

# Investigating the Intersectional Gap for Multilingual Children in Special Education

Brittney Cooper<sup>1</sup><sup>a</sup>, Bowen Wang-Kildegaard<sup>2</sup>, Ari Chinchilla<sup>3</sup>

<sup>1</sup> Special Education, San Francisco State University, <sup>2</sup> University of California, Berkeley, <sup>3</sup> University of Pennsylvania

## Article Information

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## Abstract

### Plain Language

This article employs a critical dis/abilities raciolinguistic perspective to explore how home language influences general education (GE) participation for students in special education. We build on findings that dually classified students (i.e., English Learners [EL] and disabled) have limited access to inclusive education compared to non-EL peers, a disparity described as an intersectional gap. We explore another intersectional gap, hypothesizing that special education students from homes using languages other than English (i.e., multilingual in this study) are affected *regardless* of English-proficiency or EL designation. Analysis shows multilingual students spent 5.23 percentage points less time in GE weekly than peers from English-only homes, controlling for demographic, economic, and achievement variables. English proficiency did not moderate outcome. This research calls for educational policies that address raciolinguistic and disability discrimination. Additionally, this study signals the need to account for home language in addition to EL designation to counteract and prevent unintended intersectional gaps.

### Formal

**Purpose:** This article employs a critical dis/abilities raciolinguistic perspective to explore if multilingual students are affected by an intersectional gap, a phenomenon whereby students with intersectional identities have limited access to inclusive education (Cioè-Peña, 2017). We hypothesize that home language (i.e., English-only versus multilingual) influences general education (GE) participation among students in special education, regardless of English proficiency.

**Method:** Our secondary analysis of the Special Education Elementary Longitudinal Study data included 4,115 children. We used mixed-effect linear models, with the proportion of time in GE as the dependent variable and multilingual status as the primary explanatory variable, controlling for demographic, economic, and achievement-related factors.

**Results:** We found that multilingual students were estimated to spend an average of 5.23 percentage points less time in GE per week than their English-only peers ( $p < 0.01$ ), controlling for relevant variables. The effect size was 0.15. English proficiency did not significantly moderate this disparity.

**Conclusion:** Highlighting a persistent marginalization for multilingual students labeled as disabled, this research calls for educational policies that address the nuances of both raciolinguistic and disability discrimination. Additionally, this study signals the need to account for home language in addition to English Learner (EL) designation to counteract and prevent unintended intersectional gaps.

In the international context, inclusion refers to processes that support historically marginalized children (e.g., girls, ethnic minorities, children living in poverty, etc.) in accessing education and opportunities to learn with the general student population (Kurth et al., 2018). In the United States, educational inclusion policies center

on students with dis/abilities<sup>1</sup>, with the *Individuals with Disabilities Education Act* (IDEA, 2004) serving as the cornerstone of federal legislation. Since 1975 (then titled the *Education for All Handicapped Children Act*, P.L. 94-142), IDEA ensures that students with disabilities receive a free appropriate public education that includes access to the general education curriculum and opportunities to learn with nondisabled peers to the maximum extent possible.

Although IDEA has undoubtedly benefited countless children with disabilities by increasing access to inclusive education, critical research acknowledges that when efforts are made to include students on the basis of one factor, such as dis/ability, students who simultaneously represent more than one demographic may be “left on the margins” (Cioè-Peña, 2017, p. 907). Cioè-Peña (2017) refers to this phenomenon as an *intersectional gap*. A growing body of literature points to an intersectional gap for students of color, meaning that they tend to be educated in more restrictive settings than white peers in special education (Cooc, 2022, 2023; De Valenzuela et al., 2006; Grindal et al., 2019; Skiba et al., 2006). More recently, scholarship has explored the intersectional experiences of students who are labeled as disabled and whose heritage language(s) includes languages other than English (Cioè-Peña, 2017, 2021a; Cooc, 2023; Counts et al., 2018; De Valenzuela et al., 2006; Kangas & Cook, 2020; Mohamed, 2023; Sullivan, 2011; Umansky, 2016; Umansky et al., 2017).

Prior research on special education referral, identification, and placement for multilingual students has primarily focused on a subgroup labeled *English Language Learners* or *English Learners* (EL). The EL label is used by education institutions to indicate students assessed to have English proficiency below what is considered necessary for expected participation in English-only classrooms (Linquanti & Cook, 2013). The EL label has been implicated as a determinant of academic tracking (Gándara et al., 2003; Umansky, 2016). Beyond the EL label itself, related yet distinct facets of oppression directed towards marginalized identities (e.g., classism, racism) are also believed to contribute to the academic barriers affecting these students (Catalano et al., 2020; Flores et al., 2015; Mohamed, 2023).

To better understand the multifold barriers affecting multilingual students, it is important to recognize that only a fraction of multilingual children demonstrate difficulty with English or are categorized as ELs (Forum on Child and Family Statistics [ChildStats], 2023). Therefore, research focused on students with a formal EL label may be limited in explaining how broader linguistic factors, such as language use at home, may influence inclusion for the wider group of multilingual students in special education. Home language surveys often serve as an initial

step in identifying students as ELs, containing questions for parents and guardians about languages used at home and by students. However, variations on these forms and processes across states lead to different identification outcomes for similar multilingual students (Bailey & Kelly, 2013; Salerno & Andrei, 2021). Although the home language survey may not provide information about the students’ linguistic practices, students labeled as disabled (SLADs) from multilingual or non-English speaking families who are not categorized as ELs may also experience barriers to inclusive placement. Observing the educational placement of the broader multilingual group relative to monolingual English-speaking students in special education is necessary to determine if an intersectional gap exists and if students’ diverse language background is a contributing factor. To address this gap in the literature, we compared the proportion of time spent in general education (GE) between multilingual students in special education and their English-only peers.

## Terminology

In this paper, the term *multilingual* is adopted to describe students living in homes where languages other than English are used. Importantly, living in a multilingual home does not automatically mean that a student uses multiple named languages themselves. For the specific purposes of this study, which is interested in home language, we use the term *multilingual* to refer to students exposed to languages other than English in their home environments as reported by families in the Special Education Elementary Longitudinal Study (SEELS) data. We do not use this term to refer to students’ use of named languages, which may differ from those used by their families.

In the U.S., the phrase *culturally and linguistically diverse* (CLD) is often used to describe the multilingual population; however, this term assumes that white American culture and white-centric American Englishes represent the absence of diversity. Other phrases that do not center on English and that highlight students’ varied linguistic repertoires have been suggested, such as emergent bilingual and multilingual learner. Adopting this strength-based perspective (Soto-Boykin et al., 2021), we use the term multilingual student to acknowledge students’ experience with multiple languages without referring to their proficiency with English or their home/heritage language(s). We use the term *EL* in reference to the institutional determination that categorizes students based on their assessed English-language proficiency. Thus, we do not use EL and multilingual synonymously. Additionally, we use the term *student labeled as disabled* (SLAD) to describe students in special education. This phrase was suggested by Cioè-Peña (2020) to replace phrases placing

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<sup>1</sup> The slash in “dis/ability” is used to refer to the inseparable nature of ‘abled’ and ‘disabled’ as socially constructed categories. In addition, the slash serves to interrupt deficit discourses by considering both struggles and capabilities on the basis of dis/ability (Polish, 2017).

the onus of disability on the student, such as *student with special needs*.

