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An LRE Placement Loophole: A Critical Policy Analysis of LRE Placement in Defining Disproportionality of Culturally and Linguistically Diverse Students in Special Education

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The policies adopted by the Exceptional Children's Education Act (2016) enabled disproportionality within LEAs by overlooking undocumented classroom removal practices, underestimating the monitoring and reporting criteria, and overlooking non-dominant cultural and linguistic groups within the Colorado community. In this critical policy analysis, I used quantitative methods to analyze and explore the difference between the odds ratio calculation of culturally and linguistically diverse students (CLDS) in special education with a least restrictive environment (LRE) of 40% and greater compared to Colorado's acceptance of the federal mandate of the minimum requirement of the student LRE of less than 40% and alternate school setting. I explored the efficacy of the Colorado policy that used the minimal flexibility standards (less than 40% or alternate school setting) within the amendment to the Individuals with Disabilities Education Improvement Act (2016) as a form of equity for CLDS with dis/abilities in special education. I explored the consequences of data collection of CLDS in each of the special education categories and racial/ethnic groups. I found through this critical policy analysis: 1) disproportionate representation persisted across all CLD groups; 2) overrepresentation persisted across all LRE placement levels; 3) suppressed and missing data prevented some CLDS groups from being monitored and reported from certain dis/ability categories under all LRE definitions; and 4) overrepresentation continued to be an under-monitored and under-reported concern for students reported as English learners with a dis/ability under all LRE definitions. I discovered through the data collection process that data suppression due to low n count to protect student privacy needed to be rethought in order to provide appropriate allocation of funds to students who were taken into account. This critical policy analysis concluded with a discussion of implications of Colorado's policy that implemented the minimal flexibility standards and suppression of data. I concluded this critical policy analysis with the following three recommendations: 1) the development of policy to address the documentation for removal of all students from the general education classroom; 2) update the monitoring and reporting criteria to capture underrepresentation and suppressed data for students in all special education categories; and 3) update state-level policy to address English Learners identified with a dis/ability in specific special education categories that include an action plan to reduce disproportionality in all LRE definitions.

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The policies adopted by the Exceptional Children's Education Act (2016) enabled disproportionality within LEAs by overlooking undocumented classroom removal practices, underestimating the monitoring and reporting criteria, and overlooking non-dominant cultural and linguistic groups within the Colorado community. In this critical policy analysis, I used quantitative methods to analyze and explore the difference between the odds ratio calculation of culturally and linguistically diverse students (CLDS) in special education with a least restrictive environment (LRE) of 40% and greater compared to Colorado's acceptance of the federal mandate of the minimum requirement of the student LRE of less than 40% and alternate school setting. I explored the efficacy of the Colorado policy that used the minimal flexibility standards (less than 40% or alternate school setting) within the amendment to the Individuals with Disabilities Education Improvement Act (2016) as a form of equity for CLDS with dis/abilities in special education. I explored the consequences of data collection of CLDS in each of the special education categories and racial/ethnic groups. I found through this critical policy analysis: 1) disproportionate representation persisted across all CLD groups; 2) overrepresentation persisted across all LRE placement levels; 3) suppressed and missing data prevented some CLDS groups from being monitored and reported from certain

dis/ability categories under all LRE definitions; and 4) overrepresentation continued to be an under-monitored and under-reported concern for students reported as English learners with a dis/ability under all LRE definitions. I discovered through the data collection process that data suppression due to low *n* count to protect student privacy needed to be rethought in order to provide appropriate allocation of funds to students who were taken into account. This critical policy analysis concluded with a discussion of implications of Colorado's policy that implemented the minimal flexibility standards and suppression of data. I concluded this critical policy analysis with the following three recommendations: 1) the development of policy to address the documentation for removal of all students from the general education classroom; 2) update the monitoring and reporting criteria to capture underrepresentation and suppressed data for students in all special education categories; and 3) update state-level policy to address English Learners identified with a dis/ability in specific special education categories that include an action plan to reduce disproportionality in all LRE definitions.

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Chapter One: Introduction

In 2016, the amendment to the Individuals with Disability Education Improvement Act (IDEIA) provided state guidance and criteria for state education agencies (SEAs) to monitor and hold accountable the states' local education agencies (LEAs) for significant disproportionality of students who were culturally and linguistically diverse (CLDS). To meet compliance with IDEIA (2016), Colorado adopted policies and practices to monitor LEAs and administrative units (AUs) for significant disproportionality. In this analysis, I provided a background to the problem of disproportionate overrepresentation of CLDS. Next, I provided a statement to the problem with the policy adopted by Colorado. I identified my purpose statement and research questions as I explored the educational policy through a critical lens. I introduced my theoretical framework. Then, I identified my research design for this critical educational policy analysis. I provided a list of significant terms along with their definitions. I reviewed my assumptions, delimitations, and limitations. Finally, I identified the significance of this critical policy analysis.

Background to the Problem

In 1967, the U.S. Courts first recognized problems within the education system that encouraged students of color were inappropriately and disproportionately identified with an educational dis/ability, resulting in special education placement (*Hobson v.*

Hansen, 1967). Despite the continued litigation on inequitable education of culturally and linguistically diverse students (CLDS) in special education and the research on the inequity that resulted from inappropriate placement of CLDS in special education, it took Congress 30 years to address significant disproportionality in special education through federal policy (Individuals with Disabilities Act (IDEA), 1997).

The IDEA of 1997 and its reauthorization, the Individuals with Disabilities Education Improvement Act (IDEIA) of 2004 mandated that SEAs were to develop their own systems to define significant disproportionality and to monitor their administrative units (AUs) or LEAs for significant disproportionality. The IDEIA of 2004 added an additional enforcement criterion to the significant disproportionality policy, which was unenforceable due to the flexibility options within IDEIA (2004) which provided state definitions, state guidelines, and state-controlled policy.

