young adulthood, teachers further explored and resolved aspects of their ethnic-racial identity with assistance from elements of critical consciousness, such as critical awareness and political efficacy (see Themes 4-6). Last, teachers enter the profession to actively engage in Latinx community efforts and bilingual teaching to fight for a more equitable future for children of Color and immigrant children.

## Figure 5.1

Motivation for Transformative Justice: A Developmental Process


The sole teacher-participant who was not a teacher of Color, Zoe, also cultivated a motivation for transformative justice which compelled her to become a bilingual teacher. Her path to formulating this motivation unfolded differently. Unlike her colleagues, she did not describe experiencing ethnic-racial prejudice at school that targeted her ethnicity-race and home/heritage language. However, while in college, she took a history course where she empathized with language injustices that occurred in United States schools. She was a Spanish major and had worked very hard to learn the language. Learning Spanish and being a Spanish speaker was important to her, and a salient and central part of her identity. The thought that a learning institution would work to eradicate bilingual students' home/heritage languages when she was working furiously to be bilingual herself, felt extremely unjust. At that moment, she
decided she was going to become a bilingual teacher to support and advocate for the preservation and maintenance of students' home/heritage languages in school.

All teachers' motivation for transformative justice included the following characteristics: First, teachers, as children and youth (before enrolling in a teacher education program), became aware of social injustices in education and societies. Second, youth, now young adults, examined these realizations or awakenings as they related to their identity exploration (e.g., ethnic-racial identity, language learner identity). Lastly, their awareness, realizations or awakenings, and identity exploration together, pushed the young adult to engage in disrupting the (re)production of the identified injustices, which they now have a personal connection to. This theoretical work presents a developmental psychosocial process, and as such, should be studied further.

For example, we do not know much about the relationship between these developmental assets - (ethnic-racial) identity, critical consciousness, and language development -- or the various ways these assets manifest in motivation for transformative justice. Thus, there is a need for more research, longitudinal or otherwise, that continues to explore how this phenomenon develops and when it begins to manifest with a diverse sample of people from different age groups.

Additionally, motivation for transformative justice is not a process unique to education. By exploring this phenomenon with a diverse group of students in secondary school and university/college, we may begin to learn more about the different ways in which identity, critical consciousness and language development may motivate one to engage in a variety of careers or activities for transformative justice.

Thus, it is essential for research to examine the different ways and degrees to which a career or activity engages an individual or a community to participate in social change. It is
unrealistic and a missed opportunity to expect that having a motivation for transformative justice will always lead to community activism and organizing. There are many ways one might address injustices.

## Achieving Grade-Level Spanish Reading Proficiency by the End of the First Grade is

## Important for Fifth Grade Reading in Both Languages

There is a dearth of research that has investigated bi/multilingual students' home/heritage language (i.e., Spanish) and English language development across the elementary school years (kindergarten to fifth grade). The work presented in Study 2 drew from seminal studies, which are few. Of particular interest was exploring whether the data would confirm that strong early Spanish reading proficiency supports English reading proficiency by the upper elementary school grades, as other scholars have found (Relyea \& Amendum, 2020), and/or find evidence of Spanish language atrophy by the end of the fifth grade as recent studies have observed (Babino \& Stewart, 2017).

Unlike Relyea and Amendum's (2020) study which had reading growth trajectories starting at kindergarten, the reading growth trajectories I examined started at first grade (spring) because most kindergarten students were reading below grade level proficiency in Spanish, and many students continued reading below grade-level expectations into the fall of their first-grade year. However, by the spring of their first-grade year, most students were reading in Spanish at or above grade level. Due to the lack of variance between students' Spanish reading scores at these time points, longitudinal descriptive analysis of students' Spanish and English reading growth began at first grade (spring). Nevertheless, findings suggest that strong Spanish reading competence in the first grade (spring) supports Spanish- and English- reading growth by the end of the fifth grade (spring).

These findings have implications for theory and research. First of all, we know that students' home language (i.e., Spanish) can help support English language development, if Spanish reading competence in kindergarten is strong (Relyea \& Amendum, 2020). However, findings from Study 2 suggest that students who are reading below grade level in kindergarten or in the first grade (fall), could still benefit from their home/heritage language (i.e., Spanish) reading skills when learning to read in English, if they improve their Spanish proficiency by the end of first grade (spring). Future research should investigate this further. For example, how might degrees of proficiency below or above grade level proficiency in the first grade, moderate or predict English and Spanish reading development by the end of the fifth grade? Additionally, estimating how much time an emerging reader has to achieve grade-level reading proficiency in Spanish before it impacts their Spanish and English reading proficiency by the end of the fifth grade, would help practitioners prepare for specialized interventions or determine which pedagogical tools they may need to support young learners.

The Upper Elementary Grades: A Critical Juncture for Spanish and English Reading

## Development

Findings from Study 2 indicate that overall, English reading growth may increase slightly more than Spanish growth over time. There is evidence to suggest that English reading growth trajectories are steeper than Spanish reading trajectories, surpassing them by the fourth grade (spring), and ending the fifth grade (spring) reading an entire grade-level higher than Spanish. This finding is interesting considering most students, initially (first grade, spring), were reading at or above grade level proficiency in Spanish. Furthermore, the shape of students' English and Spanish reading growth trajectories appear to have slightly decelerating quadratic forms. This finding signifies that students' reading growth showed significant acceleration across the early
elementary school grades in both languages, and that it gradually slowed after the third grade into the upper elementary grades. This finding is consistent with a number of studies that have reported quadratic terms for Spanish (Rojas et al., 2019; Yu \& Bailey, in review) and English language growth patterns (Otaiba et al., 2009; Puranik et al., 2008)

However, when analyzing students' reading growth trajectories in Spanish and English by cohort, a pattern emerges. The last three cohorts of students who had recently graduated from the fifth grade, were different from the first three cohorts. Students in the last three cohorts (most recent data), were making great gains in Spanish and English reading between the fifth-grade fall and fifth-grade spring time points. Thus, while the first cohorts (2022, 2023, and 2024) appeared to have quadratic trajectories, the last three cohorts' $(2025,2026,2027)$ trajectories appeared linear.

These findings suggest that theoretically we need more growth models of bilingual longitudinal data. The seminal research and the dissertation study discussed here make it apparently clear that Spanish and English language development and its components (reading, listening, speaking, writing) are dynamic, and are highly influenced by one another, as Grosjean (1998), Kroll and colleagues (2014), and Hulstijn (2015) have postulated.

Furthermore, Study 2, similar to Rojas and Iglesias' (2013) study, suggests Spanish and English language development over time is highly sensitive to contextual factors. For example, I found that students' motivation to learn Spanish and English increased from fourth grade spring to fifth grade spring. In fact, most students were highly motivated to learn both languages. Students felt learning English and Spanish wa s fun. They liked to learn new and difficult things in either language. They felt good about understanding difficult things in both languages. Students felt it was important to show their teachers and their families that they can learn English
and Spanish, especially since they knew that their families and teachers wanted them to learn both.

Students' English and Spanish reading growth trajectories, especially when analyzed by cohort, and students' motivation to learn English and Spanish indicate that the school, teachers, and parents were invested in supporting students' bilingualism, biliteracy and sense of self, and were successful. Still, Spanish reading progressed at a slower rate than English reading over time, and students completed the fifth grade reading at a lower proficiency level in Spanish than English. Yu and Bailey (in review) interpreted a similar finding in writing likely to be due to lack of commensurate curriculum and challenge in Spanish.

Furthermore, the qualitative data from Study 2 suggests that students' interest in developing and learning specific language modalities varies. For example, while some students are highly motivated to further develop their bi/multilingual reading abilities, their interest in further developing their oral skills in Spanish may be waning. Rojas and Iglesias' (2013) found that oral language growth in Spanish from kindergarten to third grade was curvilinear, while English oral language growth was linear. Their findings suggest that perhaps Spanish oral language fluctuates more than English.

Relatedly, I found that students seemed to have many varied feelings attached to speaking Spanish more than English, but had mostly positive feelings about reading in Spanish and English. In fact, many students wrote about wanting to learn to read a third or fourth language. Furthermore, some students' home language is an indigenous language from Mexico or Central America their perspectives about the particularities of language use were different. One student shared that she taught her parents Spanish so they could communicate better at home, since she knows more Spanish than Zapoteco. She is now invested in teaching her parents English.

Thus, it appears students have different feelings and attitudes about using and learning different aspects of their many languages (e.g., reading, speaking). There is a need to explore how students' development of and attitudes about language modalities impact their bilingualism and biliteracy. For example, if students are not interested in developing their oral language, would this impact their reading growth in Spanish and English, and is there a particular developmental period (elementary versus secondary school grades) when it matters most that they do so the most?

## Valdes' Circularization and Ruiz' Language Orientations: A Powerful Duo to Understanding

## How School Programs Support (or Hinder) Student’ Spanish and English Development

Ruiz's (1984) language orientations and Valdes's (2018) framework on the mechanisms of curricularization complemented each other. Valdes's framework on the mechanisms of curricularization was helpful at identifying how micro mechanisms (e.g., teacher adaptations) are influenced by the macro mechanisms found in schools, such as standardized testing, ELD reclassification, ideologies about learners and perspectives on language teaching and learning. Ruiz' (1984) language orientations, as an analytical framework, guided critical analysis of the micro and macro mechanisms identified by Valdes's framework.

For example, when the findings from Study 2 and Study 3 are examined together, it appears that the adaptations Den teachers made to their curricula and instruction the last three years of this study, really paid off. To recap, teachers reviewed students' longitudinal Spanish and English reading data and found that Spanish reading appeared to stagnate by the end of fifth grade more so than English. This prompted Den 3 teachers to review students'self-assessment responses about their Spanish and English language growth. Teachers found that students felt they were struggling with Spanish reading because of the difficult vocabulary they were now
encountering in Den 3. As described in Study 3, teachers critically evaluated their Spanish instructional blocks and began to creatively augment opportunities for students to develop their Spanish receptive and productive skills.

Study 2 findings indicated that students' reading progress in Den 3 was important because it determined (1) the linear form of the Spanish and English trajectory, and (2) students' final Spanish and English proficiency scores. For example, in the last three years of the study, students' reading trajectories in both languages but especially in Spanish began to increase in the fourth and fifth grade, shifting a slightly decelerating quadratic form into a more linear form. This finding corresponds with Study 3's finding, when Den 3 teachers were adapting their Spanish pedagogy in response to student data and reflection. This finding is also important for research because it proves that the decelerating quadratic growth trend that scholars have observed in Latinx bilingual children's English and Spanish language development can be turned around. Thus, it seems that progress made in the upper elementary grades may have more of an influence on students' potential success in achieving bilingual reading proficiency in secondary school than the early grades.

## Policy and Practice

## Teacher Preparation and Certification

For many of the teacher participants, undergraduate courses from Ethnic and Indigenous Studies programs primed realizations or awakenings that connected their lived experiences to history. These courses afforded teachers opportunities (via conversations, discussion, assignments, research) to explore their identities and critical consciousness (i.e., critical awareness, political efficacy), while also encouraging the development of teachers' motivation for social transformation. Thus, teacher education programs might benefit from collaborating
with teacher educators and professors who have experience teaching courses about interdisciplinary topics relevant to education utilizing critical frameworks.

Alternatively, leadership from teacher education and certification programs might consider offering teacher educators extensive training on instructional practices and curricula that incorporate approaches and frameworks typically encountered in Ethnic and Indigenous Studies. For example, studies have found that teacher education courses that utilize critical frameworks (e.g., LatCrit, intersectionality) and critical pedagogical methods (e.g., studentcollected photographs, artifacts, and texts; sharing language autobiographies) encourage bilingual teachers of Color to deepen content knowledge by drawing from their own lived experiences, confronting historical inaccuracies and omissions, and creating counter narratives (Salinas et al., 2016; Sarmiento-Arribalzaga \& Murillo, 2010).