We acknowledge that the terms *inclusion* and *access to general education* are not considered synonymous by many scholars and practitioners in education. Access to GE, or participation in GE, refers to meaningful opportunities to learn the general curriculum in a classroom with a GE teacher and peers. We acknowledge that GE spaces are not inherently superior to special education settings, particularly for multiply marginalized learners who often experience lack of academic supports and heightened punitive measures in GE (e.g., Wun, 2018). For many stakeholders, access to GE is only one component of inclusive education, which also encompasses beliefs and practices that contribute to a person's sense of belonging within the classroom and school community (Qvortrup & Qvortrup, 2018). Although our study does not investigate said beliefs and practices around inclusivity, we consider having *equitable* access to the GE classroom integral to inclusive education (White et al., 2019). Consequently, we use the terms *inclusion*, *access*, and *participation in GE* interchangeably when referring to students' educational placement in GE classrooms.

## Literature Review

### Theoretical Framework

This inquiry into the educational placement of multilingual SLADs is inspired by a critical dis/abilities raciolinguistic (CDR) perspective put forth by Cioè-Peña (2021a). A CDR perspective explores how power structures around race, ability, and language intersect to influence the experiences of multilingual individuals who are labeled as disabled. This lens bridges Intersectionality, Dis/abilities Critical Race Theory (DisCrit), and a raciolinguistic perspective to describe how oppression can coalesce to create burdens and barriers that are not equally realized by those who are in a singular marginalized group.

Intersectionality was initially developed by Crenshaw (1989) to describe how both feminist and antiracist movements failed to account for the interdependent systems of oppression experienced by African American women; it has provided a useful framework for discussing how societal power structures overlap and impact people differently based on their social positioning. This study uses intersectionality as a tool to consider how disability and linguistic background creates unique GE-access barriers for multilingual SLADs. Historically, the DisCrit framework has been used to examine racial disproportionality in special education referral and identification, which have illuminated an elevated risk of special education identification for African American, Latine, and Native American students (Artiles & Trent, 1994; Connor et al., 2016; Harry & Klingner, 2006). DisCrit is fundamental to the CDR framework because it elucidates how constructs of race and disability are deeply interrelated and used to justify othering in society and in schools. While integral to the CDR framework and the present discus-

sion, DisCrit's focus on race does not fully capture how language can be used to racialize students and families.

The CDR framework invokes a raciolinguistic perspective which emphasizes how some groups' linguistic practices are devalued and used to racialize speakers when judged against expectations based on race, monolingualism, and standard language ideology (Cioè-Peña, 2021a; Rosa & Flores, 2017). In education, for instance, students with less than "perfect" English may be labeled ELs, suggesting racialization and deficit framing of their language practices, which may negatively impact their educational trajectory. Deficit framing conjecturally extends to multilingual SLADs, whose language practices are simultaneously compared to standards of whiteness and normalcy (Cioè-Peña, 2021a). From this standpoint, evaluations of student language use become informed by colonial logics of whiteness and linguistic legitimacy (Cioè-Peña, 2022), along with framing linguistic difference as a problem to be remediated (Ruíz, 1984). In this vein, the CDR perspective considers how racialization of language practices extends to the parents of multilingual SLADs, creating unique challenges that may further impede academic progress, language development, and access to inclusive learning. Because of its intersecting focus on language and disability, and an orientation to both students and parents, we use the CDR framework to explain the potential influence of students' home language on exclusion.

### Factors Associated with General Education Participation

IDEA's Least Restrictive Environment directive requires students to be educated with nondisabled peers as much as possible and only removed from regular classes when progress cannot be made despite the use of supplementary aids and services. When justified on students' Individualized Education Programs (IEP), instruction and services may be provided in alternative settings representing a continuum of placement options from least to most restrictive, with many students receiving instruction in a combination of settings.

An established way to measure inclusion in the least restrictive environment is to calculate the percentage of the school day spent in the GE classroom. The Annual Report to Congress on the Implementation of the IDEA indicates a steadily increasing trend with 66% of all SLADs spending at least 80% of the day in GE (National Center for Education Statistics [NCES], 2023). Despite the positive trend overall, disparities have been found across groups of students suggesting numerous factors that are likely associated with GE participation.

Decisions regarding special education referral, classification, and placement should be based on students' individual needs. Although standards of academic ability have received criticism for often centering Eurocentric values (e.g., individual achievement, competition) to the detriment of marginalized communities (Au, 2020), purported academic achievement is considered a key predictor of referral and identification for special education (Hibel et al., 2010; Hosp & Reschly, 2004). Thus, students

with higher standardized test scores tend to spend more time in the regular classroom (Cooc, 2022). Disability category also appears to weigh strongly on educational placement (Barrett et al., 2019). In 2021, 88% of students with speech or language impairment as the sole disability label spent more than 80% of the school day in GE compared to 15% of students labeled with multiple disabilities (NCES, 2023). Moreover, rates of inclusion appear to be accelerating more quickly for students with high-incidence disabilities (i.e., speech-language impairment, specific learning disabilities), while children with complex support needs have seen only modest changes (Morningsstar et al., 2017).

Although academic ability is a purported determinant of placement decisions (Cooc, 2022), variables such as race, ethnicity, economic status, and location, have all been found to influence both special education identification<sup>2</sup> and instructional placement (see Agran et al., 2020 for review). After being categorized as a student in special education, several studies have found that students of color have a greater chance of being in more restrictive placements than white peers (Cooc, 2022; De Valenzuela et al., 2006; Grindal et al., 2019; Skiba et al., 2006). Similarly, low socioeconomic status (Grindal et al., 2019) and attending urban schools (Brock & Schaefer, 2015; Jung & Bradley, 2006) are risk factors for more restrictive classrooms. These barriers are thought to coalesce for SLADs from ethnically and racially minoritized groups who are more likely than white students to be in poverty (NCES, 2019) and to attend urban schools (Logan & Burdick-Will, 2017). In the U.S., race, socioeconomic status, and the schools students attend are inextricably linked (Blanchett et al., 2009; Cruz & Rodl, 2018), making it challenging to isolate the role that each factor plays on placement. Linguistic diversity may introduce an additional layer that influences placement for students in special education.

## Multilingual Students in Special Education

Several studies have investigated the possible overrepresentation of EL students in special education (Abedi, 2009; Murphy & Johnson, 2023; Sullivan, 2011; Umansky et al., 2017). Some studies suggest that EL students are overidentified for special education, indicating potential biases in referral, assessment, and placement practices, while others report underidentification, highlighting inconsistencies that stem from methodological choices, data sources, and interpretive frameworks (Counts et al., 2018; Cruz & Rodl, 2018). The mixed evidence of these investigations underscores the complexity of measuring disproportionality. This complexity arises from a myriad of student-level factors, such as

medical history (Morgan et al., 2012) and academic achievement (Umansky, 2016), as well as school-level factors such as upper versus lower grades (Umansky et al., 2017). Methodological choices also contribute, including data collection methods, covariates, and how disproportionality is defined (Counts et al., 2018). Both quantitative and qualitative research points to a compounding effect of disability and EL status on placement for dually categorized students. Non-EL SLADs are more likely to receive instruction in the least restrictive environment compared to EL-SLADs (Cooc, 2023; De Valenzuela et al., 2006; Sullivan, 2011; Zehler et al., 2003). In a recent large-scale examination, Cooc (2023) found that, in 2020, about 66% of non-ELs SLADs spent at least 80% of the school day in GE classrooms, compared with about 62% of ELs SLADs. They also report that GE placement rates have been consistently lower for EL SLADs than non-EL SLADs since 2006, even though the rate for students overall have increased.