In 2016, Congress passed an amendment to IDEIA, which provided guidance and guidelines to SEAs for setting definitions for significant disproportionality, risk ratio calculations, risk ratio definition flexibility, risk ratio threshold flexibility, inclusion and exclusion criteria, annual growth flexibility, student least restrictive environment (LRE) placement flexibility, enforcement timelines, and enforcement criteria. In December 2016, the Colorado legislature adopted the amendments to Colorado's Exceptional Children's Education Act to reflect the mandates and flexibilities in the amendments to IDEIA (2016). Risk ratio calculations, definitions, and thresholds were established for each special education category based upon state level data (Colorado Department of Education, 2020). AU and LEA identification and determination for significant

disproportionality for each special education category was focused on the student LRE placement settings of alternate school setting and less than 40% in the general education setting (Colorado, 2020).

Students identified and placed in special education programming received special education services in the LRE in accordance with a free and appropriate public education (FAPE) (Education for All Handicapped Children's Act, 1975; IDEIA, 2004). The LRE was a percentage calculation of all education services the student received with the student's general education peers. Despite the specific student LRE placement percentage calculation, the LRE was split into quartiles for data collection on the student's individualized education plan (IEP): 1) alternate school setting; 2) less than 40% in the general education setting; 3) 40% to 79% in the general education setting; and 4) 80% or more in the general education setting (IDEIA, 2004). Every student placed in special education programming had one of the four LRE placement levels. By only calculating the risk of overrepresentation of CLDS in the alternate school setting and less than 40% in the general education setting, the risk of overrepresentation of CLDS in 60% of the placement environments were left unaccounted for in the state of Colorado.

The U.S. Office of Special Education Programs (OSEP) and the U.S. Department of Special Education (2017) developed guidelines and guidance for SEAs as the SEA developed policies to meet the mandates for the amendment to IDEIA (2016). SEAs collected data and determined the existence of over- or underrepresentation in special education and each of the special education categories of students in each of the seven racial or ethnic groups: 1) Hispanic/Latino of any race; 2) American Indian or Alaskan

Native; 3) Asian; 4) Black or African American; 5) Native Hawaiian or Other Pacific Islander; 6) White; and 7) Two or more races (OSEP, 2017). The amendment to IDEIA (2016) and the OSEP (2017) guidance documents did not include or recommend that SEAs include students receiving special education services who were also receiving services for English language development as part of the categories or groups to monitor for over- or underrepresentation.

Since 1967, U.S. Courts and researchers recognized the connection to overrepresentation in special education and English language development or other cultural factors (Annamma et al., 2018; Congressional Investigation, 1972; *Diana v. Board of Education*, 1970; Fergus, 2017; *Hobson v. Hansen*, 1967; *Mills v. Board of Education*, 1972; *Pennsylvania Association for Retarded Children (PARC) v. Commonwealth of Pennsylvania*, 1972; *Parents in Action on Special Education (PASE) v. Hannon*, 1980). The nature of the diversity in Colorado provided policy makers with the obligation to protect the underrepresented populations who lost when their cultural or linguistic needs were not met (Apple, 2019). Although 90% of Colorado's student population have been recognized as native or fluent English speakers, ten percent of Colorado's student population have been identified as either non-English proficient (NEP) or limited-English proficient (LEP) (see Appendix A). These students continued to receive services through English language development (ELD) with a certified ELD teacher. The racial/ethnic diversity of the students in Colorado spread through the urban, suburban, and rural regions. 53% of students in Colorado identified as White, 34% of student identified as Latinx, 5% identified as Black, 4% identified as Two or More Races,

3% identified as Asian/Asian American, 1% identified as Native American/Alaskan Native, and less than 1% identified as Pacific Islander/Native Hawaiian (see Appendix A). With more than half of the student population in Colorado who identified as White, the students who identified as Latinx, Black, Two or More Races, Asian/Asian American, Native American/Alaskan Native, and Pacific Islander/Native Hawaiian clustered into a minority population which ran a risk of being unrepresented and overlooked as policy was developed and implemented (Apple, 2019; Young & Diem; 2017). In IDEIA (2016), the federal guidelines for SEAs to actively monitor and guide the AUs and LEAs to reduce significant disproportionality within special education was set in place to protect the underrepresented student groups who ran the risk of segregation within the public education system.

Policymakers developed guidelines that described the calculations to determine significant disproportionality with the term "risk ratio" (Colorado Department of Education. 2018). The methodology and calculations the data collectors at the state used to determine significant disproportionality fit the definition of odds ratio (OR) (Cochrane Training, 2021). The inconsistency in vocabulary and terminology in policy and research increased the likelihood of ambiguities within this policy analysis. The risk ratio was a calculation of the risk of each individual group being identified for special education compared to the overall risk of the entire enrolled population (Bollmer et al., 2007; Colorado Department of Education, 2020; IDEIA, 2016). The OR was a calculation of the risk of each individual group that was identified for special education services compared to the overall risk of the rest of the population identified with a dis/ability

(Bollmer et al., 2007; Cochrane Training, 2021; Colorado Department of Education, 2020; IDEIA, 2016). An OR of 1.0 indicated that the CLD group had an 1:1 representation in receiving special education services compared to any other student in the comparison population (Bollmer et al., 2007; Cochrane Training, 2021; Colorado Department of Education, 2020; IDEIA, 2016). An OR greater than 1.0 indicated that there was a disproportionate overrepresentation of the CLD group (Bollmer et al., 2007; Cochrane Training, 2021; Colorado Department of Education, 2020; IDEIA, 2016). An OR less than 1.0 indicated there was a disproportionate underrepresentation of the CLD group (Bollmer et al., 2007; Cochrane Training, 2021; Colorado Department of Education, 2020; IDEIA, 2016).