In addition to nurturing preservice and in-service teachers' ethnic-racial identities and critical consciousness, these pedagogical methods serve as a healing pedagogy. Healing pedagogy gives bilingual teachers opportunities to reflect on marginalizing experiences, and confront underlying feelings of loss and shame inflicted by ethnic-racial and raciolinguistic prejudice which includes assimilationist ideologies (Cervantes-Soon, 2018). For example, Gardner and colleagues' (2020) study shows how teachers of Color, in partnerships, might (re)engage with experiences in schools that diminished their ethnicity, race, and cultural heritages to reclaim their own voice, agency, and narratives. Thus, I recommended that teacher education programs and schools integrate opportunities for preservice and in-service teachers of Color to name, reflect upon, and heal from these experiences. Furthermore, healing pedagogy may help teachers of Color confront the internalized racism and deficit thinking they may have
about their own racial and ethnic group, which may impact their students (Kohli, 2014; Valenzuela, 2016).

Sometimes bilingual teachers or candidates enrolled in subtractive education (i.e., transitional bilingual programs) or English immersion programs as children, may experience doubts about their ability to deliver instruction across curricula in Spanish (Guerrero \& Valadez, 2011), feelings which were also described by some of the teacher-participants from Study 1. Perhaps, teacher education and certification programs may consider collaborating with language departments to create Spanish courses that strengthen bilingualism, identity, and self-esteem, and incorporate critical frameworks and healing pedagogy. These Spanish courses might help prevent potential bilingual candidates from transferring into a monolingual English teacher certification program as some research has found (Gauna et al., 2022).

## The Importance of Balanced Literacy and Phonics

Teachers in the Union Community School assess fluency and reading comprehension in Spanish and English from kindergarten to the fifth grade. About three years before this study ended, teachers in the lower elementary grades incorporated Spanish phonics instruction and formative assessment into their balanced literacy curriculum. More recently, teachers have begun to incorporate English and Spanish phonics and phonemic awareness instruction and a variety of assessment into their curriculum across all grades, transitional kindergarten to fifth grade. In the upper elementary grades, phonics and phonemic awareness are taught strategically in small groups. Teachers in the upper grades (i.e., $3-5$ ) use student data gathered from the school's reading assessments (i.e., F\&P BAS and SEL; ELE) and the district (i.e., Dynamic Indicators of Basic Early Literacy Skills, DIBELS; Indicadores Dinámicos del Éxito en la Lectura, IDEL) to
determine which students may be eligible for more specialized phonics and phonemic awareness intervention in Spanish and/or English.

Even though phonics development was not studied in this dissertation, I mention it to show how teachers at this school utilize a multitude of curricula, assessment, and instructional approaches to teaching and learning, such as balanced literacy and phonics/phonemic awareness to enhance student learning and growth as well as cultivate confident learners. The curricula, instructional approaches, and assessment are studied and piloted by teachers before presenting preliminary findings with all elementary school teachers. Teachers collectively decide to what extent a new practice, assessment, curricula will be rolled out.

Currently, in the media, a hot topic of debate is whether schools should replace balanced literacy approaches to reading with phonics instruction, which has ignited the "Reading Wars" once again. Today's version of the "Reading Wars" pits balanced literacy approaches against the science of reading camp. But as the teachers in this study have demonstrated, both approaches are necessary, especially if you have students who differ across myriad backgrounds and learning characteristics. This summer, Education Week published an article on this subject, and basically called for a truce. This is their take (Wilkins \& McNamara, 2023):

Using information that exists on both sides of the war can empower teachers, administrators, and school leaders to develop a literacy program that is both balanced in its time allocation of the elements of reading instruction and supported by the body of research that is the science of reading. Isn't it time to call a truce?

I think many teachers and researchers would agree, it is time to call a truce, indefinitely.

## Consciousness in Schools

The teachers in this study found the practice of collecting and analyzing students' bilingual data important to student academic and psychosocial growth because it helped them improve their practice and program. This dissertation found that the conversations teachers had in their Dens and as an elementary school, provided teachers opportunities to critically reflect on instructional practices and local language policy, and ask themselves: "Am I, is my team, is my school promoting and protecting students' home/heritage languages in addition to supporting English development?" Cervantes-Soon (2018) writes about the importance of "unveiling the complexities of these issues and its impact on the schooling of Latinx bilingual children" (p. 872). Data analysis, reflection, and action "may offer aspiring bilingual teachers clarity about why sharing the same language or even the same ethnic background with their students is not enough, and why enacting social transformation goes beyond teaching in two languages" and that "ultimately, such analyses and reflections may help bilingual teachers reorient the vision of bilingual education toward critical and emancipatory goals" (Cervantes-Soon, 2018, p. 872).

This study also found that the Union Community School's bilingual program has been successful at protecting and promoting students' languages by incorporating opportunities for guided student reflection. Future research might consider investigating whether we would observe the same increases in motivation and bilingual reading growth with or without selfassessment tools such as the LESA and RISA?

## Limitations

The data for this study was collected from one school site. While the decision to focus on one school was the intent, future work might consider addressing similar research questions with more public schools that represent a variety of programming (e.g., two-way immersion vs Spanish maintenance bilingual or community school vs general public school). Furthermore,
most teachers who work in the Union Community School's elementary school are bi/multilingual teachers of Color, this is unique and may not be representative of most public schools. Thus, echoing the aforementioned recommendation, future work might want to consider recruiting school sites that have different representations of teachers populations and experiences.

## Conclusion

With great effort bi/multilingual people of Color who live in the United States for generations have fought to maintain and protect their home/heritage languages. Of great concern has been the ever-looming possibility that their home/heritage languages may atrophy in their generation and that they may witness the loss in their children's generation. In spite of these and other socio-political roadblocks bi/multilingual teachers and students have encountered on their journey to bi/multilingualism, it is their appreciation, acceptance, and cultivation of their own differences and others' differences that has propelled them onward. I end this dissertation with Liliana's wise words:

My view of language? Learning languages takes time [...] We all learn languages differently and at different paces and that's okay! Sometimes, um, unfortunately, the standards, the district, and society are not really valuing children's languages and growth. Sometimes I have to remind myself that if a young child says one word in English or one word in Spanish, their language will come. So, validate what they've done so far and know that their languages will come.

## References

Babino, A. (2017). Same program, distinctive development: Exploring the biliteracy trajectories of two dual language schools. Bilingual Research Journal, (40)2, 169-186.

Bailey, A. L., \& Osipova, A. V. (2016). Children's multilingual development and education: Fostering linguistic resources in home and school contexts. Cambridge University Press.

Banks J. A. (1996). Multicultural education, transformative knowledge, and action: Historical and contemporary perspectives. Teachers College Press.

Cervantes-Soon, C. G. (2018). Using a Xicana feminist framework in bilingual teacher preparation: Toward an anticolonial path. The Urban Review, 50(5), 857-888.

Crenshaw, K. (1991). Mapping the margins: Intersectionality, identity politics, and violence against women of color. Stanford Law Review, 43, 1241-1299.

Erikson, E. H. (1958). Young man Luther: A study in psychoanalysis and history. Norton.
Erikson, E. H. (1959). Identity and the life cycle. Norton.
Erikson, E. H. (1968). Youth and crisis. Norton.
Fray, L., \& Gore, J. (2018). Why people choose teaching: A scoping review of empirical studies, 2007-2016. Teaching and Teacher Education, 75, 153-163. https://doi.org/10.1016/j.tate.2018.06.009

Gauna, L. M., Beaudry, C., \& Cooper, J. (2022) The leaking Spanish bilingual education teacher pipeline: Stories of PK-20 challenges told by Latinx becoming bilingual teachers in the U.S. Journal of Latinos and Education. https://doi.org/10.1080/15348431.2022.2057989

Graham, A., \& Erwin, K. D. (2011). " I don't think Black men teach because of how they get treated as students": High-achieving African American boys' perceptions of teaching as a career option. Journal of Negro Education, 80(3), 398-416.

Grosjean, F. (1998). Studying bilinguals: Methodological and conceptual issues. Bilingualism: Language and Cognition, 1(02), 131-149.

Guerrero, M., \& Valadez, C. (2011). Fostering candidate Spanish language development. In B. B. Flores, R. H. Sheets, \& E. R. Clark (Eds.), Preparing teachers for bilingual student populations: Educar para transformar. New York: Routledge

Hulstijn, J. H. (2015). Language proficiency in native and non-native speakers: Theory and research. (Vol. 41), Philadelphia, PA: John Benjamins Publishing.

Kallan, H.M. (1915, February 25). Democracy vs the melting pot. The Nation.
King, S. H. (1993). Why did we choose teaching careers and what will enable us to stay?: Insights from one cohort of the African American teaching pool. The Journal of Negro Education, 62(4), 475-492.

Kohli, R. (2014). Unpacking internalized racism: Teachers of color striving for racially just classrooms. Race Ethnicity and Education, 17(3), 367-387. https://doi.org/10.1080/13613324.2013.832935.

Kroll, J. F., Bobb, S. C., \& Hoshino, N. (2014). Two languages in mind: Bilingualism as a tool to investigate language, cognition, and the brain. Current directions in psychological science, 23(3), 159-163.

Mathews, C. J., Medina, M. A., Bañales, J., Pinetta, B. J., Marchand, A. D., Agi, A. C., ... \& Rivas-Drake, D. (2020). Mapping the intersections of adolescents' ethnic-racial identity and critical consciousness. Adolescent Research Review, 5(4), 363-379.

Al Otaiba, S., Petscher, Y., Pappamihiel, N. E., Williams, R. S., Dyrlund, A. K., \& Connor, C. (2009). Modeling oral reading fluency development in Latino students: A longitudinal study across second and third grade. Journal of educational psychology, 101(2), 315.

Oyserman, D., \& Destin, M. (2010). Identity-based motivation: Implications for intervention. The Counseling Psychologist, 38(7), 1001-1043.

Puranik, C. S., Petscher, Y., Al Otaiba, S., Catts, H. W., \& Lonigan, C. J. (2008). Development of oral reading fluency in children with speech or language impairments: A growth curve analysis. Journal of Learning Disabilities, 41(6), 545-560.

Rapa, L. J., Diemer, M. A., \& Bañales, J. (2018). Critical action as a pathway to social mobility among marginalized youth. Developmental Psychology, 54(1), 127-137. https://doi.org/10.1037/dev0000414

Relyea, J. E., \& Amendum, S. J. (2020). English reading growth in Spanish-speaking bilingual students: Moderating effect of English proficiency on cross-linguistic influence. Child Development, 91(4), 1150-1165.

Rojas, R., \& Iglesias, A. (2013). The language growth of Spanish-speaking English language learners. Child development, 84(2), 630-646. 10.1111/j.1467-8624.2012.01871.x

Rojas, R., Hiebert, L., Gusewski, S., \& Francis, D. J. (2019). Moving forward by looking back: Understanding why some Spanish-speaking English learners fall behind. New Directions for Child and Adolescent Development, 2019(166), 43-77.
https://doi.org/10.1002/cad. 20305
Ruiz, R. (1984). Orientations in language planning. NABE journal, 8(2), 15-34.
Salinas, C. S., Fránquiz, M. E., \& Rodríguez, N. N. (2016). Writing Latina/o historical narratives: Narratives at the intersection of critical historical inquiry and LatCrit. The Urban Review, 48(2), 264-284. https://doi.org/10.1007/s11256-016-0355-z.

Sarmiento-Arribalzaga, M. A., \& Murillo, L. A. (2010). Pre-service bilingual teachers and their invisible scars: Implications for preparation programs. SRATE Journal, 19(1), 61-69. http://fles.eric.ed.gov/ fulltext/EJ948691.pdf.

Su (1997) Teaching as a profession and as a career: Minority candidates' perspectives, Teaching \& Teacher Education, 13(3), 325340.

Umaña-Taylor, A. J., Douglass, S., Updegraff, K. A., \& Marsiglia, F. F. (2018). A small-scale randomized efficacy trial of the Identity Project: Promoting adolescents' ethnic-racial identity exploration and resolution. Child development, 89(3), 862-870. https://doi.org/10.1111/cdev. 12755

Valenzuela, A. (Ed.). (2016). Growing critically conscious teachers: A social justice curriculum for educators of Latino/a youth. New York: Teachers College Press.