Drawing from an embedded case study of 10 middle-school EL SLADs, Kangas and Cook (2020) conclude that reliance on high-stake testing, deficit framing of students' abilities despite their education history, and logistic clustering of EL-SLADs into "de facto special Ed ESOL class[es]" (p. 2430) resulted in fewer opportunities to learn with GE peers. Additionally, language barriers, lack of information about the special education system, and limited avenues for advocacy have been suggested as hindering multilingual parents' ability to advocate for inclusive placements (Cioè-Peña, 2021b; Mohamed, 2023; Trainor, 2010). Although policies directly associated with the EL label will impact placement decisions for dual-identified students specifically, these systemic barriers may also affect inclusion for multilingual students without the EL label.

Multilingual students are heterogeneous in English proficiency classifications, including bilingual students who are considered to have native proficiency and students initially designated as EL who are reclassified as English proficient. According to US Census data, about 23% of school-age children spoke a language other than English at home in 2019, with only 4% of children in the survey reportedly having difficulty with English (Child-Stats, 2023). During the same year, students identified as ELs represented 10% of the overall student population (NCES, 2023). Further research is needed to confirm if multilingual SLADs, *in general*, face similar barriers to GE participation compared to English-only SLADs. Understanding the educational placement of the broader group is important for revealing the barriers to inclusion that may be attributed to linguistic differences, broadly, and not the EL label, specifically. The present study explores a possible intersectional gap by examining the re-

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<sup>2</sup> Overrepresentation of students from certain demographic groups in special education has been an enduring problem warranting continued scrutiny; however, disproportionate risk for special education referral and identification is beyond the scope of this paper. Please see Counts et al. (2018) and Cruz and Rodl (2018) for syntheses of research on this topic.

relationship between students' home language and GE inclusion from elementary to high school. The following research questions are addressed.

*Research Question 1:* Among students labeled as disabled (SLADs) in regular schools, do multilingual students spend a lower proportion of time per week in GE than English-only students (EO), controlling for English proficiency, discrepancy between reading level and grade level, disability category, grade level, gender, ethnicity, family income, school urbanicity and wave of data collection?

*Research Question 2:* Does English proficiency moderate the relationship between home language and proportion of time in GE?

## Method

### Data

Utilizing the Special Education Elementary Longitudinal Study (SEELS), we compared placement data for multilingual students relative to EO students in special education programs from elementary through high school. The SEELS dataset (available at [www.seels.net](http://www.seels.net)) sampled 11,512 children in special education who were aged 6-12 in Year 1999. Data were collected in three waves (Year 2000, Year 2002, and Year 2004). Despite it being an older data set, the SEELS is the most current nationally representative dataset interested specifically in SLADs that covers an age span of 6-17 years, allowing for comparisons between SLADs in elementary, middle, and high school.

For the present study, we analyzed data for students attending regular schools, defined by the SEELS as a school serving a wide variety of students. Data regarding school type was not collected during Wave 3. After confirming the stability of regular school enrollment across waves<sup>3</sup>, we assumed that the school type in Wave 3 was the same as Wave 2 and filled in the missing data. The present analyses were based on five sub-datasets for each wave: the Parent/Guardian Questionnaire, School Characteristics Questionnaire, Teacher Questionnaire, Student's School Program Questionnaire, and Cross Instrument Data. After merging the datasets across three waves, filling in missing data for "school type" and "home language" (see Home Language subheading), and keeping only *regular school* observations, we had an analytic sample of 5,864 observations among 4,115 unique children (see Supplementary Material for detailed codes and annotations). The average age of the students was 9.75 years (SD = 1.79) at the first wave of data collection (2000), 11.58 years (SD = 1.86) at the second wave (2002), and 13.65 years (SD = 1.87) at the third wave (2004).

### Home Language

Parents or guardians participating in the SEELS were asked, "Is any language other than English regularly used in the home?" Using this binary variable, we defined *multilingual* for the purposes of this study as students whose parents or guardians responded *yes* to this question. The reference group, EO students, was those who were reported to live in homes where English was the only language regularly spoken. Participants who responded to this question in an earlier wave were not asked again in subsequent waves; in such cases, we set the value of this variable to the corresponding prior-wave value per official guidelines of the dataset. 14.58% of the student sample (600 students with 816 observations) reported regularly speaking a language other than English at home (i.e., multilingual).

### Outcome Variable

The outcome variable was the proportion of school time per week spent in a GE setting. We created this variable using two existing variables in the merged dataset: the total minutes per week the student spent in GE classrooms and the approximate number of hours per week the student attended school. Based on the SEELS School Program Questionnaire, GE is defined as instructional time spent in a setting that includes students that do not have identified disabilities. Classroom settings such as English as a New Language and dual language programs are considered GE. For each observation, we divided the total minutes per week in GE by the total number of minutes per week in school, and then multiplied the result by 100 to calculate the percentage of time in GE (see Supplementary Material for detailed codes).

Our analytic sample excluded observations whose percentage of time in GE is larger than 100%, which we deemed as data collection errors. This variable was normally distributed with a mean of 63.18 (between-subject SD: 34.56; within-subject SD: 9.62). Aggregating observations across all three waves, the average proportion of time in GE was 54.23% for multilingual students and 64.63% for EO students. [Table 1](#) shows the descriptive statistics of the outcome variable by home language (multilingual v. EO), English proficiency, and ethnicity at each wave.

### Covariates

The following variables were included in our analytic procedures due to their documented or conjectural association with multilingual status and academic inclusion.

<sup>3</sup> Only 1.28% of the students who were in a regular school in Wave 1 changed to another type of school (e.g., school only for children with disabilities, technical school) in Wave 2. 6.7% of students in other school types during Wave 1 changed to regular school in Wave 2 (all from schools serving only students with disabilities).