Disproportionate underrepresentation could serve as an indication that students who were in need of services were being overlooked and may not have received the educational services or interventions they needed to succeed or learn how to develop the skillset they needed to work with their dis/ability (Linn & Hemmer, 2011; Sullivan & Bal, 2013). Through a disproportionate over-and underrepresentation, CLDS in the public education system could have slipped through the proverbial cracks through a lack of instruction, lack of rigor, inadequate exposure to grade level standards, low expectations, and/or lack of exposure to grade level peers (Linn & Hemmer, 2011; Sullivan & Bal, 2013). Disproportionate overrepresentation of CLDS in special education programming could have resulted in support services that were inappropriate for students who required individually designed services. Students placed in special education programming for interventions out of the general education classroom environment

missed out on universal core content instruction which was aligned to rigorous state standards (Linn & Hemmer, 2011).

Through IDEIA (2004), Congress provided a set of options for SEAs to adopt in lieu of the severe discrepancy model. Response to Intervention (RtI), and later Multi-Tiered System of Supports (MTSS), was adopted by CDE to reduce disproportionate representation and reduce the likelihood of students failing before it triggered the referral processes of special education which was the consequence of the severe discrepancy model (Zirkel & Thomas, 2010). RtI and MTSS were tiered support systems, wherein students received research-based instruction at a universal level, Tier 1, in the general classroom with their grade level peers. As students demonstrated the need for support, problem-solving teams worked together to identify the supports needed to benefit the student(s) (Colorado Department of Education, 2020). General education teachers and intervention specialists provided support for small groups of students at a targeted level, Tier 2. If students were still struggling with content after the Tier 2 interventions were implemented with fidelity, Tier 3 supports were considered through the special education process (Colorado Department of Education, 2020).

CLDS identified for special education programming receive interventions and services that may be listed on their IEP but were not reflected in their LRE due to the nature of the interventions and services (IDEIA, 2004). The Tier 2 interventions provided by reading specialists or math specialists and English language development (ELD) classes provided by a certified ELD teacher that were designed as lessons outside of the general education setting would not be reflected in the student LRE calculation. By the

very nature of Tier 2 intervention and ELD services, students receiving these lessons did not have these minutes recorded in their Individualized Education Plan (IEP) because not all students were identified with a dis/ability. Undocumented disciplinary procedures for students with an IEP, such as sitting outside of the classroom, being sent to the office, or being sent to another classroom for the buddy system result in the student being removed from the general education environment without formally recording the change to student's LRE (Farnsworth & Mackenzie, 2015; Linn & Hemmer, 2011; Rodriguez & Rodriguez, 2017). The more chronic the disciplinary actions, the greater the impact would be on the student's LRE placement without notifying the student's family or formally reporting the LRE impact to the SEA or other reporting agencies, such as the Office of Civil Rights (OCR). Tier 2 intervention, ELD services, and undocumented disciplinary procedures became unmonitored services for students with dis/abilities on their LRE and took time away from the general education learning environment, exposure to grade level content standards, socialization with peers, understanding social norms, developing academic and social vocabulary, and preparing students for college-level or adult-level readiness.

Statement of the Problem

In the risk ratio calculation for significant disproportionality, Colorado selected the LRE flexibility option from the amendment state guideline to IDEIA (2016), which included only the alternate school setting and students placed in the classroom less than 40% of the time. CLDS identified in special education who had a student LRE placement setting of 40% or greater in the general classroom environment were not included in the

significant disproportionality calculations for the LEAs (Colorado Department of Education, 2020). In Colorado, more than 91% of students identified with an educational dis/ability who received special education or related services were placed in a student LRE of 40% or greater (see Appendix B). In accordance with the flexibility option within IDEIA (2016), Colorado Department of Education did not hold LEAs accountable for significant disproportionality or overrepresentation of CLDS for the 91% of students placed in the LRE of 40% or greater (Colorado Department of Education, 2020). To determine the number of hours per day a student in the 40%-80% LRE placement status spends in the general learning environment, I multiplied the average seven-hour school day by 40% and repeated the process by multiplying the seven-hour school day by 80%. Students who attended the average seven-hour school day and were in the student LRE placement of 40%-80% in the general education environment, attended approximately 2.8 – 5.6 hours per day, respectively, engaged in peer socialization, grade level academic content, rigorous instruction to grade level standards, academic and social linguistic exposure, and societal expectations. This calculation did not include the time English learning (EL) students were removed from the classroom for ELD services, or the amount of time CLDS were removed from the classroom for Tier 2 supports, services and interventions which were not listed on their IEP as part of their student LRE placement. The minutes for these services and supports continued to go unmonitored and unreported to national special education data collection agencies, such as the U.S. Office of Special Education and Rehabilitation Services (OSERS) and the Council of Parent Attorney and Advocates (COPAA), which perpetuated the segregation of CLDS and went beyond the

scope of this study (Council of Parent Attorneys and Advocates, Inc, 2020; United States Office of Special Education and Rehabilitation Services, 2020). The unmonitored and underreported LRE of CLDS in special education included in the OR calculation, definition, and threshold that were in the student LRE placement of 40% and more, could result in students receiving less than the adequate education their general education peers were exposed to.

The OR calculation, definition, and threshold set by Colorado (2020) left out two groups of CLDS identified in special education through the two student LRE placement categories: 1) student LRE placement of 40% to 79% in the general education environment; and 2) student LRE placement of 80% or more in the general education environment. The calculations left out two cultural/ethnic groups who could identify as White. The statistical findings within the disproportionality calculations did not include the linguistically diverse population: 1) non-English proficient (NEP); and 2) limited-English proficient (LEP). Students who moved to the United States from countries whose primary language was other than English, yet who identified as White, may have been included in the unmonitored and underreported population of CLDS identified in special education. IDEIA of 2004 and its subsequent amendments did not mandate or address the monitoring of linguistic groups in the significant disproportionality provisions. The potential unmonitored or underreporting of CLDS in special education resulted in a disproportionate number of students who received classroom instruction in a segregated environment. As noted in *Brown v. Board of Education* (1954, 1955), a separate

educational environment was not equivalent to equitable instruction or exposure to standards.