Villanueva, S. T. (2013). Teaching as a healing craft: Decolonizing the classroom and creating spaces of hopeful resistance through Chicano-indigenous pedagogical praxis. The Urban Review, 45(1), 23-40. https://doi.org/10.1007/s11256-012-0222-5

Watt, H. M., Richardson, P. W., \& Smith, K. (Eds.). (2017). Global perspectives on teacher motivation.

Wilkins, B. \& McNamara, L. (2023, July 07). What people are getting wrong about the science of reading. Education Week. https://www.edweek.org/teaching-learning/opinion-what-people-are-getting-wrong-about-the-science-ofreading/2023/07\#:~:text=The\ science\ of\ reading\ informs,will\ build\% 20their\%20vocabulary\%2C\%20background

## TECHNICAL APPENDIX

## Study 1

## Table A2.1

Sampled Text Block Identification Numbers

| Interviewee | Total Number of Text Blocks | Interview Questions (1-17) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 2 |  | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Carlos Alvaro | 25 |  | 3 |  | 5 |  | 9 |  |  |  |  |  | 12 |  | 20 |  |  | 24 |
| Liliana Rodriguez | 28 |  | 5 |  |  | 10 | 14 |  |  |  |  | 17 |  |  |  |  | 23 | 24 |
| Paty Cabal | 23 |  | 5 | 3 |  |  | 6 | 10 |  | 9 |  |  |  |  |  |  | 23 | 21 |
| Maya Bhave | 21 | 2 | 7 |  |  | 9 | 12 | 15 |  |  | 18 |  | 20 |  |  |  |  |  |
| Elena Lopez | 27 | 2 | 4 | 6 | 7 | 8 | 10 |  |  | 12 | 16 |  | 19 |  |  | 23 |  | 25 |
| Mariana Hurtado | 26 |  |  | 4 | 14 | 17 |  | 6 |  | 18 |  |  | 20 |  | 23 |  | 25 |  |
| Silvia Rubio | 29 | 1 | 2 |  |  | 27 | 28 |  |  |  |  | 18 | 6 |  | 13 |  | 23 | 26 |
| Fatima Botín | 21 | 1 |  | 4 |  |  | 8 |  |  |  |  | 16 |  |  |  | 19 |  |  |
| Maite Sánchez | 25 |  |  |  |  |  |  |  | 14 |  |  | 20 |  |  |  |  |  |  |
| Elizabeth Ryan | 15 | 1 | 3 | 6 | 7 | 10 |  |  |  |  | 12 | 14 |  |  |  |  |  |  |
| Gabriela Chavez | 16 |  |  | 3 |  |  |  | 8 | 9 | 11 | 12 |  |  |  |  |  |  |  |
| Anura Barnes | 13 |  |  |  | 6 |  | 8 | 9 |  |  |  |  |  | 13 |  |  |  |  |
| Javier Torres | 22 | 3 | 4 |  | 7 |  | 9 | 11 |  |  | 15 |  | 21 |  |  |  |  |  |
| Barbara Chen | 20 | 1 | 3 |  | 5 | 7 |  | 9 |  |  |  |  | 16 |  |  |  |  |  |
| Ines Huerta | 21 | 1 | 4 |  |  | 9 |  |  | 14 |  |  | 18 |  | 21 |  |  |  |  |
| Lisa Byrne | 21 |  | 48 | 8 |  | 10 |  | 14 | 15 |  |  | 17 |  |  |  |  |  |  |
| Olivia Serrano | 22 | 2 |  |  | 4 | 6 | 8 | 9 |  | 12 |  |  |  |  |  |  |  |  |

Note. This table demonstrates that text blocks were sampled from the beginning, middle, and end of the interview protocol. The upper school teacher interview only had thirteen questions, whereas the lower school teacher interview had seventeen questions.

## Study 2: Quantitative Variables and Psychometric Foundational Analysis

The psychometric analysis was conducted using exploratory factor analysis utilizing IBM SPSS Statistics program. Exploratory factor analysis was appropriate considering that the purpose of these analyses was to establish measurement validity with this student population, and confirm that multicollinearity between each variable's subscales was not an issue. Most of these measures have been previously validated by other scholars extensively, which I discussed in the Measures section in Chapter 3.

## Outcome (Dependent) Variables

The BAS, SEL, and ELE reading measures were utilized to collect Spanish and English reading performance data.

## Assessment Scoring Forms

The BAS, SEL, and ELE forms have the same structure and features. The scoring form has two sections. The first section assesses fluency, and the second, reading comprehension.

Section One: Oral Reading Recording Form. The fluency portion looks and functions like a traditional running record. As the child reads aloud, the teacher checks off each word read correctly. When there is an error, the teacher uses marking conventions to note the type of error directly above the word. An example of an error is the omission of a word. In this case, the teacher would draw a long dash above the omitted word. Self-corrections are also noted but do not count as errors. If the child is reading a level L book or above, they will come across a mark signaling them to read silently. At this time, the teacher has the option to either analyze their notes and determine if the errors and/or self-corrections were made as a result of meaning, structure, or visual cueing, and/or summarize the observed reading behavior.

The errors and self-corrections are utilized to determine accuracy rate (i.e., percentage of words read correctly), self-correction ratio (i.e., number of errors plus number of self-corrections divided by number of self-corrections), and fluency (i.e., using accuracy rate and self-correction ratio, a key is referenced to determine a score). Reading rate (i.e., words per minute, WPM) can also be recorded but is not needed to report the final reading level score.

Section Two: Reading Comprehension Conversation Recording Form. The reading comprehension section is intended to resemble a conversation. The teacher asks a student questions representative of three categories: "within the text," "beyond the text," and "about the text." Questions "within the text" are literal, which means that the answers to them are right there in the text. Teachers are basically assessing students' ability to monitor their own understanding and accuracy by searching for and using information directly from the text, as well as remembering information and processing words and their ideas in summary form.

The "beyond the text" questions asks students to make predictions and connections using prior knowledge, personal experience, inferring, and synthesizing new information gathered from the text. "About the text" questions are asked when students read a level L or above book/passage. These questions ask students about literary elements appearing in the text and are asked to respond to the writer's craft and provide a critical analysis of the text. Teachers score each question category. The scores from each category are added and a score is determined using a scoring key and a rubric.

Final Assessment Summary Form. The scores from the "oral reading recording form" and the "comprehension conversation recording form" are transferred to the final "assessment summary form." With the consolidated scoring information, a key is utilized to determine independent, instructional, and hard reading levels.

Leveled Assessment Books. The BAS 1 includes 14 nonfiction and 14 fiction books, assessing levels A to N. BAS 2 includes 15 nonfiction and 15 fiction books. Similar to BAS 1, the SEL 1 includes 14 nonfiction and 14 fiction books. There are two books per reading level, a nonfiction and fiction book. The Spanish and English books are original stories specifically developed for Fountas and Pinnell. The Spanish books were developed by bilingual literacy experts and illustrated by Latinx artists to include culturally relevant topics and themes. Both Spanish and English books were leveled with attention to their respective languages' sentence complexity and vocabulary. The English books were field-tested with classroom teachers and a broad spectrum of students throughout the United States (Fountas \& Pinnell, 2011). Field-testing for the Spanish leveled books was conducted with Spanish-speaking teachers and students in bilingual and dual-language classroom settings (Fountas \& Pinnell, 2012).

The ELE, however, does not include original books like the BAS $1 \& 2$ and SEL 1. The Union Community School teachers did not have the resources to contract Latinx writers and illustrators to create test books for them. Thus, they decided to select passages from books written in Spanish that have been vetted by Fountas and Pinnell staff using the F\&P Text Level Gradient ${ }^{\mathrm{TM}}$. Most of these books were originally written in English and were translated editions. While these passages are not original stories like those created for the BAS $1 \& 2$ and SEL, passages from published books were carefully selected and reviewed by a team of teachers to ensure the passages selected included content necessary for students to answer the reading comprehension questions.

## Reliability

The BAS and SEL field studies found the assessment systems to be reliable and valid measures of increased reading difficulty (Fountas \& Pinnell A to Z Benchmark Assessment

System, 2011, 2012). A test-retest reliability approach was utilized to determine consistency and stability of scores obtained by the same individual when examined with the same test on different occasions or with different sets of equivalent test items. The test-retest results for BAS exhibited a reliability coefficient of 0.97 for all books ( $\mathrm{A}-\mathrm{Z}$ ), and a reliability coefficient of 0.96 for SEL 1 (books A - N). Both reliability coefficients are above the recommended 0.95 for high stakes assessment, indicating strong reliability.

## Validity

To evaluate validity, which is the degree to which an assessment measures what it purports to measure, fieldtesters/researchers examined whether BAS and SEL correlated strongly with equivalent measures (Fountas \& Pinnell A to Z Benchmark Assessment System, 2012). They found strong evidence of convergent validity (Fountas \& Pinnell A to Z Benchmark Assessment System, 2011). There was a strong association between BAS 1 fiction texts (0.94), nonfiction texts (0.93) and Reading Recovery Observation Survey Text Reading Level, also known as the Observation Survey.

The Text Reading Level task includes a running record which assesses the accuracy and process a student employs when reading. Similar to the BAS, increasingly difficult texts are used to determine a student's appropriate reading level. This task's convergent validity has been evaluated with other standardized norm referenced tests, such as the Iowa Test of Basic Skills (Gomez-Bellenge, Rodgers, Wang, \& Schilz, 2005), and the Woodcock Reading Mastery Test (Gomez-Bellenge \& Thompson, 2005).

There was a moderate association between the BAS 2 fiction texts ( 0.69 ), nonfiction texts (0.62) and the Slosson Oral Reading Test-Revised (SORT-R3), a list of 200 words in increasing order of difficulty administered to students individually. The BAS 2 fiction texts (0.44),
nonfiction texts (0.42), and Degrees of Reading Power had a moderate association. Degrees of Reading Power is a norm referenced assessment made up of nonfiction text passages formatted using a cloze technique.

The SEL 1 was also determined to have strong validity (Fountas \& Pinnell A to Z Benchmark Assessment System, 2012). Researchers found a strong relationship between the SEL 1 fiction texts (0.88), nonfiction texts (0.87) and Instrumento de observación de los logros de la lectoescritura, the Spanish reconstruction of the Reading Recovery Observation Survey Text Reading Level.

Additionally, their results indicated a strong correlation between the SEL fiction texts (0.91), nonfiction texts (0.89) and the Evaluacion del desarrollo de la lectura (EDL2). The EDL2 is similar to SEL and Instrumento. Both tests provide students with texts, which increase in difficulty incrementally. All three tests utilize a running record format. In addition, researchers indicated a moderate association between the SEL 1 fiction texts (0.45), nonfiction texts (0.50), and LAS Links Espanol, which is a group administered test consisting of three sections analyzing words, reading words, and reading to understand.

Evaluating the BAS, SEL, and ELE. As described in the Measures section, in Chapter 3, the BAS, SEL, and ELE reading performance scores follow a sequential progression across grades, which is the expectation. This occurs intentionally. As students master one level, the only way forward would be to master the next level, following a hierarchical pattern.

To evaluate whether this is occurring, an exploratory factor analysis (EFA) was employed, examining the English and Spanish reading scores separately. I hypothesized that the English reading scores and the Spanish reading scores would each yield two factors, indicative of
the lower elementary grades (first to second grade) and the upper elementary grades (third to fifth grade).

Table A3.1
Exploratory Factor Analysis of English Reading Grade-Level Data Points

|  | Factors |  |  |
| :--- | :---: | :---: | :---: |
| English Reading Grade-Level Data Points | BAS-1 | BAS-2 | Communalities |
| e4 | $\mathbf{0 . 8 2}$ | 0.32 | 0.88 |
| e5 | $\mathbf{0 . 8 6}$ | 0.37 | 0.92 |
| e6 | $\mathbf{0 . 8 4}$ | 0.46 | 0.92 |
| e7 | $\mathbf{0 . 8 1}$ | 0.47 | 0.91 |
| e8 | $\mathbf{0 . 7 2}$ | 0.58 | 0.91 |
| e9 | 0.59 | $\mathbf{0 . 7 2}$ | 0.89 |
| e10 | 0.38 | $\mathbf{0 . 7 8}$ | 0.74 |
| e11 | 0.38 | $\mathbf{0 . 9 1}$ | 0.91 |
| e12 | 0.40 | $\mathbf{0 . 8 2}$ | 0.85 |
| Eigenvalue | 7.155 | 0.841 |  |
| \% of Total Variance | 79.504 | 9.342 |  |

Note. Salient loadings $>0.44$ in boldface. To interpret the loadings, I used Comrey and Lee's (1992) suggestion that loadings in excess of 0.71 ( $50 \%$ overlapping variance) are excellent, 0.63 ( $40 \%$ overlapping variance) very good, $0.55(30 \%$ overlapping variance) good, 0.45 ( $20 \%$ overlapping variance) fair, and 0.32 ( $10 \%$ overlapping variance) poor.