**Table 1. Descriptive Statistics of General Education Proportion by Home Language, English Proficiency, and Ethnicity**

Variable	Category	Wave 1		Wave 2		Wave 3	
		N	Mean (SD)	N	Mean (SD)	N	Mean (SD)
Home Language	Multilingual	370	53.27 (36.27)	261	57.81 (36.85)	185	51.11 (37.60)
	English-only	2,083	65.15 (33.79)	1,725	64.79 (35.08)	1,240	63.52 (34.92)
	No spoken language	57	25.33 (27.78)	48	29.00 (27.79)	32	33.39 (35.79)
Proficiency	Native	2,216	65.05 (33.75)	1,815	65.31 (34.82)	1,327	63.18 (35.01)
	Bilingual	125	55.87 (36.62)	79	65.54 (35.76)	50	51.00 (38.35)
	Limited/no English	55	51.61 (36.24)	44	39.50 (38.13)	16	48.35 (38.48)
Ethnicity	White	1,759	67.55 (32.64)	1,421	67.94 (33.67)	1,105	64.56 (34.80)
	African American	344	47.94 (35.91)	315	48.67 (37.07)	155	49.81 (36.61)
	Hispanic	291	56.86 (36.65)	199	57.80 (37.50)	129	53.94 (36.67)
	Asian/PI	36	58.61 (37.40)	29	63.57 (35.60)	24	59.44 (36.30)
	Amln/AINa	15	54.55 (36.09)	11	74.57 (31.04)	7	81.87 (19.81)
	Mult/Oth	8	79.76 (27.83)	11	73.51 (38.78)	5	42.52 (31.52)

### **English-Language Proficiency**

Limited English language proficiency is not a disability and should not be a determining factor for special education identification or placement in more restrictive special education environments (Lhamon & Gupta, 2015). Nonetheless, in practice, it is possible that IEP teams take a student's perceived English-language ability into account when making placement decisions. A related possibility is that a SLAD's home language may have more or less influence on placement decisions depending on the student's reported English language proficiency. For instance, it may be that home language has a negligible influence on placement for multilingual students considered to have native English proficiency yet be a significant risk factor for SLADs purported to have limited English. To account for these possibilities, we controlled for proficiency level as reported by teachers in the Teacher Questionnaire and explored the possibility of an interaction between proficiency and multilingual status (described in Analysis section).

Teachers reported the student's English proficiency using the following categories: N/A—student does not use spoken language, native English speaker, bilingual, limited English proficient, and non-English speaker. Due to the small number of students in the non-English category, we combined the limited English and non-English categories. Among the multilingual group, the proportion of students labeled native English speakers ranged from 50.27% to 61.08% across the three waves. The majority of EO students were considered native English speakers ranging from 97.10% to 97.90%. [Table 2](#) presents the proportion of different English proficiency categories among multilingual and EO students at each wave. The outcome variable varied by proficiency level, with native English speakers having the highest mean GE proportion ([Table 1](#)).

### **Ethnicity**

Hispanic/Latino and Asian/Pacific Islander (PI) ethnicities made up a larger proportion of multilingual students than EO students. In contrast, EO students had a larger representation of African American and White students. 61% of multilingual students in the sample were Hispanic/Latino, compared to 2.5% of EO students. Only 5.83% of multilingual students were African American whereas 16.81% of EO students were African American. [Table 2](#) presents the percentages of different ethnicities among multilingual and EO participants at each wave.

### **Disability Category**

The disability category variable was from the School Program Questionnaire. Participants' primary disability category was reported by a school professional acquainted with their school program. Respondents chose from the 12 federally defined disability categories. [Table 2](#) presents the percentages of different types of disability among multilingual and EO participants at each wave.

### **Reading Level Discrepancy**

The reading level discrepancy variable was from the cross-instrument dataset. Teachers or school professionals familiar with the students' education were asked to estimate the student's overall reading ability, based on recent assessments, by selecting a grade level (e.g., 3rd grade reading level). According to the SEELs documentation, reading discrepancy was calculated by subtracting the child's grade level at time of testing from the estimated reading grade level. [Table 3](#) shows the descriptive statistics of the reading level discrepancy variable by home language, English proficiency, and ethnicity at each wave.

### **Grade and Wave**

There was high collinearity between age and grade level. We chose to include grade level instead of age because there were fewer missing data points (364 observations) and errors (e.g., 57 observations had an age difference of less than or more than two years from July 2000 to July 2002). We also tested whether the relation between age and the outcome was linear by adding polynomial terms for age. We found that the addition of a quadratic term was necessary, making the coefficients of age uninterpretable; therefore, we chose grade level instead of age for increased model simplicity, interpretability, and statistical power.

In addition, a unique feature of the SEELs is the inclusion of students from elementary school to high school. Controlling for grade level allowed for comparisons between elementary, middle, and high school, while controlling for age blurred those trends. In addition to grade level, we included the wave of data collection to account for the characteristics of specific years that may have an effect on the outcome variable, such as education policy during that period (Rabe-Hesketh & Skrondal, 2012).

### **Other Covariates**

Aggregating observations across all waves, a higher proportion of multilingual observations were from families with low income ( $\leq 25k$ ; 42.28%) and were in urban schools (46.81%) compared to EO observations (27.32% and 29.10%, respectively). [Table 4](#) shows the proportion of multilingual and EO students by gender, family income, and urbanicity for each wave.

### **Analysis**

We employed mixed-effect linear models where repeated measures across waves were nested in participants. Model 1 was a Variance Component Model to confirm if the outcome variable, percentage of time in GE, varied between participants. Model 2 was a two-level random-intercept model with random intercepts for individuals and fixed effect for the multilingual status; we ran Model 2 to examine if an overall gap on the outcome variable existed between multilingual and EO students, with-

**Table 2. Proportion of Multilingual and English-only SLADs by English Proficiency and Race**

Variable	Category	Wave 1		Wave 2		Wave 3	
		Multilingual	English-only	Multilingual	English-only	Multilingual	English-only
Proficiency	No spoken language	25 (6.76%)	32 (1.54%)	21 (8.05%)	27 (1.57%)	16 (8.65%)	16 (1.29%)
	Native	186 (50.27%)	2,030 (97.46%)	140 (53.64%)	1,675 (97.10%)	113 (61.08%)	1,214 (97.90%)
	Bilingual	117 (31.62%)	8 (0.38%)	74 (28.35%)	5 (0.29%)	45 (24.32%)	5 (0.40%)
	Limited/no English	42 (11.35%)	13 (0.62%)	26 (9.96%)	18 (1.04%)	11 (5.95%)	5 (0.40%)
Ethnicity	White	82 (22.16%)	1,677 (80.51%)	63 (24.14%)	1,358 (78.72%)	58 (31.35%)	1,047 (84.44%)
	African American	22 (5.95%)	322 (15.46%)	16 (6.13%)	299 (17.33%)	11 (5.95%)	144 (11.61%)
	Hispanic	240 (64.86%)	51 (2.45%)	157 (60.15%)	42 (2.43%)	102 (55.14%)	27 (2.18%)
	Asian/PI	25 (6.76%)	11 (0.53%)	22 (8.43%)	7 (0.41%)	14 (7.57%)	10 (0.81%)
	Amin/AINa	1 (0.27%)	14 (0.67%)	2 (0.77%)	9 (0.52%)	0 (0%)	7 (0.56%)
	Mult/Oth	0 (0%)	8 (0.38%)	1 (0.38%)	10 (0.58%)	0 (0%)	5 (0.40%)
Disability	LD	39 (10.54%)	238 (11.43%)	25 (9.58%)	202 (11.71%)	19 (10.27%)	147 (11.85%)
	SLI	31 (8.38%)	229 (10.99%)	15 (5.75%)	198 (11.48%)	6 (3.24%)	124 (10.00%)
	MR	21 (5.68%)	206 (9.89%)	10 (3.83%)	174 (10.09%)	10 (5.41%)	104 (8.39%)
	ED	19 (5.14%)	164 (7.87%)	19 (7.28%)	151 (8.75%)	6 (3.24%)	91 (7.34%)
	HI	80 (21.62%)	173 (8.31%)	58 (22.22%)	138 (8.00%)	51 (27.57%)	106 (8.55%)
	VI	42 (11.35%)	137 (6.58%)	27 (10.34%)	113 (6.55%)	11 (5.95%)	86 (6.94%)
	OI	34 (9.19%)	216 (10.37%)	38 (14.56%)	183 (10.61%)	22 (11.89%)	150 (12.10%)
	OHI	14 (3.78%)	227 (13.30%)	6 (2.30%)	200 (11.59%)	9 (4.86%)	167 (13.47%)
	AUT	46 (12.43%)	264 (12.67%)	34 (13.03%)	226 (13.10%)	35 (18.92%)	172 (13.87%)
	TBI	13 (3.51%)	61 (2.93%)	10 (3.83%)	41 (2.38%)	6 (3.24%)	35 (2.82%)
	Mult	30 (8.11%)	117 (5.62%)	19 (7.28%)	99 (5.74%)	10 (5.41%)	56 (4.52%)
	Df/BI	1 (0.27%)	1 (0.05%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	2 (0.16%)