In accordance with Education for All Handicapped Children's Act (EAHCA) of 1975, students with dis/abilities needed to be instructed in the LRE with a Free and Appropriate Public Education (FAPE). When a disproportionate number of CLDS were placed into special education programming due to a lack of understanding of cultural norms, language development, or the impact of economic distress and trauma, a disservice was provided to students, families, and communities by creating an alternate form of segregation (Annamma et al., 2018; Fergus, 2017). Students were removed from their grade level peers when they needed them to develop academic and conversational language skills, social skills, academic content knowledge, and motivation to continue to pursue academic and career goals (Fergus, 2017). CLDS who were initially low performing due to linguistic development, the emotional impact of economic or traumatic distress, or cultural norms met the qualifying factors (based on teacher perception and subjective assessments) of a dis/ability when pulled out of the general education classroom (Ahram et al., 2011; Fergus, 2017).

In accordance with IDEIA (2016), Colorado (2016) adopted state level policies to meet compliance regulations with the significant disproportionality policies in IDIEA (2016). Colorado State Legislatures adopted minimum requirements to monitor, evaluate, and enforce student LRE placement criteria in the risk ratio calculations for significant disproportionality (Colorado 2016; Colorado, 2020; IDEIA, 2016). Through the minimum monitoring and enforcement requirements for student LRE placement in

the risk ratio calculations for significant disproportionality, several CLDS identified in special education went unmonitored for disproportionate identification in special education and special education categories (Ahram et al., 2011; Fergus, 2017). The lack of monitoring and reporting of CLDS in special education all LRE placement categories prevented many of these students from accessing the same rigorous academic standards as their general education peers and placed them in the losing end of the Colorado (2016) policy adoption of IDEIA (2016).

Purpose Statement and Research Question

The purpose of this policy analysis was to explore the differences in statistical trends and conclusions that was made from them based on the OR calculation, definition, and threshold if the student LRE placement included 40% or greater placement levels within the general classroom environment. I explored the difference between the OR calculation of CLDS in special education with the inclusion of the LRE status of 40% or greater compared to the CDE acceptance of the federal mandate of the minimum requirement of the student LRE placement status of less than 40% and alternate school setting. My investigation was guided by the following research questions.

1. What do the statistical trends reveal about the disproportionality of CLDS in special education in Colorado using an OR that defines a student's LRE status whose time learning in general education classrooms is greater than 40%?
2. What is the difference in the disproportionality of CLDS in special education between an OR that defines a student's LRE status of 40% or greater

compared to an OR that defines a student's LRE status of less than 40% in general education classrooms in each special education category in Colorado?

Theoretical Framework

I engaged in a critical educational policy analysis using quantitative methods. Young and Diem (2017) and Apple (2019) identified critical educational policy analysis as the exploration and understanding of the complexities of social power and its relationships to policy development, educational policy, and practices as it was developed, received and interpreted, while it employed critical movements to challenge dominant forms of authority, policy, and practices that generated and/or encouraged inequities in the educational system. The five critical concerns of critical policy analysis were:

- Understanding the difference between policy discourse and policy practiced in reality (Diem et al., 2014)
- The development of policy and its historical roots, how it emerged, the problems it intended to solve, and how it morphed, evolved and changed over time (Diem et al., 2014)
- The distribution of power, the resources available, the knowledge available, and the development of the policy as it sets up a foundation for "winners" and "losers" (Diem et al., 2014; Young & Diem, 2017, p. 4).
- The development of inequity, privilege, and power of the non-dominant members of society (Diem et al., 2014).

- The nature to resist or engage in policy by non-dominant members of society (Diem et al., 2014; Young & Diem, 2017).

Through this critical educational policy analysis, I focused on the distribution of power, the adoption and creation of policy in Colorado, and how the policy set up a foundation for "winners" and "losers" for CLDS identified with dis/abilities in the public education system (Diem et al., 2014; Young & Diem, 2017, p. 4). The flexibility rule for student LRE placement in monitoring significant disproportionality in Colorado's LEAs and AUs set a foundation for a group of CLDS to go unmonitored and overrepresented in special education and specific special education categories (IDEIA, 2016).

This study will focus on the minimum requirements the Colorado legislature and stakeholders determined was adequate to determine if CLDS disproportionate representation existed in special education and across special education categories. Quantitative analysis was rarely used in critical education policy analysis (Diem et al, 2014; Young & Diem, 2017). By using a critical education policy framework with a quantitative design, I explored the efficacy of determining significant disproportionality through disproportionate representation of CLDS by only calculating the student LRE placement of alternate school setting and less than 40% in the general education environment.

Research Design

The focus of this critical educational policy analysis explored the difference between the risk ratio calculation of CLDS in special education with the inclusion of the student LRE placement status of 40% or greater in the general education environment

compared to the CDE acceptance of the federal mandate of the minimum requirement of the student LRE placement status of less than 40% and alternate school setting. District-level data was collected for state-level analysis of students in public and charter schools that provided special education services in the state of Colorado. Student variables were be sorted by race/ethnicity, linguistic development, special education category, and LRE placement. I collected publicly available data through the SEA and LEAs. No personally identifiable information (PII) was collected.

Definition of Terms

Administrative Unit (AU): An administrative unit was a school district or a board of cooperative educational services (BOCES) that was responsible for providing special education services (Colorado Department of Education, 2020).