English Reading EFA. An EFA was conducted with the English reading scores from first to fifth grade. Students' English reading is tested for the first time during the spring of the first grade. Thereafter, students are tested twice a year, in the fall and in the spring, a total of nine data points.

A principal axis factor with a varimax (orthogonal) rotation of the nine data points from the BAS-1 (5 data points) and BAS-2 (4 data points) was performed through IBM SPSS on data gathered from 393 participants. The results of Bartlett's test of sphericity (Bartlett, 1954) indicated that the correlation matrix was random, $\chi 2(36)=2,072.86, p<.001$. The Kaiser-Meyer Olkin statistic (Kaiser, 1974) was 0.90 , suggesting that the sample was excellently factorable, well above the minimum standard (0.70) appropriate for factor analysis. The principal axis factor
analysis suggested a two-factor solution, explaining $88.55 \%$ of the variance. Patterns indicate that BAS-1 represents students' English reading performances from the early and middle elementary school grades (first to third grade) and BAS-2 represents students' English reading performance from the later elementary school grades (fourth to fifth grade). See Table A3.1

Spanish Reading EFA. A principal axis factor with a varimax (orthogonal) rotation of twelve data points from the SEL and ELE was performed through IBM SPSS on the same 393 participants as before. There were twelve Spanish reading grade-level data points in this analysis because students' Spanish reading is tested, in the fall and spring, from kindergarten to fifth grade.

An issue with singularity occurred, as identified by the determinant value which was less than 0.00001 . Singularity occurs when variables are perfectly correlated. Applying the process of elimination, the kindergarten grade-level data points (s1 and s2) and the first-grade spring gradelevel data point (s3) were omitted.

Once again a principal axis factor with a varimax (orthogonal) rotation of nine Spanish reading grade-level data points was performed. The results of Bartlett's test of sphericity indicated that the correlation matrix was random, $\chi 2(36)=2,045.76, p<.001$. An examination of the Kaiser-Meyer Olkin measure of sampling adequacy suggested that the sample was excellently factorable, $\mathrm{KMO}=0.90$. The principal axis factor analysis suggested a two-factor solution, explaining $89.77 \%$ of the variance. Patterns indicate that SEL is representative of students' Spanish-reading performances from the early and middle elementary school grades (first to third grade) and ELE is representative of students' Spanish-reading performance from the later elementary school grades (fourth to fifth grade). See Table A3.2

## Table A3.2

Exploratory Factor Analysis of Spanish Reading Grade-Level Data Points

|  | Factors |  |  |
| :--- | :---: | :---: | :---: |
| Spanish Reading Grade-Level Data Points | SEL | ELE | Communalities |
| s4 | $\mathbf{0 . 7 4}$ | 0.33 | 0.79 |
| s5 | $\mathbf{0 . 8 8}$ | 0.33 | 0.90 |
| s6 | $\mathbf{0 . 8 8}$ | 0.33 | 0.89 |
| s7 | $\mathbf{0 . 8 7}$ | 0.39 | 0.92 |
| s8 | $\mathbf{0 . 8 0}$ | 0.45 | 0.89 |
| s9 | 0.59 | $\mathbf{0 . 7 3}$ | 0.90 |
| s10 | 0.44 | $\mathbf{0 . 8 7}$ | 0.93 |
| s11 | 0.36 | $\mathbf{0 . 9 2}$ | 0.93 |
| s12 | 0.30 | $\mathbf{0 . 8 9}$ | 0.89 |
| Eigenvalue | 7.00 | 1.09 |  |
| \% of Total Variance | 77.67 | 12.10 |  |

Note. Salient loadings $>0.44$ in boldface. To interpret the loadings, I used Comrey and Lee's (1992) suggestion that loadings in excess of 0.71 ( $50 \%$ overlapping variance) are excellent, 0.63 ( $40 \%$ overlapping variance) very good, 0.55 ( $30 \%$ overlapping variance) good, 0.45 ( $20 \%$ overlapping variance) fair, and $0.32(10 \%$ overlapping variance) poor.

English reading scores from second (e6) to fourth grade (e9) loaded onto the BAS 1 and BAS 2 factors; and, Spanish reading scores from third (e8) to fourth grade (e9) loaded onto the SEL 1 and ELE factors. This pattern is indicative of the pattern found in the F \& P text gradient. While each grade level testing period (fall and spring) has a recommended Spanish and English reading level benchmark, the F \& P gradient recognizes that in practice, students from a particular grade at a particular time period might be reading at, above, or below a benchmark reading level. The reading scores that loaded onto both measures indicate overlapping variance. Interestingly, in recognition of this overlap, in practice, teachers with students in second, third, and fourth grade typically have access to the lower and upper primary school grade kits when assessing students in these grades.

Furthermore, the SEL and ELE had similar loading patterns as the BAS-1 and BAS-2 demonstrating that the ELE fit well within the overall F \& P reading assessment system.

## Motivation to Learn Spanish or English in School: The English Language Learner Motivation Scale (ELLMS): Pre-College

The ELLMS Pre-College (Ardasheva, Tong, \& Tretter, 2012) was utilized to measure students' motivation to learn English and Spanish. This measure assesses students' intrinsic motivation and external regulation to learn English as a second language. Items about the motivation to learn Spanish were modeled after the original items. Eight items from the ELLMS were adapted.

Since items from the ELLMS were adapted for this study, two factor analyses were conducted for the fourth and fifth grade items respectively to determine which items in each grade load onto the predetermined factors (subscales). Furthermore, the examination of the factor structure of each grade evaluates whether the items utilized at various points in time (i.e., fourth and fifth grade) still measure the same construct (Spanish and English motivation) in the same way. Each factor analysis had items about Spanish and English motivation. Items were rated on a 5 -point Likert-style scale, $1=$ "strongly disagree" to $5=$ "strongly agree."

## Fourth Grade Motivation

A principal axis factor with a varimax (orthogonal) rotation of 16 items was performed through IBM SPSS on data gathered from $n=230$ participants. The principal axis factor analysis suggested a two-factor solution, explaining $55.41 \%$ of the variance. See Table A3.3

The results of Bartlett's test of sphericity indicated that the correlation matrix was random, $\chi 2(120)=902.13, p<.001$. The Kaiser-Meyer Olkin statistic was 0.85 , suggesting an adequate sample size for this factor analysis.

The English motivation variable is the mean score of eight items. The reliability value for Cronbach's Alpha was $\boldsymbol{\alpha}=0.88$ from a sample of $n=166$ fourth graders. Listwise deletion based on all items in the $\boldsymbol{\alpha}$ procedure.

The Spanish motivation variable is the mean score of eight items. The reliability value for Cronbach's Alpha was $\boldsymbol{\alpha}=0.85$ from a sample of $n=161$ fourth graders. Listwise deletion based on all items in the $\boldsymbol{\alpha}$ procedure.

## Fifth Grade Motivation

A principal axis factor with a varimax (orthogonal) rotation of 16 items was performed through IBM SPSS on data gathered from $n=230$ participants. The principal axis factor analysis suggested a two-factor solution, explaining $58.49 \%$ of the variance. See Table A3.4. The results of Bartlett's test of sphericity indicated that the correlation matrix was random, $\chi 2(120)=$ $1116.63, p<.001$. The Kaiser-Meyer Olkin statistic was 0.85 , suggesting the sample was adequately factorable.

The English motivation variable is the mean score of eight items from a sample of $n=$ 177 fifth graders. Listwise deletion was based on all items in the $\boldsymbol{\alpha}$ procedure. The reliability value for Cronbach's Alpha was $\boldsymbol{\alpha}=0.88$.

The Spanish motivation variable is the mean score of eight items. The reliability value for Cronbach's Alpha was $\boldsymbol{\alpha}=0.87$ from a sample of $n=183$ fifth graders. Listwise deletion based on all items in the $\boldsymbol{\alpha}$ procedure.

## Table A3.3

Principal Axis Factoring of Adapted ELLMS Fourth Grade English and Spanish Motivation

| Scale | Construct | Item | 1 | 2 | Extraction Communalities |
| :---: | :---: | :---: | :---: | :---: | :---: |
| English Motivation | Intrinsic <br> Motivation | It is fun to learn English. | 0.68 | 0.17 | 0.55 |
|  |  | I like learning new things in English. | 0.75 | 0.28 | 0.66 |
|  |  | I like it when I do well in English. | 0.74 | 0.28 | 0.61 |
|  |  | I like it when I can understand difficult things in English. | 0.69 | 0.08 | 0.75 |
|  |  | I like doing difficult things in English. | 0.69 | 0.08 | 0.76 |
|  | External Regulation | I want to show my teachers that I can learn English. | 0.71 | 0.37 | 0.72 |
|  |  | My family and teachers want me to learn English. | 0.66 | 0.33 | 0.61 |
|  |  | I want to show my parent(s) or guardian(s) that I can learn English. | 0.64 | 0.36 | 0.57 |
| Spanish Motivation | Intrinsic Motivation | Es divertido aprender español. | 0.13 | 0.72 | 0.53 |
|  |  | Me gusta aprender cosas nuevas en español. | 0.34 | 0.64 | 0.64 |
|  |  | Me gusta cuando hago bien en español. | 0.15 | 0.60 | 0.48 |
|  |  | Me gusta cuando puedo comprender cosas difíciles en español. | 0.12 | 0.52 | 0.47 |
|  |  | Me gusta hacer cosas difíciles en español. | 0.20 | 0.56 | 0.46 |
|  | External Regulation | Quiero mostrarles a mis maestros que puedo aprender español. | 0.28 | 0.81 | 0.72 |
|  |  | Mi familia y maestros quieren que yo aprenda español. | 0.21 | 0.45 | 0.41 |
|  |  | Quiero mostrarles a mi mamá, mi papá, o mi tutor/a que puedo aprender español. | 0.14 | 0.62 | 0.44 |
|  |  | Eigenvalues | 6.75 | 13.21 |  |
|  |  | \% of variance | 42.20 | 55.41 |  |

Note. Factor 1 = English Motivation; Factor 2 = Spanish Motivation; Rotation Method: Varimax with Kaiser Normalization; Rotation converged in 3 iterations; To interpret the loadings, I used Comrey and Lee's (1992) suggestion that loadings in excess of 0.71 ( $50 \%$ overlapping variance) are excellent, $0.63(40 \%$ overlapping variance) very good, $0.55(30 \%$ overlapping variance $)$ good, $0.45(20 \%$ overlapping variance) fair, and 0.32 ( $10 \%$ overlapping variance) poor.