*Note.* Disability types include learning disability (LD), speech or language impairment (SLI), mental retardation (MR; now intellectual disability), emotional disturbance (ED, now serious emotional disturbance), Hearing impairment (HI), Visual impairment (VI), Orthopedic impairment (OI), Other health impairment (OHI), Autism (AUT), Traumatic brain injury (TBI), Multiple disabilities (MULT), Deaf/blindness (Df/BI).



**Table 3. Descriptive Statistics of Reading Level Discrepancy by Home Language, English Proficiency, and Ethnicity**

Variable	Category	Wave 1		Wave 2		Wave 3	
		N	Mean (SD)	N	Mean (SD)	N	Mean (SD)
Home Language	Multilingual	370	-1.50 (1.80)	261	-1.54 (2.17)	185	-2.34 (2.71)
	English-only	2,083	-0.91 (1.88)	1,725	-1.14 (1.94)	1,240	-1.24 (2.68)
Proficiency	No spoken language	57	-3.02 (1.74)	48	-2.60 (1.95)	32	-3.59 (2.66)
	Native	2,216	-0.90 (1.85)	1,815	-1.14 (1.95)	1,327	-1.28 (2.71)
	Bilingual	125	-1.60 (1.81)	79	-0.94 (2.15)	50	-2.20 (2.28)
	Limited/no English	55	-1.71 (1.80)	44	-2.16 (1.90)	16	-2.75 (1.61)
Ethnicity	White	1,759	-0.81 (1.86)	1,421	-1.01 (1.94)	1,105	-1.14 (2.66)
	African American	344	-1.54 (1.80)	315	-1.70 (1.89)	155	-2.26 (2.79)
	Hispanic	291	-1.46 (1.83)	199	-1.73 (2.11)	129	-2.30 (2.64)
	Asian/PI	36	-1.61 (2.33)	29	-1.10 (2.01)	24	-2.00 (2.78)
	AmIn/AlNa	15	-1.33 (1.76)	11	-1.18 (3.31)	7	-1.14 (3.08)
	Mult/Oth	8	-0.25 (1.04)	11	-0.55 (1.21)	5	-1.60 (2.07)

**Table 4. Proportion of Multilingual and English-only SLADs by Family Income, School Urbanicity, and Gender**

Variable	Category	Wave 1		Wave 2		Wave 3	
		Multilingual	English-only	Multilingual	English-only	Multilingual	English-only
Income	≤25K	182 (49.19%)	615 (29.52%)	108 (41.38%)	500 (28.99%)	55 (29.73%)	264 (21.29%)
	25K-50K	100 (27.03%)	649 (31.16%)	80 (30.65%)	488 (28.29%)	69 (37.30%)	335 (27.02%)
	>50K	88 (23.78%)	819 (39.32%)	73 (27.97%)	737 (42.72%)	61 (32.97%)	641 (51.69%)
Urbanicity	Rural	9 (2.43%)	232 (11.14%)	10 (3.83%)	209 (12.12%)	16 (8.65%)	280 (22.58%)
	Suburban	162 (43.78%)	1,199 (57.56%)	127 (48.66%)	976 (56.58%)	110 (59.46%)	683 (55.08%)
	Urban	199 (53.78%)	652 (31.30%)	124 (47.51%)	540 (31.30%)	59 (31.89%)	277 (22.34%)
Gender	Male	242 (65.41%)	1,383 (66.39%)	155 (59.39%)	1,155 (66.96%)	122 (65.95%)	846 (68.23%)
	Female	128 (34.59%)	700 (33.61%)	106 (40.61%)	570 (33.04%)	63 (34.05%)	394 (31.77%)

out controlling for any covariates. For Model 3, we added variables representing characteristics of individuals (i.e., all covariates except for family income and school urbanicity) to determine if a gap between multilingual and EO students still existed after holding individual factors constant.

To answer Research Question 1, we ran the full model (Model 4) which included individual variables as well as SES-related variables about their families and schools (i.e., family income and school urbanicity). Model 4 included random intercepts for individuals and fixed effects for the following variables (reference group in parenthesis): multilingual status (EO), English proficiency (native-English speaker), reading level discrepancy, grade level (elementary school), wave of data collection (Wave 1), disability type (learning disability), gender (male), ethnicity (white), family income ( $\leq 25k$ ), and school urbanicity (urban). To answer Research Question 2, we ran Model 5, which included the interactions between multilingual and proficiency levels to determine if English-language proficiency moderated the relationship between home language and time in GE. All models were run with robust standard errors.

We tested and allowed for nonlinearity for the continuous covariate, reading level discrepancy, by adding polynomial terms to Model 4, one at a time. The polynomial terms remained significant until the quadratic term. The coefficients of other variables and statistical significance remained intact with the added polynomial terms for reading level discrepancy. The coefficients for squared term and cubic term, despite being significant, were very close to zero, so the relationship between reading level discrepancy and the outcome was approximately linear. For interpretability of the coefficient of the reading level variable and to enable comparison with the coefficients of other variables, we decided to keep the original Model 4 without polynomial terms as our final model for Research Question 1. The model with the added polynomial terms can be found in the supplementary material.

## Findings

We report the model estimates for Models 1-5, using robust standard errors, in [Table 5](#). Model 1 shows that the variance of the random effects of individuals was significant ( $p < 0.001$ ), which means that the outcome variable, percentage of time in GE, varied between participants, thus justifying the use of multilevel models where observations across waves were clustered under individuals. Model 2 shows that the average proportion of GE time was estimated to be 9.13 percentage points lower for multilingual students than EO students ( $z = -5.75$ ,  $p < 0.001$ ), without controlling for any covariates.

Model 3 indicates that after controlling for individual factors (English proficiency, reading level discrepancy, grade level, disability type, gender, ethnicity, and wave), the average proportion of GE time was estimated to be 5.50 percentage points lower for multilingual students than EO students ( $z = -3.19$ ,  $p = 0.001$ ). In other words,

part of the overall gap between multilingual and EO children estimated in Model 1 can be explained by individual characteristics.