Alternate Risk Ratio: The alternate risk ratio was a calculation to determine the risk ratio by dividing the risk of the specific CLD group within the AU by the risk outcome for the enrolled students of all other racial/ethnic or dominant groups in the state (Colorado Department of Education, 2020; OSEP, 2017).

Autism Spectrum Disorder (ASD): Autism Spectrum Disorder was a special education identification category developed for children identified with a developmental dis/ability that significantly affected the child's social communication, social interactions, and verbal and non-verbal communications and interactions, and emotional exchanges. A child with ASD could demonstrate characteristics of repetitive behaviors and stereotypical movements, resistance to social or environmental change or changes in daily routines and could demonstrate atypical

sensory responses. Children identified with ASD through an IEP would fit the identification criteria have been determined that the ASD characteristics had a significant educational impact (Colorado Department of Education, 2020).

Comparison Category: The comparison category was all special education identification categories within an LEA or SEA except the category that was being analyzed, when calculating the OR for significant disproportionality (Colorado Department of Education, 2020).

Comparison Group: The comparison group was all CLD and/or dominant groups within an LEA or the SEA except the CLD and/or dominant group that was being analyzed, when calculating the OR for significant disproportionality (Colorado Department of Education, 2020; OSEP, 2017).

Culturally and Linguistically Diverse (CLD): Culturally and linguistically diverse was the term commonly used to describe students of diverse cultural, ethnic, and linguistic heritage or backgrounds (Colorado Department of Education, 2012).

Deaf-Blindness: Deaf-blindness was a special education identification category for children with a combined medical diagnosis of significant hearing impairment(s) and visual impairment(s). The combination of the impairments caused a significant educational impact and developmental impact that could not be addressed through the special education programming for hearing impairment(s) or visual impairment(s) alone (Colorado Department of Education, 2020).

Developmental Delay (DD): Developmental delay was a special education identification category for children three through eight years of age. Children identified under

DD were identified with a significant developmental delay under one or more of the following criteria: 1) cognitive; 2) physical; 3) communication; 4) social or emotional; and/or 5) adaptive. An identification under DD indicated that the child's delay prevented the child from receiving a reasonable educational benefit from the general educational environment alone (Colorado Department of Education, 2020).

Disproportionate Representation (AKA Overrepresentation or Underrepresentation): Disproportionate representation was the identification derived from significant disproportionality that indicated the result of inappropriate identification of racial, ethnic, and linguistic development groups in special education and related services (OSEP, 2017; IDEIA, 2016).

English Learner (EL): English learner was a term that may be referred to as emergent bilingual (EB). A student identified as an English learner was a student who was identified as benefiting from English language development (ELD) services (Colorado Department of Education, 2012).

Emergent Bilingual (EB): Emergent bilingual was a term that may be referred to as a student who was identified as an English learner. See English learner. (Colorado Department of Education, 2020).

Hearing Impairment, Including Deafness: Hearing impairment, including deafness was a category of special education identification for a child with a medical diagnosis of significant hearing loss, including deafness, that even with the support of amplification or hearing aids, the child was prevented from receiving reasonable

educational benefit from general education alone (Colorado Department of Education, 2020).

Intellectual Disability (ID): Intellectual disability was a category of special education where the child was identified with a significantly reduced intellectual functioning that existed concurrently with adaptive behavior and cognitive functioning that manifested during the child's developmental period, which prevented the student from receiving reasonable educational benefit from general education alone (Colorado Department of Education, 2020).

Learning Disability (LD): Learning disability was a category of special education identification which was commonly viewed as a disorder within a small percentage of the population that interfered with the processes of learning, reading, writing, and mathematics (Sleeter, 2010).

Least Restrictive Environment (LRE): The least restrictive environment was the calculated percentage of time determined by the student's IEP team to be the least disruptive to the student's interaction with the student's grade level peers. This was the amount of time, as determined by the student's IEP team, the student should be working or pulled out of the general education environment by the educational team. The LRE was not impacted by the days outside of the school's control (i.e., absent, snow days, or calendar holidays) (Colorado Department of Education, 2020; IDEIA, 2004).

Limited-English Proficient (LEP): Limited-English proficient referred to the category of students whose primary language was a language other than English. The

students were learning to read, speak, write, and understand English and were considered to be limited in their proficiency to read, speak, write, and understand English. Placement in the LEP category was determined through a standardized assessment delivered by a certified ELD teacher (Colorado Department of Education, 2012).

Local Education Agency (LEA): The local education agency was a local school district that was responsible for providing educational services, including but not limited to special education services and English language development instruction (Colorado Department of Education, 2020).

Minimum Cell Size: The minimum cell size was the minimum number of students required to determine the risk when used as the numerator when determining the risk for a group of students in a specific racial or ethnic group or when determining the risk for students in all other racial or ethnic groups (Colorado Department of Education, 2020; OSEP, 2017).

Minimum *n*-Size: The minimum *n*-size was the minimum number of students enrolled in an LEA or SEA when used as the denominator when calculating the risk for students of a specific racial or ethnic group or when determining the risk for students in all other racial or ethnic groups (Colorado Department of Education, 2020; OSEP, 2017).

Multi-Tiered Systems of Supports (MTSS): Multi-tiered systems of supports was:

> a prevention-based framework of team-driven data-based problem solving for improving the outcomes of every student through family, school, and community partnering and layered continuum of evidence-based practices applied at the

classroom, school, district, region, and state level. (Colorado Department of Education, 2020).

Multiple Disabilities (MD): Multiple disabilities was a category of special education identification that included two or more special education categories, one of which must include intellectual disability. The other categories of identifications must include one or more of the following: 1) autism spectrum disorder; 2) deaf-blindness; 3) hearing impairment, including deafness; 4) orthopedic impairment; 5) other health impairment; 6) serious emotional disability; 7) specific learning disability; 8) speech language impairment; 9) traumatic brain injury; or 10) visual impairment, including blindness. The severity of the complexity of needs prevented the student from receiving a reasonable educational benefit from general education alone (Colorado Department of Education, 2020).