## Table A3.4

Principal Axis Factoring of Adapted ELLMS Fifth Grade English and Spanish Motivation

| Scale | Construct | Item | 1 | 2 | Extraction Communalities |
| :---: | :---: | :---: | :---: | :---: | :---: |
| English Motivation | Intrinsic Motivation | It is fun to learn English. | 0.75 | 0.05 | 0.60 |
|  |  | I like learning new things in English. | 0.75 | 0.07 | 0.59 |
|  |  | I like it when I do well in English. | 0.79 | 0.15 | 0.67 |
|  |  | I like it when I can understand difficult things in English. | 0.61 | 0.10 | 0.55 |
|  |  | I like doing difficult things in English. | 0.59 | 0.24 | 0.65 |
|  | External Regulation | I want to show my teachers that I can learn English. | 0.81 | 0.29 | 0.73 |
|  |  | My family and teachers want me to learn English. | 0.63 | 0.13 | 0.51 |
|  |  | I want to show my parent(s) or guardian(s) that I can learn English. | 0.78 | 0.17 | 0.66 |
| Spanish <br> Motivation | Intrinsic <br> Motivation | Es divertido aprender español. | 0.05 | 0.73 | 0.62 |
|  |  | Me gusta aprender cosas nuevas en español. | 0.12 | 0.73 | 0.63 |
|  |  | Me gusta cuando hago bien en español. | 0.17 | 0.79 | 0.66 |
|  |  | Me gusta cuando puedo comprender cosas difíciles en español. | 0.08 | 0.72 | 0.60 |
|  |  | Me gusta hacer cosas difíciles en español. | 0.07 | 0.77 | 0.67 |
|  | External Regulation | Quiero mostrarles a mis maestros que puedo aprender español. | 0.20 | 0.77 | 0.68 |
|  |  | Mi familia y maestros quieren que yo aprenda español. | 0.20 | 0.44 | 0.40 |
|  |  | Quiero mostrarles a mi mamá, mi papá, o mi tutor/a que puedo aprender español. | 0.31 | 0.55 | 0.50 |
|  |  | Eigenvalues | 6.326 | 3.033 |  |
|  |  | \% of variance | 39.54 | 18.95 |  |

Note. Factor 1 = English Motivation; Factor 2 = Spanish Motivation; Rotation Method: Varimax with Kaiser Normalization; Rotation converged in 3 iterations; To interpret the loadings, I used Comrey and Lee's (1992) suggestion that loadings in excess of 0.71 ( $50 \%$ overlapping variance) are excellent, 0.63 ( $40 \%$ overlapping variance) very good, 0.55 ( $30 \%$ overlapping variance) good, 0.45 ( $20 \%$ overlapping variance) fair, and 0.32 (10\% overlapping variance) poor

Self-Description Questionnaire, SDQ. The SDQ is an instrument originally designed by Marsh et al. (1983) to (a) measure seven facets or dimensions of self-concept and (b) examine whether self-concept is multidimensional and is supported by empirical evidence (Marsh \& Hattie, 1996). Drawing from Shavelson's work, Marsh et al. (1983) operationalized self-concept as "an individual's perception of self-formed through experiences with the environment, interactions with significant others, and attributions of his or her own behavior" (p. 173).

Marsh et al. (1983) determined an eight-factor solution utilizing an oblique rotation method. When conducting factor analysis there are different rotations one can utilize to assist in interpretability of the factor loadings. Other extraction methods were used, but ultimately the oblique rotation provided them with the most easily interpretable results. The following factors emerged: physical ability self-concept, physical appearance self-concept, relations with peers self-concept, relations with parents self-concept, reading self-concept, mathematics self-concept, and school subjects self-concept.

An adapted version of the Self-Descriptive Questionnaire-I (SDQ-1; Marsh, 1990) has been included in The Early Childhood Longitudinal Study (ECLS) program's longitudinal studies (ECLS-K: 1999, ELCS-K: 2011). The ECLS follows a nationally representative sample of children from kindergarten to either fifth or eighth grade. The scales utilized by the ECLS include: reading, math, school subjects, peer relations, externalizing problem behaviors, and internalizing problem behaviors.

Niehaus and Adelson (2013), utilizing data from ECLS-K: 1999, examined children's self-concept in third grade. Participants included 11,020 native "English-speaking children," 1,277 "Spanish-speaking EL children," and 546 "Asian-language speaking EL children." They examined measurement invariance and utilized a multigroup confirmatory factor analysis, which
showed that the SDQ-I measured self-concept similarly across children from all three groups. Their findings indicate that the SDQ is a reliable and valid measure to utilize with students who are designated English Learners and native English speakers, student groups which are representative of my sample. This study uses the ECLS adapted version of the SDQ-1.

## Self-Descriptive Questionnaire Variables

Exploratory factor analysis of the SDQ-1 fourth and fifth grade items was conducted to confirm whether the items from both the fifth and fourth grade samples were representative of the same four subscales as in the ELCS SDQ-1 version. The four subscales are: (1) perceived interest/competence in all school subjects, (2) perceived interest/ competence in peer relations, (3) externalizing problem behaviors, and (4) internalizing problem behaviors. Items were rated on a 4-point Likert-style scale, $1=$ "not at all true" to 4 = "very true."

Fourth Grade. A principal axis factor with a varimax (orthogonal) rotation of 25 items was performed through IBM SPSS on data gathered from $n=230$ participants. The principal axis factor analysis suggested a two-factor solution, explaining $53.62 \%$ of the variance. See Table A3.5. The results of Bartlett's test of sphericity indicated that the correlation matrix was random, $\chi 2(300)=1988.589, p<.001$. The Kaiser-Meyer Olkin statistic was 0.87 , suggesting that the sample was adequately factorable.

The perceived interest/competence in all school subjects variable is the mean score of six items. The reliability value for Cronbach's Alpha was $\boldsymbol{\alpha}=0.86$ from a sample of $n=156$ fourth graders. Listwise deletion based on all items in the $\boldsymbol{\alpha}$ procedure.

The perceived interest/competence in peer relations variable is the mean score of six items. The reliability value for Cronbach's Alpha was $\boldsymbol{\alpha}=0.76$ from a sample of $n=152$ fourth graders. Listwise deletion based on all items in the $\boldsymbol{\alpha}$ procedure.

The externalizing problem behaviors variable is the mean score of five items. The reliability value for Cronbach's Alpha was $\boldsymbol{\alpha}=0.84$ from a sample of $n=156$ fourth graders. Listwise deletion based on all items in the $\boldsymbol{\alpha}$ procedure.

The internalizing problem behaviors variable is the mean score of eight items. The reliability value for Cronbach's Alpha was $\boldsymbol{\alpha}=0.84$ from a sample of $n=155$ fourth graders. Listwise deletion based on all items in the $\boldsymbol{\alpha}$ procedure.

Fifth Grade. A principal axis factor with a varimax (orthogonal) rotation of 25 items was performed through IBM SPSS on data gathered from $n=230$ participants. The principal axis factor analysis suggested a two-factor solution, explaining $53.62 \%$ of the variance. See Table A3.6. The results of Bartlett's test of sphericity (Bartlett, 1954) indicated that the correlation matrix was random, $\chi 2(300)=1988.589, p<.001$. The Kaiser-Meyer Olkin statistic (Kaiser, 1974) was 0.87 , suggesting that the sample was adequately factorable.

The perceived interest/competence in all school subjects variable is the mean score of six items. The reliability value for Cronbach's Alpha was $\boldsymbol{\alpha}=0.88$ from a sample of $n=173$ fifth graders. Listwise deletion based on all items in the $\boldsymbol{\alpha}$ procedure.

The perceived interest/competence in peer relations variable is the mean score of six items. The reliability value for Cronbach's Alpha was $\boldsymbol{\alpha}=0.83$ from a sample of $n=164$ fifth graders. Listwise deletion based on all items in the $\boldsymbol{\alpha}$ procedure.

The externalizing problem behaviors variable is the mean score of five items. The reliability value for Cronbach's Alpha was $\boldsymbol{\alpha}=0.83$ from a sample of $n=170$ fifth graders. Listwise deletion based on all items in the $\boldsymbol{\alpha}$ procedure.

The internalizing problem behaviors variable is the mean score of eight items. The reliability value for Cronbach's Alpha was $\boldsymbol{\alpha}=0.85$ from a sample of $n=171$ fifth graders.

## Listwise deletion based on all items in the $\boldsymbol{\alpha}$ procedure.

Table A3.5
Principal Axis Factoring of SDQ-1 Fourth Grade

| Subscale | Item | 1 | 2 | 3 | Extraction Communalities |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Perceived <br> Interest/ <br> Competence in All School Subjects | Work in all school subjects is easy for me | 0.66 | 0.06 | 0.34 | 0.55 |
|  | I enjoy work in all school subjects | 0.67 | 0.01 | 0.25 | 0.52 |
|  | I am good at all school subjects | 0.69 | -0.05 | 0.21 | 0.52 |
|  | I get good grades in all school subjects | 0.55 | -0.07 | 0.36 | 0.44 |
|  | I like all school subjects | 0.71 | -0.04 | 0.25 | 0.56 |
|  | I look forward to all school subjects | 0.66 | 0.05 | 0.30 | 0.53 |
| Perceived <br> Interest/ <br> Competence <br> in Peer <br> Relations | I am easy to like | 0.52 | 0.30 | 0.09 | 0.36 |
|  | I have more friends than most other kids | 0.59 | 0.33 | 0.02 | 0.46 |
|  | I have lots of friends | 0.66 | 0.10 | -0.18 | 0.48 |
|  | I make friends easily | 0.67 | 0.16 | -0.10 | 0.49 |
|  | I get along with kids easily | 0.63 | 0.09 | 0.04 | 0.40 |
|  | Other kids want me to be their friend | 0.68 | 0.17 | 0.07 | 0.49 |
| Externalizin g Problem Behaviors | It's hard for me to pay attention | 0.03 | 0.67 | 0.22 | 0.50 |
|  | I get in trouble for fighting with other kids | 0.13 | 0.64 | 0.27 | 0.50 |
|  | I get in trouble for talking and disturbing others | 0.17 | 0.78 | 0.12 | 0.65 |
|  | I get distracted easily | 0.07 | 0.70 | 0.26 | 0.56 |
|  | It's hard for me to finish my school work | 0.06 | 0.49 | 0.39 | 0.39 |
| Internalizing <br> Problem Behaviors | I feel angry when I have trouble learning | 0.14 | 0.33 | 0.56 | 0.44 |
|  | I often feel lonely | -0.05 | 0.41 | 0.55 | 0.47 |
|  | I worry about taking tests | 0.29 | 0.23 | 0.51 | 0.40 |
|  | I feel sad a lot of the time | 0.11 | 0.54 | 0.43 | 0.49 |
|  | I worry about doing well in school | 0.13 | 0.28 | 0.40 | 0.25 |
|  | I feel ashamed when I make mistakes at school | 0.12 | 0.25 | 0.68 | 0.54 |
|  | I worry about finishing my work | 0.13 | 0.14 | 0.64 | 0.45 |
|  | I worry about having someone to play with at school | 0.10 | 0.40 | 0.52 | 0.44 |
|  | Eigenvalues | 7.92 | 3.80 | 1.68 |  |
|  | \% of Variance | 31.67 | 15.22 | 6.73 |  |

Note. Rotation Method: Varimax with Kaiser Normalization; Rotation converged in 8 iterations; To interpret the loadings, I used Comrey and Lee's (1992) suggestion that loadings in excess of 0.71 ( $50 \%$ overlapping variance) are excellent, 0.63 ( $40 \%$ overlapping variance) very good, $0.55(30 \%$ overlapping variance) good, 0.45 ( $20 \%$ overlapping variance) fair, and $0.32(10 \%$ overlapping variance) poor.