After controlling for all covariates, Model 4 shows that multilingual students were estimated to spend, on average, 5.23 percentage points less time in GE settings per week relative to their EO peers ( $z = -3.03$ ,  $p = 0.002$ ). On average, the students in our analytic sample spent 1241 minutes per week (mpw) in school. The between-student standard deviation was 702 mpw, which is approximately 20 hours and 41 minutes. Therefore, the 5.23% difference in time is estimated to be about 64 mpw. In context, a multilingual student was estimated to spend about 64 minutes less time in GE compared to an EO student with the same characteristics, such as English proficiency, reading level and so forth (based on an average school week of 1241 mpw). The between-student standard deviation of the outcome variable was 34.57 percentage points; thus, a difference of 5.23 percentage points is equal to a between-student standard deviation of 0.15. This indicates a moderate effect size.

Comparing the coefficient for multilingual status to the coefficients for other variables is noteworthy because our results indicate that the multilingual-English-only difference was similar to or greater than many other factors known to influence GE inclusion. For instance, as reading level discrepancy increased by one grade level (i.e., as the discrepancy between reading level and grade level widened), students' average proportion of GE time was estimated to decrease by 5.67 percentage points ( $z = 26.74$ ,  $p < 0.001$ ), or approximately 70 mpw (based on an average of 1241 mpw), controlling for all other covariates.

The difference in GE time among SLADs in the highest income bracket and the lowest income bracket was estimated to be 7.33 percentage points ( $z = 7.19$ ,  $p < 0.001$ ), equivalent to approximately 90 minutes. The advantage of being in the middle-income group relative to low-income group was completely negated by being a multilingual student (3.82 percentage points, approximately 47 mpw;  $z = 3.77$ ,  $p < 0.001$ ). These findings are similar to the differences between students in rural versus urban schools (7.65 percentage points, 95 mpw;  $z = 6.01$ ,  $p < 0.001$ ) and between suburban and urban schools (2.85 percentage points, 35 mpw;  $z = 3.06$ ,  $p = 0.002$ ).

After controlling for multilingual status and all other covariates, the impact of race on GE participation was insignificant for most categories except for African American and Asian/PI students relative to White students. Our findings align with other research showing that Black and African American SLADs spent significantly less time in GE, whereas Asian/PI SLADs spent more time, compared to White SLADs (Cooc, 2022; Skiba et al., 2006). Interestingly, when multilingual status was controlled for, the difference between Hispanic/Latino and White SLADs was insignificant.

It is possible that the difference in GE time between multilingual and EO students varied between students with different levels of English proficiency. We used

**Table 5. Coefficients of Multilevel Models**

	Model 1	Model 2	Model 3	Model 4	Model 5
Multilingual vs English-only		-9.13*** (1.59)	-5.50** (1.73)	-5.23** (1.72)	-5.12** (1.81)
No spoken language vs. Native			-16.69*** (2.53)	-16.07*** (2.51)	-16.01*** (3.15)
Bilingual vs. Native			-3.99 (2.16)	-2.94 (2.16)	-0.07 (4.05)
Limited/no English vs. Native			-8.84** (3.03)	-7.77** (3.00)	-8.37 (4.61)
Reading level discrepancy			5.81*** (0.21)	5.67*** (0.21)	5.67*** (0.21)
Middle school vs. Elementary			0.86 (0.83)	0.51 (0.83)	0.52 (0.83)
High school vs. Elementary			7.16*** (1.58)	6.43*** (1.57)	6.44*** (1.57)
SLI vs. LD			13.29*** (1.52)	12.33*** (1.52)	12.31*** (1.52)
MR vs. LD			-17.73*** (1.87)	-16.92*** (1.86)	-16.92*** (1.86)
ED vs. LD			-13.21*** (2.06)	-12.01*** (2.04)	-12.02*** (2.04)
HI vs. LD			-1.12 (1.72)	-0.85 (1.72)	-0.89 (1.72)
VI vs. LD			5.16** (1.93)	6.08** (1.92)	6.09** (1.92)
OI vs. LD			-1.84 (1.74)	-1.54 (1.74)	-1.55 (1.74)
OHI vs. LD			-1.74 (1.65)	-1.94 (1.65)	-1.95 (1.65)
AUT vs. LD			-18.58*** (1.75)	-18.84*** (1.76)	-18.86*** (1.76)
TBI vs. LD			-11.57*** (2.83)	-11.06*** (2.81)	-11.05*** (2.81)
Mult vs. LD			-23.97*** (2.18)	-23.96*** (2.18)	-23.96*** (2.18)
Df/BI vs. LD			-19.93 (17.41)	-21.80 (17.49)	-21.90 (17.56)
Female vs. male			2.04* (0.87)	2.12* (0.87)	2.13* (0.87)
African American vs. White			-11.80*** (1.27)	-8.43*** (1.32)	-8.42*** (1.33)
Hispanic vs. White			1.02 (1.88)	3.64 (1.88)	3.62 (1.88)
Asian/PI vs. White			6.46 (1.88)	6.90* (1.88)	6.91* (1.88)

	Model 1	Model 2	Model 3	Model 4	Model 5
			(3.44)	(3.46)	(3.47)
AmIn/AlNa vs. White			1.41	1.90	1.92
			(5.33)	(5.25)	(5.25)
Mult/Oth vs. White			0.08	1.99	2.00
			(8.03)	(7.70)	(7.70)
Wave 2 vs. Wave 1			1.66*	1.39*	1.39*
			(0.67)	(0.67)	(0.67)
Wave 3 vs. Wave 1			-2.20*	-3.25**	-3.25**
			(0.99)	(1.00)	(1.00)
25K-50K vs. ≤25K				3.82***	3.82***
				(1.01)	(1.01)
>50K vs. ≤25K				7.33***	7.34***
				(1.02)	(1.02)
Rural vs. urban				7.65***	7.65***
				(1.27)	(1.27)
Suburban vs. urban				2.85**	2.85**
				(0.93)	(0.93)
<b>Interactions</b>					
Multilingual # no spoken language					-0.16
					(5.02)
Multilingual # bilingual					-3.20
					(4.71)
Multilingual # limited/no English					0.81
					(6.07)
Intercept	62.27***	63.59***	76.34***	68.99***	68.98***
	(0.54)	(0.57)	(1.33)	(1.67)	(1.66)
Random Effect Variances	931.97***	920.72***	412.10***	402.99***	402.78***
	(23.42)	(23.42)	(23.35)	(22.68)	(22.76)
<i>N</i>	5864	5864	5864	5864	5864

Note. Standard errors in parentheses. Disability types include learning disability (LD; the reference group), speech or language impairment (SLI), mental retardation (MR; now intellectual disability), emotional disturbance (ED, now serious emotional disturbance), Hearing impairment (HI), Visual impairment (VI), Orthopedic impairment (OI), Other health impairment (OHI), Autism (AUT), Traumatic brain injury (TBI), Multiple disabilities (MULT), Deaf/blindness (Df/Bl).

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Model 5 (Table 5) to test whether the multilingual-English-only difference was moderated by English-proficiency level (Research Question 2). The interactions between multilingual status and proficiency levels were not significant ( $\chi^2(3) = 0.51$ ,  $p = 0.92$ ), which means that difference in GE time between the groups did not differ by English-proficiency level.