Non-English Proficient (NEP): Non-English proficient referred to the category of students whose main (sometimes only) language was a language other than English. The students were learning to read, speak, write, and understand English and were considered to be not fluent in their ability to read, speak, write, and understand English. Placement in the NEP category was determined through a standardized assessment delivered by a certified ELD teacher (Colorado Department of Education, 2012).

Odds Ratio (OR): Odds Ratio was the ratio that identified the representation of a specific race/ethnicity or linguistic status in an LEA or SEA. This was determined by dividing the risk of students in a specific racial/ethnic group or linguistic group in the LEA by the risk of students in all other racial or ethnic

groups in the LEA or SEA. According to most federal and state educational policy Odds Ratio was referred to as risk ratio (Bollmer, 2007; Cochrane Training, 2021; Colorado Department of Education, 2020; OSEP, 2017).

Orthopedic Impairment: Orthopedic impairment was a special education category where a student who had a medical diagnosis with a severe "neurological/muscular/skeletal abnormality that impede[d] mobility, which prevent[ed] the child from receiving a reasonable educational benefit from general education" alone (Colorado Department of Education, 2020).

Other Health Impairment (OHI): Other health impairment was a special education category where a child was determined to have:

> limited strength, vitality, or alertness, including heightened alertness to environmental stimuli that result[ed] in limited alertness with respect to the educational environment due to a chronic or acute health problem, including but not limited to asthma, attention deficit disorder, or attention deficit hyperactivity disorder, diabetes, epilepsy, a heart condition, hemophilia, leukemia, kidney disease, sickle cell anemia, or Tourette syndrome [which prevented the child from receiving a reasonable educational benefit from general education alone]. (Colorado Department of Education, 2020).

Response to Intervention (RtI): Response to intervention was a set of research-based interventions intended to be used in the classroom setting to prevent the likelihood of students failing before triggering the referral processes of special education. RtI was one of the options presented in IDEIA (2004) to replace significant discrepancy in identifying students with a significant learning disability (Zirkel & Thomas, 2010).

Risk: Risk was the likelihood (percentage) that students in a specific racial/ethnic or linguistic group would be identified with any particular outcome. Risk was

determined by dividing the number of students in a specific racial or ethnic group by the number of students in all other racial or ethnic groups (Bollmer, 2007; Cochrane Training, 2021; Colorado Department of Education, 2020; OSEP, 2017).

Risk Ratio: Risk ratio was label used by federal and state policy to determine the ratio that identified the representation of a specific race or ethnicity in an LEA or SEA (also known as Odds Ratio). This was determined by dividing the risk of students in a specific racial/ethnic or linguistic group in the LEA by the risk of students in all other racial or ethnic groups in the LEA (Bollmer, 2007; Cochrane Training, 2021; Colorado Department of Education, 2020; OSEP, 2017).

Risk Ratio Threshold: The risk ratio threshold is the threshold that was determined by the state. This threshold determined whether disproportionality of a specific race or ethnicity in an LEA was reasonable or significant (Colorado Department of Education, 2020; OSEP, 2017).

Serious Emotional Disability (SED): Serious emotional disability was a special education category which identified a student with a significant emotional or social dis/ability that prevented the child from receiving reasonable educational benefit from general education alone. In order to access the general education environment, a child identified with an SED had been determined to need academic support and social/emotional support in one or more of the following areas: 1) social skills; 2) emotional regulation; or 3) behavioral support (Colorado Department of Education, 2020).

Significant Disproportionality: Significant disproportionality was a level of disproportionality above a standard threshold in the identification, placement, or discipline of students with disabilities within an LEA as determined by the SEA (Colorado Department of Education, 2020; OSEP, 2017).

Specific Learning Disability (SLD): Specific learning disability was a special education category which indicated the student had been identified with an educational learning disorder in which one or more of the psychological process (i.e. understanding or using language) impacted one or more of the eight academic domains of learning: 1) basic reading skills; 2) listening comprehension; 3) mathematical calculation; 4) mathematical problem solving; 5) oral expression; 6) reading comprehension; 7) reading fluency skills; or 8) written expression that prevented the child from receiving a reasonable educational benefit from general education alone. A child could not be identified with SLD if the impact of the child's learning problems was primarily the result of: 1) visual impairment; 2) hearing impairment; 3) motor disabilities; 4) speech impairment; 5) intellectual disabilities; 6) serious emotional disabilities; 7) cultural factors; 8) environmental or economic factors; or 9) English language development (Colorado Department of Education, 2020).

Speech Language Impairment (SLI): Speech language impairment was a special education category which identified a child with a significant communication disorder in one or more of the following areas: 1) articulation (i.e. phonology, morphology, syntax); 2) semantics; or 3) pragmatics (i.e. the function of language

in communication) which prevented the child from receiving a reasonable education benefit from general education alone. A child could not be identified with SLI if the primary impact of the child's language impairment was due to cultural or English language development factors (Colorado Department of Education, 2020).

State Education Agency (SEA): The state education agency was the state-governed department of education that provided guidance, set data thresholds, and monitored compliance with the LEAs and AUs of the state. The SEA reported LEA data to federal compliance agencies (Colorado Department of Education, 2020; IDEIA, 2004; IDEIA, 2016).

Severe Discrepancy (SD): Severe discrepancy, also known as the discrepancy model, was the method of measuring the discrepancy between a student's Intelligence Quotient (IQ) and their achievement to determine whether or not the student could be identified with a LD (Colorado Department of Education, 2012).