## Table A3.6

Principal Axis Factoring of SDQ-1 Fifth Grade

| Subscale | Item | 1 | 2 | 3 | Extraction Communalities |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Perceived Interest/ Competence in All School Subjects | Work in all school subjects is easy for me | 0.66 | 0.06 | 0.34 | 0.55 |
|  | I enjoy work in all school subjects | 0.67 | 0.01 | 0.25 | 0.52 |
|  | I am good at all school subjects | 0.69 | -0.05 | 0.21 | 0.52 |
|  | I get good grades in all school subjects | 0.55 | -0.07 | 0.36 | 0.44 |
|  | I like all school subjects | 0.71 | -0.04 | 0.25 | 0.56 |
|  | I look forward to all school subjects | 0.66 | 0.05 | 0.30 | 0.53 |
| Perceived Interest/ Competence in Peer Relations | I am easy to like | 0.52 | 0.30 | 0.09 | 0.36 |
|  | I have more friends than most other kids | 0.59 | 0.33 | 0.02 | 0.46 |
|  | I have lots of friends | 0.66 | 0.10 | -0.18 | 0.48 |
|  | I make friends easily | 0.67 | 0.16 | -0.10 | 0.49 |
|  | I get along with kids easily | 0.63 | 0.09 | 0.04 | 0.40 |
|  | Other kids want me to be their friend | 0.68 | 0.17 | 0.07 | 0.49 |
| Externalizing Problem Behaviors | It's hard for me to pay attention | 0.03 | 0.67 | 0.22 | 0.50 |
|  | I get in trouble for fighting with other kids | 0.13 | 0.64 | 0.27 | 0.50 |
|  | I get in trouble for talking and disturbing others | 0.17 | 0.78 | 0.12 | 0.65 |
|  | I get distracted easily | 0.07 | 0.70 | 0.26 | 0.56 |
|  | It's hard for me to finish my school work | 0.06 | 0.49 | 0.39 | 0.39 |
| Internalizing Problem Behaviors | I feel angry when I have trouble learning | 0.14 | 0.33 | 0.56 | 0.44 |
|  | I often feel lonely | -0.05 | 0.41 | 0.55 | 0.47 |
|  | I worry about taking tests | 0.29 | 0.23 | 0.51 | 0.40 |
|  | I feel sad a lot of the time | 0.11 | 0.54 | 0.43 | 0.49 |
|  | I worry about doing well in school | 0.13 | 0.28 | 0.40 | 0.25 |
|  | I feel ashamed when I make mistakes at school | 0.12 | 0.25 | 0.68 | 0.54 |
|  | I worry about finishing my work | 0.13 | 0.14 | 0.64 | 0.45 |
|  | I worry about having someone to play with at school | 0.10 | 0.40 | 0.52 | 0.44 |
|  | Eigenvalues | 7.92 | 3.81 | 1.68 |  |
|  | \% of Variance | 31.67 | 15.22 | 6.73 |  |

Note. Rotation Method: Varimax with Kaiser Normalization; Rotation converged in 8 iterations; To interpret the loadings, I used Comrey and Lee's (1992) suggestion that loadings in excess of 0.71 ( $50 \%$ overlapping variance) are excellent, 0.63 ( $40 \%$ overlapping variance) very good, $0.55(30 \%$ overlapping variance) good, $0.45(20 \%$ overlapping variance) fair, and $0.32(10 \%$ overlapping variance) poor.

## Frequency of Spanish and English Language Use

Since the language frequency items in the LESA were created for this study, two exploratory factor analyses were conducted for the fourth and fifth grade items respectively to determine which items in each grade load onto a factor. Furthermore, the examination of the factor structure of each grade evaluates whether the language frequency items utilized at various points in time (i.e., fourth and fifth grade) do measure the same construct (e.g., Spanish Frequency in School) in the same way. Each exploratory factor analysis had items about Spanish and English frequency of language use in school. Items were rated on a 5-point Likert-style scale, $1=$ "never" to 5 = "always." Sample items included: "How often do you hear the following languages at home?" and "How often do you speak the following languages at school?" Fourth Grade Frequency of Language Use. A principal axis factor with a varimax (orthogonal) rotation of 16 items was performed through IBM SPSS on data gathered from $n=$ 230 participants. The principal axis factor analysis suggested a four-factor solution, explaining $65.31 \%$ of the variance. See Table A3.7. The results of Bartlett's test of sphericity indicated that the correlation matrix was random, $\chi 2(120)=945.467, p<.001$. The Kaiser-Meyer Olkin statistic was 0.74 , suggesting that the sample was adequately factorable.

Fifth Grade Frequency of Language Use. A principal axis factor with a varimax (orthogonal) rotation of 16 items was performed through IBM SPSS on data gathered from $n=230$ participants. The principal axis factor analysis suggested a two-factor solution, explaining $73.99 \%$ of the variance. See Table A3.8. The results of Bartlett's test of sphericity (Bartlett, 1954) indicated that the correlation matrix was random, $\chi 2(120)=1233.923, p<.001$. The Kaiser-Meyer Olkin statistic (Kaiser, 1974) was 0.78 , suggesting that the sample was adequately factorable.

Table A3.7
Principal Axis Factoring of Fourth Grade Language Frequency Items

|  | Item | 1 | 2 | 3 | 4 | Extraction Communalities |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Frequency of English Use in the Home | Listening | 0.12 | 0.09 | -0.08 | 0.50 | 0.276 |
|  | Reading | 0.39 | -0.10 | -0.10 | 0.76 | 0.749 |
|  | Writing | 0.34 | 0.01 | -0.04 | 0.55 | 0.424 |
|  | Speaking | -0.01 | 0.02 | -0.03 | 0.93 | 0.862 |
| Frequency of Spanish Use in the Home | Listening | 0.00 | 0.11 | 0.82 | -0.02 | 0.678 |
|  | Reading | -0.11 | 0.51 | 0.55 | -0.06 | 0.585 |
|  | Writing | 0.10 | 0.47 | 0.67 | -0.13 | 0.689 |
|  | Speaking | 0.16 | 0.23 | 0.87 | -0.16 | 0.853 |
| Frequency of English Use in School | Listening | 0.80 | 0.02 | -0.01 | 0.29 | 0.728 |
|  | Reading | 0.79 | 0.19 | 0.01 | 0.15 | 0.674 |
|  | Writing | 0.70 | 0.25 | 0.15 | 0.05 | 0.579 |
|  | Speaking | 0.86 | 0.02 | 0.06 | 0.25 | 0.802 |
| Frequency of Spanish Use in School | Listening | 0.17 | 0.68 | -0.01 | 0.02 | 0.485 |
|  | Reading | 0.06 | 0.83 | 0.30 | -0.02 | 0.779 |
|  | Writing | 0.17 | 0.72 | 0.17 | 0.07 | 0.585 |
|  | Speaking | 0.05 | 0.74 | 0.34 | 0.08 | 0.672 |
|  | Eigenvalues | 4.89 | 3.88 | 1.60 | 1.33 |  |
|  | \% of Variance | 30.56 | 24.23 | 9.98 | 8.33 |  |

Extraction Method: Principal Axis Factoring. Rotation Method: Varimax with Kaiser Normalization.
Rotation converged in 7 iterations.

Table A3.8
Principal Axis Factoring of Fifth Grade Language Frequency Items

|  |  |  |  |  | Extraction <br> Communalities |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| Frequency of English Use in the Home | Listening | 0.10 | 0.15 | $\mathbf{0 . 7 7}$ | -0.09 | 0.63 |
|  | Reading | 0.00 | 0.23 | $\mathbf{0 . 7 7}$ | -0.01 | 0.64 |
|  | Writing | 0.37 | 0.16 | $\mathbf{0 . 4 6}$ | 0.02 | 0.38 |
|  | Speaking | 0.17 | 0.17 | $\mathbf{0 . 8 3}$ | 0.00 | 0.74 |
| Frequency of Spanish Use in the Home | Listening | 0.13 | 0.02 | -0.11 | $\mathbf{0 . 8 0}$ | 0.67 |
|  | Reading | 0.55 | -0.08 | -0.01 | $\mathbf{0 . 3 4}$ | 0.43 |
|  | Writing | 0.61 | -0.12 | 0.16 | $\mathbf{0 . 4 0}$ | 0.58 |
|  | Speaking | 0.29 | 0.04 | 0.00 | $\mathbf{0 . 8 6}$ | 0.83 |
| Frequency of English Use in School | Listening | -0.03 | $\mathbf{0 . 8 2}$ | 0.13 | 0.01 | 0.69 |
|  | Reading | 0.06 | $\mathbf{0 . 8 8}$ | 0.22 | 0.01 | 0.82 |
|  | Writing | 0.28 | $\mathbf{0 . 8 4}$ | 0.16 | 0.02 | 0.81 |
|  | Speaking | 0.07 | $\mathbf{0 . 7 8}$ | 0.21 | 0.00 | 0.65 |
| Frequency of Spanish Use in School | Listening | $\mathbf{0 . 6 7}$ | 0.16 | 0.14 | 0.08 | 0.50 |
|  | Reading | $\mathbf{0 . 9 6}$ | 0.06 | 0.05 | 0.01 | 0.92 |
|  | Writing | $\mathbf{0 . 8 3}$ | 0.13 | 0.13 | 0.07 | 0.72 |
|  | Speaking | $\mathbf{0 . 7 0}$ | 0.21 | 0.15 | 0.29 | 0.64 |
|  | Eigenvalues | 5.57 | 3.33 | 1.84 | 1.31 |  |
|  | \% of Variance | 33.54 | 20.78 | 11.50 | 8.18 |  |

Extraction Method: Principal Axis Factoring. Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 6 iterations.

## APPENDIX

# My Reading Growth and Reader Identity 

* Indicates reruired gupstion

1. Date: *

Example: January 7, 2019
2. First Name:*
3. Last Name: *
4. Grade: *

Mark only one oval.45
5. Trimester:

Mark only one oval.FallWinterSpring
6. Birthdate: *

Example: January 7, 2019
7. Teacher:*

Mark only one oval.


## My Reading Data

Please use your bar graphs to complete the sentence prompts below.
8. My reading data shows me...

Complete this sentence prompt in 3-4 sentences.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
9. To me, this means...

Complete this sentence prompt in 3-4 sentences.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
10. This matters to me because...

Complete this sentence prompt in 3-4 sentences.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
My Reader Identity
11. What kind of reader are you?

Mark only one oval.Bilingual Reader (I read two languages)
Skip to question 12Multilingual Reader (I read three or more languages) Skip to question 16Monolingual Reader (I read one language) Skip to question 20

I am a Bilingual Reader
12. Which two languages do you use to read?

Check all that apply.EnglishSpanishKoreanOther:
13. Why do you read in two languages? (3-4 sentences)
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
14. I want to be the kind of bilingual reader who...

Complete this sentence prompt in 3-4 sentences.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
15. How do you feel about reading in two languages? Why? (3-4 sentences)

Skip to section 7 (Your self-assessment has ended.)
I am a Multilingual Reader
16. Which three languages do you use to read?

Check all that apply.EnglishSpanishKoreanZapotec (Zapoteco)TagalogMayan (e.g., Chuj, Quiché)TagalogBengali (Bangla)Other:
17. Why do you read in three languages? (3-4 sentences)
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
18. I want to be the kind of multilingual reader who...

Complete this sentence prompt in 3-4 sentences.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
19. How do you feel about reading in multiple languages? Why? (3-4 sentences)
Skip to section 7 (Your self-assessment has ended.)
I am a Reader of One Language
Which language do you use to read?
Mark only one oval.
English
Spanish
Korean
Other:
21. Why do you read in one language? (3-4 sentences)
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
22. I want to be the kind of reader who...

Complete this sentence prompt in 3-4 sentences.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
23. How do you feel about reading one language? Why? (3-4 sentences)
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Your self-assessment has ended.

This content is neither created nor endorsed by Google.

## Google Forms

## Default Question Block

## THE LANGUAGESESKPERTIENCE

This self-assessment was created to help you think about:

- How you use languages in different places and with different people.
- How you feel about using languages.
- How your languages change when you are working on different reading, writing, speaking, and listening tasks.

What is your first name?
$\square$

What is your last name?

What grade are you in?
$\square$

Who is your teacher?
$\qquad$

## Ciclo del idionsá español en la



## Instrucciones

Como una mariposa Monarca, nuestros idiomas también crecen y se desarrollan en etapas.

A continuación, lee cada frase y escoge la etapa que mejor describa tu desarrollo del idioma español en la CASA. ¡No hay respuestas correctas o incorrectas!

Si no entiendes algo, pídele ayuda a tu maestra/o.
¿En qué etapa realizas las, actividades en español presentadas a continuación en tu CASA?

En casa...

...leo correos
electrónicos en español que me mandan mis amigos.


## En casa...

|  |  |  |  | Etapa de avanzo |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Etapa inicial | Etapa emergente | Etapa de transición |  | Etapa dominante |
| ...tengo conversaciones en español con mi familia. | $0$ | $\bigcirc$ | $0$ | $\bigcirc$ | $\bigcirc$ |
| ...comprendo las <br> conversaciones en español que escucho a mi mamá o mi tutor/a hablar. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |

## 8/14/2020

Qualtics Survey Sottware


## En casa...

...le hablo a mis padres o mi tutor/a en español sobre algo que aprendi en la escuela.
...comprendo las conversaciones en español que escucho a mi familia hablar.
...escribo mensajes que publico "online" en español.
... comprendo las palabras en español que escucho en las noticias o programas educacionales en la televisión.