### Discussion

Prior research shows that multilingual students dually categorized as EL and disabled are less likely to receive most of their instruction in the general education classroom compared to non-EL SLADs (Cooc, 2023; Sullivan, 2011). This observation reflects what Cioè-Peña (2017) refers to as an *intersectional gap*, which highlights the ten-

dency for students at the nexus of multiple identity categories to be underserved by inclusion efforts focused on a single demographic factor. Adopting a critical dis/abilities raciolinguistic perspective (Cioè-Peña, 2021a), the present study was motivated by a hypothesis that this intersectional gap also impacts the broader group of multilingual SLADs, including those who are not identified as ELs. Our results confirm that SLADs from homes where languages other than English are used (i.e., 'multilingual' for the purposes of this study) spent less time in GE, on average, compared to SLADs exposed to only English at home. Through a CDR perspective, this could suggest that multilingual SLADs are more often positioned as deviating from the standards of GE and requiring further remediation in a specialized setting on the basis of their linguistic environment.

Existing research on inclusion generally reports the proportion of students who receive instruction in the most or least restrictive environment (i.e., >80% or <40% of instruction in GE, respectively). By examining the average proportion of time spent in GE, our study contributes more nuanced information about how the intersectional gap manifests for multilingual SLADs. We found that multilingual students spent about an hour less in GE than EO students, in an average school week of approximately 20 hours. In addition, this analysis allowed us to compare the relationship between home language and GE participation to other variables known to impact placement, revealing that being a multilingual student appeared to dampen the effects of demographic, economic, and achievement characteristics that boost GE inclusion.

Notably, teacher estimations of reading level that are one grade below the students' actual grade are associated with a similar reduction in GE time as living in a multilingual home versus an English-only home (approximately 70 mpw reduction versus 64 minutes per 20-hour week, respectively). In other words, the advantage of increased time in GE due to a higher reading level (one grade level above actual grade level) can be essentially negated by being a multilingual student. Similarly, when other variables are held constant, being a multilingual student offsets the increased GE participation that students in suburban communities experience relative to those in urban communities and that middle-income students experience relative to low-income students.

Interestingly, when home language status was controlled for, the coefficients for some race variables, such as Hispanic/Latino were not significant. This finding may suggest that the reduced GE placement for Hispanic/Latino SLADs revealed in prior research (e.g., Cooc, 2022; De Valenzuela et al., 2006; Grindal et al., 2019) may conjecturally be attributed to speaking other languages at home as opposed to a pure effect of racial/ethnic diversity. Notwithstanding, lower rates of GE inclusion for Black/African American students and higher rates for Asian/PI student remains, suggesting that racial bias may be implicated in placement decisions for some groups of students.

Some researchers have suggested that the overrepresentation of EL students in lower level or restrictive classes may be influenced by limited English proficiency, which educators may consider a hindrance to success in regular or higher-level classes (e.g., Singhal, 2004; cf. Kangas & Cook, 2020; Umansky, 2016). If this were the case, we would expect reported English proficiency to moderate the association between multilingual status and GE time. In other words, we would anticipate that low reported English proficiency exacerbates the gap between EO and multilingual students in proportion of GE time. We did not find evidence for this. Although there was a relationship between English proficiency and GE time, English proficiency did not account for the remaining discrepancy between multilingual and English-only students. Furthermore, our analysis revealed that the reduc-

tion in GE time experienced by multilingual students was not more pronounced for those reported with no/limited English proficiency nor did being reported with native English proficiency protect against the reduction observed for multilingual students. This analysis suggests that even students who were reported to have "native" levels of English proficiency by their teachers on the SEELS questionnaire may be subject to deficitizing views of their academic and linguistic capabilities.

While part of the gap between the groups can be explained by academic, demographic, and economic factors, our results indicate that a non-trivial gap remains between students who are exposed to languages other than English at home and those who are not. Several theories oriented towards EL students, SLADs, or dual-identified students offer insights that may account for the remaining intersectional gap. The CDR perspective proposes that linguistic diversity and dis/ability represent socially constructed categories of identity, in addition to race, that can subject members to unique overlapping forces of oppression. An intersectional gap, as revealed in this study, may be one manifestation of such raciolinguistic oppression.

Existing literature has suggested that decisions regarding a SLAD's participation in GE are predominantly shaped by educators' perception of the student's competence and ability to succeed with little to no adaptations (Agran et al., 2020; Cioè-Peña, 2017; MacFarlane & Woolfson, 2013). From a raciolinguistic lens, when measured against standards of monolingualism, the linguistic repertoires of multilingual students are often devalued, positioning students as "in between," "languageless," or deficient in all languages (Flores et al., 2020; Rosa, 2016). The CDR perspective argues that the combination of ableist ideologies and discourses of languagelessness can lead to the assumption that multilingual SLADs are ill-equipped for academic work and unlikely to benefit from GE settings (Cioè-Peña, 2017, 2021a; Kangas & Cook, 2020). Kangas (2021) elaborates on how these interacting deficit-orientations contribute to the creation of a "language or disability" filter (p. 676). This filter is used to interpret the challenges demonstrated by multilingual SLADs in the classroom and rationalize their educational placements while ignoring systemic factors contributing to their behavioral, linguistic, or academic performance. In addition, literacy and language practices are often evaluated based on European linguistic standards, thereby positioning racialized and multilingual learners as deficient in these areas without considering the socio-cultural contexts that inform literacy and language use (Cioè-Peña, 2022; Flores, 2021). Such measures might not accurately capture a student's actual learning and linguistic capabilities, thereby affecting their placement.

By focusing on home language and accounting for various student characteristics, our findings highlight raciolinguistic obstacles that potentially reach beyond the individual student. Bias and deficit perceptions aimed at multilingual SLADs likely converge with challenges encountered by their linguistically minoritized parents, who

may face raciolinguistic barriers independent of their child's EL classification. For instance, multilingual parents may experience a lack of culturally or linguistically appropriate communication from schools which restricts access to information that they need to advocate for and support their child's education (Cioè-Peña, 2020; Trainor, 2010). Cultural and linguistic differences between school staff and families can have significant consequences for parents of children with suspected disabilities due to unfamiliarity with the special education system and their rights as parents, effectively excluding them from involvement in their child's monolingual education. Furthermore, for children with developmental and cognitive disabilities, parents may be discouraged or even cautioned against fostering heritage language development (Kay-Raining Bird et al., 2016). The resulting heritage language loss by children can make it difficult for linguistically minoritized parents to support their children academically or linguistically (Cioè-Peña, 2021b).

In some cases, multilingual children may be considered native-English speakers, English-dominant, or otherwise not designated as ELs. By including all multilingual students in our analysis, our findings suggest that raciolinguistic ideologies directed towards children and their families can pose a problem for multilingual students at large. In this way, this work underscores the limitations of sedimented categories in quantitative research that may reinforce raciolinguistic ideologies and moves beyond rigid classifications that may obscure the nuanced experiences of multilingual students (Castillo & Gillborn, 2023). The CDR perspective contributes to a nuanced understanding of how ableist and raciolinguistic ideologies can intersect to form educational inequities that may be shared by all multilingual SLADs as well those that may be unique to multilingual SLADs not designated as EL.