Traumatic Brain Injury (TBI): Traumatic brain injury was a special education category in which a child had a medical diagnosis of a traumatic brain injury. The child acquired a closed or open head injury which resulted in impairment in one or more of the following areas: 1) cognitive functioning; 2) language development (expressive or receptive); 3) memory; 4) attention; 5) reasoning; 6) abstract thinking; 7) judgement; 8) problem-solving; 9) sensory, perceptual, or motor abilities; 10) psychosocial behavior; 11) physical functions; 12) information processing; or 13) speech. Under this classification, children who were born with

a congenital brain injury, a degenerative brain injury, or a brain injury that was induced during birth or caused by trauma during the birthing process, did not fit within this the criterion (Colorado Department of Education, 2020).

Visual Impairment, Including Blindness (VI): Visual impairment, including blindness was a special education category where a child had a medical diagnosis of a significant visual impairment(s) identified as a deficiency one or more of the following areas: 1) visual acuity; 2) visual field; or 3) visual functioning, where even with the use of corrective lenses or devices the child was prevented from receiving reasonable educational benefit from general education alone (Colorado Department of Education, 2020).

Assumptions, Delimitations, and Limitations

In this section, I outlined the assumptions, delimitations, and limitations of this critical policy analysis.

Assumptions

The data was collected from the Colorado Department of Education, the Office of Civil Rights, and the U.S. Office of Special Education. The data collected was accurate, valid, and reliable.

Delimitations

The scope of this study covered the number of students in grades kindergarten through 12, attending public schools in Colorado. The data collected covered the 2019-2020 school year. I disaggregated the number of students by ethnicity/race, special education identification category, language development status. I also reviewed the

number of students in each student LRE placement category as the AUs reported this information to Colorado Department of Education, COPPA, and the Office of Civil Rights.

Limitations

Since the implementation of IDEIA in 2004 and subsequent amendments, Colorado adopted the legal requirement to implement Response to Intervention (RtI) practices, or practices like RtI, to obtain a body of evidence before initiating the special education identification process. Students who received Tier 2 interventions through RtI and/or ELD services in or out of the classroom, but have not been identified for special education programming, were not included in this study. These students were part of the total enrollment comparison population in the OR calculation.

Student LRE placement has limitations that are beyond the scope of this study. The student LRE placement in the OR calculation were not included at the time students received Tier 2 interventions in or out of the general classroom environment in addition to their special education services. The student LRE placement in the OR calculation did not include ELD classes taught in or out of the general education classroom environment in addition to their special education services. Although student removal from the general education environment for disciplinary reasons (in-school and out-of-school suspensions) must be reported and calculated as part of the significant disproportionality data (IDEIA, 2004, 2016), this data was a separate category for OR calculations, definitions, and threshold and beyond the scope of this study but would be an important area for further study.

Significance of the Study

Through this quantitative critical educational policy analysis, I addressed the gap in Colorado's policy to ensure equity in education for CLDS. The policy makers and stakeholders in Colorado adopted the least robust and least rigorous environments to measure significant disproportionality in Colorado's LEAs and AUs. By choosing the minimal requirements for student LRE placement when monitoring significant disproportionality, Colorado policy makers failed to monitor more than 91% of the student population identified with an educational dis/ability who were placed in special education (see Appendix B). Through this study, I contributed to scholarly research, practices in the field, and to policy by addressing the gap in quantitative analysis in critical policy analysis for CLDS receiving special education and related services.

Contributions to Scholarly Research

In this study, I addressed the gap in quantitative research in critical policy analysis for students receiving special education services. Students identified as CLD and identified with individualized special education or related services were regularly pulled out of the general education classroom for interventions. IDEIA (2004, 2016) required SEAs to monitor for significant disproportionality in the state's AUs to reduce the likelihood of disproportionate overrepresentation and thereby an alternate form of segregation. CLDS identified in special education were monitored by district, state, and federal agencies using OR in the four LRE quartiles for disproportionality and disproportionate overrepresentation of any racial/ethnic group. The implementation measurement of each LRE quartile affected the reports of significant disproportionality

from each school and each school district in the state of Colorado. I explored the implications of the statistical trends of CLDS identified in special education with the student LRE placement status of less than 40% in the general education setting as it related to the definition of risk ratio and the risk ratio threshold. I researched the extent to which calculating the risk ratio for CLDS in the LRE setting greater than 40% would have on the overall definition and threshold that LEAs were accountable to. I explored the extent to which calculating the student LRE placement of 40% or greater would contribute to a difference in the risk ratio definitions and thresholds.

Contributions to Practices in the Field

I reviewed the LRE flexibility option CDE selected and analyzed the impact this had on the risk ratio definition and threshold levels for the different LRE placement levels for each CLD group in each special education category. Through this policy analysis I guided policy makers, district leaders, and building leaders to be aware of building-level and district level practices. By identifying the difference in significant disproportionality between student LRE placement of less than 40% and 40% and greater, leaders would recognize the significance of disproportionality at all levels of student LRE placement. Building leaders would be able to put into practice safeguards to protect CLDS from overrepresentation in special education and special education categories.

Contributions to Policy

When developing policy, policy makers would consider the primary stakeholders, regardless of race, ethnicity, or linguistic development. Policy makers, district leaders,

and building leaders would recognize that the policies adopted through flexibility options should only be adopted if it benefited the students, not to convenience the LEA or the building leaders. I developed a policy brief that addressed SEA, LEA, and building leaders which took into account "winners" and "losers" when adopting the flexibility option of student LRE placement in monitoring and enforcing significant disproportionality.