## En casa...

...escribo en español.
...leo la tarea de mis hermanos/as en español.
...hablo con mis padres o mi tutor/a sobre algo que he aprendido de un libro en español.
...les escribo mensajes de texto en español a mis amigos.

## En casa...


...comprendo las conversaciones en español que escucho a mis hermanos/as hablar.
...leo los textos en español que mis hermanos/as me mandan usando mi teléfono.

## Preguntas soobre tu aprendizaje

## Instrucciones

Lee cada frase y hazle click a la respuesta que mejor describe sí estás de acuerdo o en desacuerdo con la oración. Piensa en lo bien que la frase te describe. ¡No hay respuestas buenas o malas!

Si no entiendes algo, pídele ayuda a tu maestra/o.

Aprendo español porque...

Qualtics Survey Sotware

|  | Estoy <br> firmemente <br> en | Estoy en <br> desacuerdo <br> desacuerdo | No estoy <br> seguro | Estoy de <br> acuerdo |
| :--- | :---: | :---: | :---: | :---: |
| Estoy <br> firmemente <br> de acuerdo |  |  |  |  |
| que aprender español. |  |  |  |  |

## Aprendo español porque...

|  | Estoy <br> firmemente <br> en | Estoy en <br> desacuerdo <br> desacuerdo | No esto <br> segu |
| :--- | :---: | :---: | :---: |
| ...me gusta cuando puedo <br> comprender cosas dificiles <br> en español. |  |  |  |
| ...es divertido aprender <br> español. <br> ...mi familia y maestros <br> quieren que yo aprenda <br> español. |  |  |  |

## Aprendo español porque...

## Estoy <br> firmemente

en
desacuerdo desacuerdo seguro
...me gusta hacer cosas difíciles en español.

| Estoy |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | firmemente <br> en desacuerdo | Estoy en desacuerdo | No estoy seguro | Estoy de acuerdo | Estoy firmemente de acuerdo |
| ...quiero mostrarles a mis maestros que puedo aprender español. | $0$ | $\bigcirc$ | $0$ | $0$ | $\bigcirc$ |
| ...me gusta cuando hago bien en español. |  |  | O | O | O |

## ¡Disfruta de un descanso de 10 segundos!



These page timer metrics will not be displayed to the recipient.
First Click: 0 seconds
Last Click: 0 seconds
Page Submit: 0 seconds
Click Count: O clicks

## English Langyage Gerowth Cycle at



Directions

## 8/14/2020

Qualtics Survey Sottware
Like a Monarch Butterfly, our languages also grow and develop in stages.

Read each statement below and choose the stage that best describes your English language development at HOME. There are no right or wrong answers!

Remember, If you do not understand something, ask your teacher for help.

## At what stage do you perform the following English language activities at HOME?

## At home...


...I understand the English words I hear from news or educational programs on television.
...I read my siblings' (brothers, sisters) homework in English.

## At home...



## At home...



...I read the English texts my siblings (brothers, sisters) send me using my phone.

## At home...

...I read the English emails my friends send me at home.
...l talk to my siblings (brothers, sisters) in English about myself (my age, birthday, and hobbies) when they ask.
...I write in English.
...I have English conversations with my family.

## At home...


...I talk to my parents(s) or guardian(s) in English about something I learned in school.
...I understand the English conversations I hear my family speak.
...I post messages online in English.
...I understand the English words I hear from a song.

## Questions About the Hodanguages

In this section you will answer questions about:

- The languages you use with different people at home.
- How often you use different languages to LISTEN, READ, WRITE, and SPEAK at home.
- How comfortable you feel using your languages at HOME.

Remember, if you do not understand something, ask your teacher for help.

## The Languagisk You HEAR

Try to answer the following questions as best as you can.
Click on the boxes that apply to you.
Only add "Another Language" if you HEAR a language that is not listed.

How often do you HEAR the following languages at home?

|  |  |  | Most of the |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Never | Rarely | Sometimes | time | Always |
| English | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Spanish | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Zapotec (Zapoteco) | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Mayan: K'iche' (Quiché), Chuj | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Korean | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
|  | Never | Rarely | Sometimes | Most of the time | Always |
| Tagalog (Filipino) | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Bengali (Bangla) | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Arabic | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Another Language | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |

What languages do you HEAR the following people use at home?

|  |  |  | Siblings <br> (brothers, |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| English | Mother | Father | Guardian(s) | sisters) | Grandparent(s) |


|  | Not at all comfortable | Slightly comfortable | Somewhat comfortable | Very comfortable | Extremely comfortable |
| :---: | :---: | :---: | :---: | :---: | :---: |
| English | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Spanish | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Zapotec (Zapoteco) | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Mayan: K'iche' (Quiché), Chuj | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Korean | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Tagalog (Filipino) | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Bengali (Bangla) | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Arabic | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Another Language | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |

Why do you HEAR Korean at home?


Complete this sentence:
If my family only knew how I felt about LISTENING to Korean...


Why do you HEAR Zapotec (Zapoteco) at home?
$\square$

Complete this sentence:
If my family only knew how I felt about LISTENING to Zapotec (Zapoteco)...


Why do you HEAR a Mayan Language at home?


Complete this sentence:
If my family only knew how I felt about LISTENING to a Mayan Language...


Why do you HEAR English at home?


Complete this sentence:
If my family only knew how I felt about LISTENING to English...
$\square$

Why do you HEAR Spanish at home?


Complete this sentence:
If my family only knew how I felt about LISTENING to Spanish...

Why do you HEAR Tagalog (Filipino) at home?


Complete this sentence:
If my family only knew how I felt about LISTENING to Tagalog (Filipino)...


Why do you HEAR Bengali (Bangla) at home?


Complete this sentence:
If my family only knew how I felt about LISTENING to Bengali (Bangla)...


Why do you HEAR Arabic at home?


Complete this sentence:
If my family only knew how I felt about LISTENING to Arabic...

## The Languages You SPEAK

Try to answer the following questions as best as you can. Click on the boxes that apply to you.

Only add "Another Language" if you SPEAK a language that is not listed.

How often do you SPEAK the following languages at home?

|  | Most of the |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| time |  |  |  |$\quad$ Always


| 8814/2020 | Qualtics Survey Sortuare |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Never | Rarely | Sometimes | Most of the time | Always |
|  |  |  |  | Most of the |  |
|  | Never | Rarely | Sometimes | time | Always |
| Tagalog (Filipino) | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Bengali (Bangla) | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Arabic | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Another Language | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |

What languages do you SPEAK with the following people at home?
Siblings
(brothers, Grandparent(s)

How COMFORTABLE do you feel when you SPEAK the following languages at home?

| Not at all | Slightly | Somewhat | Very | Extremely |
| :---: | :---: | :---: | :---: | :---: |
| comfortable | comfortable | comfortable | comfortable | comfortable |

English

| 8/14/2020 | Cualtrics Survey Sotware |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Not at all comfortable | Slightly comfortable | Somewhat comfortable | Very comfortable | Extremely comfortable |
| Spanish | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Zapotec (Zapoteco) | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Mayan: K'iche' (Quiché), Chuj | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Korean | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Tagalog (Filipino) | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Bengali (Bangla) | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Arabic | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Another Language | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |

Why do you SPEAK English at home?


Complete this sentence:
If my family only knew how I felt about SPEAKING English...


Why do you SPEAK Spanish at home?

Complete this sentence:
If my family only knew how I felt about SPEAKING Spanish...
$\square$

Why do you SPEAK Zapotec (Zapoteco) at home?


Complete this sentence:
If my family only knew how I felt about SPEAKING Zapotec (Zapoteco)...


Why do you SPEAK a Mayan Language at home?


Complete this sentence:
If my family only knew how I felt about SPEAKING a Mayan Language...


Why do you SPEAK Korean at home?


Complete this sentence:
If my family only knew how I felt about SPEAKING Korean...


Why do you SPEAK Tagalog (Filipino) at home?
$\square$

Complete this sentence:
If my family only knew how I felt about SPEAKING Tagalog (Filipino)...


Why do you SPEAK Bengali (Bangla) at home?


Complete this sentence:
If my family only knew how I felt about SPEAKING Bengali (Bangla)...


Why do you SPEAK Arabic at home?


Complete this sentence:
If my family only knew how I felt about SPEAKING Arabic...

## The LanquagessYou READ

Try to answer the following questions as best as you can.

Click on the boxes that apply to you.
Only add "Another language" if you READ using a language that is not listed.

How often do you READ using the following languages at home?


How COMFORTABLE do you feel when you read using the following languages at home?

|  | Not at all comfortable | Slightly comfortable | Somewhat comfortable | Very comfortable | Extremely comfortable |
| :---: | :---: | :---: | :---: | :---: | :---: |
| English | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Spanish | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Zapotec (Zapoteco) | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Mayan: K'iche' (Quiché), Chuj | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |

Qualtics Survey Sotware

| Not at all | Slightly | Somewhat | Very | Extremely |
| :---: | :---: | :---: | :---: | :---: | :---: |
| comfortable | comfortable | comfortable | comfortable | comfortable |

Korean
Tagalog (Filipino)
Bengali (Bangla)
Arabic
Another Language
comfortable comfortable comfortable comfortable comfortable

## The Languages Mou WRITE

Try to answer the following questions as best as you can. Click on the boxes that apply to you.

Only add "Another language" if you WRITE using a language that is not listed.

How often do you WRITE using the following languages at home?

|  | Rarely | Sometimes of the |
| :--- | :---: | :---: | :---: | :---: | :---: |
| time |  |  |$\quad$ Always

Never Rarely Sometimes | Most of the |
| :---: |
| time Always |

Another Language

How COMFORTABLE do you feel when you write using the following languages at home?

|  | Not at all comfortable | Slightly comfortable | Somewhat comfortable | Very comfortable | Extremely comfortable |
| :---: | :---: | :---: | :---: | :---: | :---: |
| English | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Spanish | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Zapotec (Zapoteco) | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Mayan: K'iche' <br> (Quiché), Chuj | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Korean | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Tagalog (Filipino) | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Bengali (Bangla) | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Arabic | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Another Language | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |

## Enjoy a 20 second break! You are half-way through your self-assessment!



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## Ciclo del idigcuates pañol en la <br> 

## Instrucciones

Como una mariposa Monarca, nuestros idiomas también crecen y se desarrollan en etapas.

A continuación, lee cada frase y escoge la etapa que mejor describa tu desarrollo del idioma español en la ESCUELA. ¡No hay respuestas correctas o incorrectas!

Si no entiendes algo, pídele ayuda a tu maestra/o.
¿En qué etapa realizas las actividades en inglés presentadas a continuación en la ESCUELA?

En la escuela...


## En la escuela...


...comprendo las conversaciones en español que escucho a otros estudiantes hablar en el patio de la escuela.

...leo el examen de la lectura en español con mi maestra/o.
...comprendo las lecciones de la clase al escuchar al maestro/a hablar en español.
...les escribo notas a mis amigas/os en español (como "cootie catchers").

## En la escuela...


...hablo con mis amigas/os en español sobre mi persona (mi edad, mi cumpleaños, mis pasatiempos) cuando me preguntan.
...leo en español.

...comprendo las conversaciones en español que escucho a otros estudiantes hablar en el salón de clase.
...escribo varios tipos de ensayos en español (como ensayos informativos o persuasivos.

## En la escuela...


...hablo con mis amigas/os en español sobre temas que son importantes para mi.
...leo las notas que mis amigas/os escriben en español (como "cootie catchers").

...tengo conversaciones en español con mis maestras/os.
...puedo escribir al menos de cinco párrafos en español.

## English Languagegrowth Cycle at



## Directions

Like a Monarch Butterfly, our languages also grow and develop in stages.

Read each statement below and choose the stage that best describes your English language development at SCHOOL. There are no right or wrong answers!

If you do not understand something, ask your teacher for help.