## Implications

The findings from our analysis signal the need to account for *all* multilingual SLADs to counteract and prevent unintended intersectional gaps. During the 2020-2021 school year, just under 12% of students served by IDEA were dually identified as EL-SLADs, representing less than 2% of all students (Office of Special Education Programs, 2022). On the other hand, nearly a quarter of school-age children live with at least one parent who speaks a language other than English (Park et al., 2022); therefore, the implications of the present study have the potential to impact a significant number of students. Research and policy changes geared towards the EL-SLAD population are needed; however, it is also crucial for researchers, policymakers, and education officials to be aware that multilingual SLADs without an EL label, such as those who were never labeled EL or who have been reclassified, are likely contending with similar forms of marginalization as dually labeled students.

One approach for ensuring that all multilingual SLADs are accounted for in research, policy, and practice, is to improve procedures for collecting and reporting home language data (García & Kleifgen, 2018; Salerno & Andrei,

2021). Most research oriented to multilingual SLADs is focused on dually identified students. A reason for this emphasis may be that data regarding EL-SLADs is captured in the Annual Report to Congress on the Implementation of IDEA, whereas home language data is not reported. For stakeholders aiming to track trends or deploy interventions for multilingual students, home language data could offer a more inclusive categorization and help avoid the oversight of many students in large-scale datasets.

Highlighting a persistent marginalization for multilingual students labeled as disabled, this research calls for educational reforms that address the nuances of both raciolinguistic and disability discrimination. The study underscores the need for pedagogies and policies supporting inclusion for students with disabilities to include all multilingual children. It is also critical that inclusion initiatives for multilingual children go beyond EL-labeled students. When developing reforms aimed at enhancing diversity, equity, and inclusion in schools, such as professional development, guidelines, and policy changes, education officials must ensure that they do not make the reforms contingent on students having an EL label. Instead, such measures should leverage home language data to ensure that all multilingual students benefit from inclusionary practices.

## Limitations and Future Directions

Although this study makes an important contribution to the literature, it has limitations. One concern involves the possibility of endogenous sample selection bias (Elwert & Winship, 2014). This type of bias results from conditioning the analysis on an endogenous sample that is associated with both the explanatory variable and the outcome variable. In our case, prior research has found that multilingual students may be more likely than monolingual students to receive a disability label to begin with (Grindal et al., 2019; Sullivan, 2011). Thus, conditioning our analysis on special education status may lead to an *underestimation* of the gap between multilingual and EO students on GE participation, meaning the true gap between the groups may be even larger (Knox et al., 2020; see Supplementary Material pp. 3-4 for detailed discussions). For a more precise estimate of the true gap, future research using a dataset with both SLADs and students not labeled as disabled can first quantify the effect of multilingual status on SPED identification within the sample and then account for this bias in the model.

The SEELS dataset is valuable because it tracked a nationally representative sample of special education students within each disability category over several years, allowing for observation of trends from elementary to high school. However, data collection was completed in 2004, potentially limiting the application of our findings to present-day students. Analysis using the SEELS is necessary to provide baseline information with which to compare future findings, especially as policies aimed to reduce disparities in special education take hold (e.g., Federal Register, 2021). As a similar dataset of special

education students across the country has not been repeated, updated information about this population is sorely needed and should be a priority of future studies.

Some variables used in our analysis, such as English proficiency, reading level, and time in GE, were not based on direct assessment by the SEELS and instead are based on teacher reports. This presents a limitation regarding the reliability of some data as subjective bias can influence teachers' ratings of students' skills. Future research should use more direct assessments that consider the contextually rich linguistic practices of multilingual students (Flores, 2021).

The scope of the current research questions addressed the overall proportion of time students spent in GE classes. While insightful, it did not delve into the potential nuances of how multilingual status might affect participation in specific classes, which is crucial for understanding if students have equal access to ambitious education. For instance, future research should investigate if discrepancies in participation between multilingual and EO SLADs are more pronounced in content-rich classes, like English language arts, math, and science, compared to other classes like physical education and electives.

Finally, our analysis demonstrates an association between home language and GE participation after controlling for various key covariates, but more research is needed to draw a causal inference and to better understand how home language influences placement decisions. Further ethnographic research at the school and district level is needed to illuminate the nuanced interplay between home language and educational placement nationwide.

### Conclusion

The present study offers novel evidence regarding the educational placement of multilingual students labeled as disabled. Our study found that students who used languages other than English at home spent, on average, 5.23 percentage points less time in GE settings per week relative to students who used only English at home, after accounting for relevant demographic, economic, and achievement variables in the SEELS dataset. The difference equates to approximately an hour less in general education settings per 20-hour week. We did not find a moderating effect of English proficiency on the multilingual versus English-only gap, meaning that the difference in GE time between the groups did not vary significantly with English proficiency, nor did native English proficiency guard against the reduction in GE time associated with being multilingual.

This study contributes evidence that multilingual SLADs are impacted by an intersectional gap, which hinders access to instruction in general education spaces. Moreover, while previous literature has centered around barriers encountered by SLADs designated as English Learners, the present study suggests similar forms of marginalization may be encountered by multilingual SLADs regardless of their perceived English-language

proficiency or EL designation. Through a CDR perspective, these results could suggest a raciolinguistic bias in that students living in households using languages other than English may be positioned as less capable of succeeding in GE. With multilingual students forming a growing demographic in U.S. schools, accounting for students at the intersection of linguistic diversity and disability is vital to ensure that no multilingual students are left out by initiatives seeking to maximize inclusion for students in special education.

### Positionality Statements

We recognize that our respective identities, heritages, educational backgrounds, and professional experiences guide our stance towards examining inclusion for multilingual students labeled as disabled (SLADs). All authors have personal connection to multilingualism and communities outside of the United States. Cooper (she/her) is a second-generation Cuban-American white woman. Chinchilla (they/them) is a second-generation Puerto Rican and Costa Rican-American. Wang-Kildegaard (he/him) is a first-generation Chinese immigrant. All authors are able-bodied, possess speech and print literacy privileges, and did not attend special education. We received a monolingual education and did not receive English as Second Language instruction. Nonetheless, our lived experiences contribute to our investment in this research: Cooper and Chinchilla have been labeled as neurodivergent and experienced heritage language loss and Wang-Kildegaard attended English as Foreign Language instruction in China.

Each author has professional experience centering multilingual individuals and/or children with disabilities, shaping our academic contributions. Cooper is a Speech-Language Pathologist who works with children in schools and the community. She has participated in individualized education programs (IEP) meetings and has witnessed how biases surrounding language, disability, and race manifest throughout educational decision-making. In China, Wang-Kildegaard prepared adult students for the Test of English as a Foreign Language exam. He observed how ideologies surrounding English proficiency impacted people's opportunities and pursuits. Chinchilla is a former literacy instructor who has witnessed how constructs of normalcy, whiteness, and monolingualism influence learning interventions.

Our lived experiences have contributed to our scholarship. Cooper's research focuses on language acquisition among children who use augmentative and alternative communication with an emphasis on multilingual students. Wang-Kildegaard's research seeks to inform second language acquisition pedagogy by integrating applied linguistics and second language acquisition. Chinchilla's research in educational linguistics seeks to promote language accessibility in schools for multilingual SLADs.





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