## At what stage do you perform these English language activities at SCHOOL?

## At school...


...I understand the English that teachers speak.
...l read English books.
...I talk to my teacher in English about something I learned from a book.
...I write in English.

## At school...

Beginning
Stage Emerging
_.I understand the
English conversations I
hear other students
speak in the schoolyard.

...I read the English reading test with my teacher.
...I understand the class lessons I hear my teacher speak in English.
...I write notes to my friends in English (like cootie catchers).

## At school...


...l talk to my friends in English about myself (my age, my birthday, and my hobbies) when they ask me.
...l read in English.
...I understand the
English conversations I hear other students speak in the classroom.


## At school...

...l talk to my friends in English about topics that are important to me.
...l read the notes my friends write in English (like cootie catchers).
...I have English conversations with teachers.
...I can write at least five paragraphs in English.



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## Questions About the banguages

In this section you will answer questions about:

- The languages you use with different people at school.
- How often you use different languages to LISTEN, READ, WRITE, and SPEAK at school.
- How comfortable you feel using your languages at school.

Remember, if you do not understand something, ask your teacher for help.

## The Languages You HEAR at

Try to answer the following questions as best as you can.
Click on the boxes that apply to you.
Only add "Another language" if you HEAR a language that is not listed.

How often do you HEAR the following languages at school?

|  |  |  | Most of the |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Never | Rarely | Sometimes | time | Always |
| English | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Spanish | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Korean | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Tagalog (Filipino) | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Zapotec (Zapoteco) | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
|  | Never | Rarely | Sometimes | st of the | Always |
| Mayan Language: <br> K'iche' (Quiché), Chuj | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Bengali (Bangla) | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Arabic | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Another Language | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |

What languages do you HEAR the following people use at school?
Teachers Friends Students Principals

English
Spanish
Korean
Tagalog (Filipino)
Zapotec (Zapoteco)
Mayan Language:
K'iche' (Quiché), Chuj
Bengali (Bangla)
Arabic
Another Language

How COMFORTABLE do you feel when you HEAR the following languages at school?

|  | Not at all comfortable | Slightly comfortable | Somewhat comfortable | Very comfortable | Extremely comfortable |
| :---: | :---: | :---: | :---: | :---: | :---: |
| English | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Spanish | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Korean | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Tagalog (Filipino) | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Zapotec (Zapoteco) | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Mayan Language: <br> K'iche' (Quiché), Chuj | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | 0 | $\bigcirc$ |
| Bengali (Bangla) | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Arabic | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Another Language | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |

Why do you HEAR English at school?
$\square$
Complete this sentence:
If my teacher only knew how I felt about LISTENING to English...
$\square$
Why do you HEAR Spanish at school?
$\square$

Complete this sentence:
If my teacher only knew how I felt about LISTENING to Spanish...
$\square$

Why do you HEAR Korean at school?


Complete this sentence:
If my teacher only knew how I felt about LISTENING to Korean...


Why do you HEAR Zapotec (Zapoteco) at school?


Complete this sentence:
If my teacher only knew how I felt about LISTENING to Zapotec
(Zapoteco)...


Why do you HEAR Bengali (Bangla) at school?


Complete this sentence:
If my teacher only knew how I felt about LISTENING to Bengali (Bangla)...
$\square$

Why do you HEAR a Mayan Language at school?


Complete this sentence:
If my teacher only knew how I felt about LISTENING to a Mayan Language...
$\square$

Why do you HEAR Arabic at school?


Complete this sentence:
If my teacher only knew how I felt about LISTENING to Arabic...


Why do you HEAR Tagalog (Filipino) at school?
$\square$

Complete this sentence:
If my teacher only knew how I felt about LISTENING to Tagalog (Filipino)...


## 8/14/2020

## The Languages You READ at

Try to answer the following questions as best as you can. Only click on the boxes that apply to you.

Only add "Another Language" if you READ a language that is not listed.

How often do you READ using the following languages at school?

|  | Most of the <br> time |  |  | Always |
| :--- | :---: | :---: | :---: | :---: | :---: |
| English | Never | Rarely | Sometimes |  |
| Spanish |  |  |  |  |
| Korean |  |  |  |  |

How COMFORTABLE do you feel when you READ using the following languages at school?

|  | Not at all <br> comfortable | Slightly <br> comfortable | Somewhat <br> comfortable | Very <br> comfortable | Extremely <br> comfortable |
| :--- | :---: | :---: | :---: | :---: | :---: |
| English |  |  |  |  | $\bigcirc$ |
| Spanish |  |  |  |  |  |
| Korean |  |  |  |  |  |
| Another Language |  |  |  |  |  |

## The Languagessobu WRITE at

Try to answer the following questions as best as you can. Only click on the boxes that apply to you.

Only add "Another Language" if you WRITE a language that is not listed.

How often do you WRITE using the following languages at school?

|  |  |  | Most of the |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Never | Rarely | Sometimes | time | Always |
| English | 0 | 0 | 0 | 0 | 0 |
| Spanish | 0 | 0 | 0 | 0 | 0 |
| Korean | 0 | 0 | 0 | 0 | 0 |
| Another Language | 0 | 0 | 0 | 0 | 0 |

How COMFORTABLE do you feel when you WRITE using the following languages at school?

|  | Not at all <br> comfortable | Slightly <br> comfortable | Somewhat <br> comfortable | Very <br> comfortable | Extremely <br> comfortable |
| :--- | :---: | :---: | :---: | :---: | :---: |
| English | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |  |
| Spanish | $\bigcirc$ |  |  | $\bigcirc$ | $\bigcirc$ |
| Korean | $\bigcirc$ |  |  |  | $\bigcirc$ |

## The Languages Kou SPEAK at

Try to answer the following questions as best as you can. Only click on the boxes that apply to you.

Only add "Another Language" if you SPEAK a language that is not listed.

How often do you SPEAK the following languages at school?

| 8/14/2020 | Cualtres Survey Sotware |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Never | Rarely | Sometimes | Most of the time | Always |
| English | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Spanish | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Korean | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Tagalog (Filipino) | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Zapotec (Zapoteco) | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
|  | Never | Rarely | Sometimes | Most of the time | Always |
| Mayan Language: <br> K'iche' (Quiché), Chuj | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Bengali (Bangla) | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Arabic | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Another Language: | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |

What languages do you SPEAK with the following people at school?

|  | Teachers | Friends | Students | Principals |
| :--- | :---: | :---: | :---: | :---: |
| English | $\square$ | $\square$ | $\square$ | $\square$ |
| Spanish | $\square$ | $\square$ | $\square$ | $\square$ |
| Korean | $\square$ | $\square$ | $\square$ | $\square$ |
| Zapotec (Zapoteco) | $\square$ | $\square$ | $\square$ | $\square$ |
| Mayan Language: | $\square$ | $\square$ | $\square$ | $\square$ |
| K'iche' (Quiché), Chuj | $\square$ | $\square$ | $\square$ | $\square$ |
| Tagalog (Filipino) | $\square$ | $\square$ | $\square$ | $\square$ |
| Bengali (Bangla) | $\square$ | $\square$ | $\square$ | $\square$ |
| Arabic | $\square$ | $\square$ | $\square$ | $\square$ |

How COMFORTABLE do you feel when you SPEAK the following languages at school?

|  | Not at all comfortable | Slightly comfortable | Somewhat comfortable | Very comfortable | Extremely comfortable |
| :---: | :---: | :---: | :---: | :---: | :---: |
| English | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Spanish | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Korean | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Zapotec (Zapoteco) | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Mayan Language: <br> K'iche' (Quiché), Chuj | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Tagalog (Filipino) | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Bengali (Bangla) | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Arabic | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Another Language | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |

Why do you SPEAK English at school?
$\square$

Complete this sentence:
If my teacher only knew how I felt about SPEAKING English...
$\square$

Why do you SPEAK Spanish at school?


Complete this sentence:
If my teacher only knew how I felt about SPEAKING Spanish...
$\square$

Why do you SPEAK Korean at School?


Complete this sentence:
If my teacher only knew how I felt about SPEAKING Korean...


Why do you SPEAK Zapotec at school?


Complete this sentence:
If my teacher only knew how I felt about SPEAKING Zapotec...
$\square$

Why do you SPEAK a Mayan Language at school?


Complete this sentence:
If my teacher only knew how I felt about SPEAKING a Mayan Language...


Why do you SPEAK Tagalog (Filipino) at school?


Complete this sentence:
If my teacher only knew how I felt about SPEAKING Tagalog (Filipino)...
$\square$

Why do you SPEAK Bengali at school?


Complete this sentence:
If my teacher only knew how I felt about SPEAKING Bengali...
$\square$

Why do you SPEAK Arabic at school?


Complete this sentence:
If my teacher only knew how I felt about SPEAKING Arabic...
$\square$

## 8/14/2020 Qualtrics Survey Sotware <br> Questions Ablisht Learning

## Directions

Read each sentence and click on the answer that best describes how strongly you agree or disagree with the sentence. Think of how well the sentence describes you. There are no right or wrong answers!

Remember, If you do not understand something, ask your teacher for help.

I learn English because...
Strongly

disagree $\quad$ Disagree $\quad$ Not sure $\quad$ Agree $\quad$| Strongly |
| :---: |
| agree |

... everybody in school has to learn English.
...I like learning new things in English.
...I want to show my parent(s) or guardian(s) that I can learn English

I learn English because...
Strongly

disagree $\quad$ Disagree Not sure $\quad$ Agree $\quad$| Strongly |
| :---: |
| agree |

...I like it when I can understand difficult things in English.
...it is fun to learn English.
...my family and teachers want me to learn English.

I learn English because...
Strongly

disagree $\quad$ Disagree $\quad$ Not sure $\quad$ Agree | Strongly |
| :---: |
| agree |

...I like doing difficult things in English.
...I want to show my teachers that I can learn English.
...I like it when I do well in English.

## Enjoy a 10 second break! You are almost finished with

 your self-assessment!

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## QuestionşAbout Learning in

## Directions

Read each sentence and choose the answer that explains how TRUTHFUL the sentence is to you.

There are no right or wrong answers!

```
8/14/2020
    Qualtrics Survey Sotware
```

Remember, If you do not understand something, ask your teacher for help.

Choose the answer that explains how TRUTHFUL the sentence is to you.
Not at all true A little bit true
I like reading long
chapter books...
I enjoy doing work in
all school subjects...
It's hard for me to pay
attention...
I get in trouble for
talking and disturbing
others...
Work in reading is
easy for me...

| I get along with kids |
| :--- |
| easily... |
| I get good grades in |
| reading... |
| I get in trouble for |
| fighting with other |
| kids... |

I have lots of friends...

Choose the answer that explains how TRUTHFUL the sentence is to you.
Not at all true A little bit true Mostly true Very true

I am good at all school subjects...
Not at all true A little bit true
I feel angry when I
have trouble
learning...
I worry about taking
tests...
I cannot wait to read
each day...

| I get good grades in |
| :--- |
| all school subjects... |
| I have more friends |
| than most other kids... |
| I feel sad a lot of the |
| time... |
| I enjoy doing work in |
| reading... |

Choose the answer that explains how TRUTHFUL the sentence is to you.

|  | Not true | A little bit true | Mostly true | Very true |
| :--- | :---: | :---: | :---: | :---: |
| I make friends easily... <br> I often feel lonely.. | $\bigcirc$ |  |  |  |
| I like all school <br> subjects... <br> Work in all school <br> subjects is easy for <br> me... | Not true | A little bit true | Mostly true | Very true |
| I am interested in <br> reading... |  |  |  |  |

It's hard for me to finish my school work...

I am easy to like...
I worry about doing well in school...
$\bigcirc$

Choose the answer that explains how TRUTHFUL the sentence is to you.
Other kids want me to
be their friend...
I am good at reading...
I feel ashamed when I
make mistakes at
school...
I worry about finishing
my work...

| I worry about having |
| :--- |
| someone to play with |
| at school... |
| I look forward to all |
| school subjects... |
| I cannot wait to read |
| each day... |

## Thank you for taking the time to answer each question!


[^0]:    Note. Experiences recorded in this table were explicitly mentioned by teacher-participants during the interview, indicating that other teachers may have had similar experiences but