Chapter Summary

Across the United States, students received interventions inside and outside of the general education environment through special education resources. In the amendment to IDEIA (2016) Congress and the U.S. Department of Education developed guidelines for SEAs to monitor and develop accountability systems for the state's LEAs and AUs to enforce violations of significant disproportionality of CLDS in special education. IDEIA (2016) provided flexibilities that Colorado adopted, allowing for the use of the minimum student LRE placement in measuring the risk ratio in the significant disproportionality calculations. Through the literature review, I analyzed the development of policy as it contributed to "winners" and "losers". I reviewed case law, federal regulations, and state statutes as they related to CLDS placed in special education and related services. I identified my methodology for this quantitative critical education policy analysis as I explored Colorado's policy of utilizing only less than 40% in the general education setting and alternate school setting in the student LRE placement for their significant disproportionality calculations. I reviewed and analyzed my findings as I examined the extent to which the statistical trends indicated the creation of "winners" or "losers" based

on the definition for Colorado's OR for disproportionality for CLDS. Finally, I provided a summary of my findings followed by a discussion and implications as it pertains to policy development for "winners" and "losers" in special education.

Chapter Two: Literature Review

In this chapter, I provide the methodology for reviewing the existing literature on the disproportionate overrepresentation of culturally and linguistically diverse students (CLDS) in special education. Next, I discuss the legal and historical aspects of race and dis/ability in education. Then, I review key federal laws that governed special education in K-12 schools in the United States beginning with the Elementary and Secondary Education Act (ESEA), a federal grant program established in 1965 through the Individuals with Disabilities Education Improvement Act (IDEIA) of 2004 and its following amendments in 2011 and 2016 to understand what each law meant for parents and school leaders. Concurrently, I chronologically trace the evolution of the disproportionate overrepresentation of CLDS in special education by examining major lawsuits that emerged during this time (1965-2019). I review the federal and state policies connected to the court and community actions, as well as those connected to special education and cultural representation in Colorado. Finally, I identify the impact of these policies on the United States' education system by revealing the loopholes that were created by the dominant culture to ensure continued control and power of the White upper and middle class.

Methodology of Literature Review

The purpose of this historical literature review was to identify and analyze the history of federal, state, and case law related to special education programming in public schools. In this section, I provide the methodology for reviewing the existing literature on the disproportionate overrepresentation of CLDS in special education. By reviewing federal and state law, I was able to analyze the effects on case law and the impact on disproportionate overrepresentation of CLDS in special education. I started my review by analyzing the history of overrepresentation of CLDS in special education in the United States. I learned about the existing research, the possible causes, and the controversies behind disproportionate overrepresentation of CLDS in special education. The literature led me to the federal statutes, which influenced the state statues. These statutes referenced case law that influenced their development.

I used inclusion and exclusion criteria in various forms and order in my research. The inclusion criteria for the research included: 1) special education; 2) overrepresentation; 3) disproportionality; 4) policy; 5) United States; 6) culturally responsive; 7) linguistically diverse; 8) language; 9) English language learners; 11) laws; 12) federal; 13) race; 14) discrimination; and 15) minority. My inclusion criteria for federal policy and case law research were: 1) Individuals with Disabilities Education; 2) Elementary and Secondary Education Act; 3) Free and Appropriate Public Education; 4) Least Restrictive Environment; 5) Americans with Disabilities Act; 6) Every Student Succeeds Act; 7) Education for All Handicapped Children's Act; 8) Equal Education Opportunity Act; and 9) Section 504. The exclusion criteria were: 1) discipline; 2)

psychology; 3) therapy; 4) inclusion; 5) de minimas; 6) education; and 7) higher education. I began my literature review with the following curiosities: 1) What was the impact of federal policy in special education identification and overrepresentation in special education for CLDS? 2) How did the communities and courts respond to overrepresentation and inappropriate identification in special education due to cultural and linguistic bias? 3) What was already known about overrepresentation in special education? 4). What was being done to affect change in the special education community to ensure equity among CLDS?

Databases and Search Terms

I started my review through reviewing literature on overrepresentation in special education. I searched through Google Scholar, Compass, Prospector, and Eric (ProQuest) for peer reviewed research related to overrepresentation of minoritized and linguistically diverse students in special education. I expanded my research to discover if there was a relationship in research of the disproportionate overrepresentation of CLDS in special education.

I continued my review by searching for federal statutory legislation, state policy, and case law. I searched through Law Aspect, Library of Congress, Census Bureau, United States Department of Education, www.govinfo.gov, Justia, Findlaw, CaseText, Westlaw, Council of Parent Attorneys and Advocates (COPAA) and, Colorado Department of Education (CDE). I pulled the original legislations for the Individuals with Disabilities Education Act (IDEA) of 1990 followed by its reauthorizations, IDEA in 1997 and the IDEIA of 2004 and the subsequent amendment in 2011, 2016, and 2018. As

I read through these reauthorizations, I recognized they were dependent on previous legislations. ESEA of 1965; Bilingual Education Act of 1967; Section 504 of the Rehabilitation Act of 1973; Education for All Handicapped Children Act (EAHCA) of 1975; Handicapped Children's Protection Act (HCPA) of 1986; and the Americans with Disabilities Act (ADA) of 1990. Through reading the historical legislation, I discovered the connection to case law. Each act depended on key court decisions which had an impact on the community. In some cases, policy was enacted through community actions, such as protest and local political representation. In the next section, I discussed the legal and historical aspects of race and dis/ability in education.

Legal and Historical Aspects of Race and Dis/Ability

The connection to ability and race has been traced to the days of the United States Constitution, where a human slave was recognized as three-fifths of a White person (U.S. Const. art I. §2, 1787). Ability and race continued to be connected in "scientific" research in cranial measurement differences and intelligence quotient measurement differences (Annamma et al., 2013; Annamma et al., 2018; Connor et al., 2016). Through the centuries, scientists worked diligently to equate dis/ability with race. The development of craniology, phrenology, and eugenics were part of an attempt to prove Whiteness as superior to people of any other color or "race" (Connor et al., 2016). By "proving" Black and Brown people as less than equal to White people, scientists attempted to equate Black and Brown people as less than human, "mentally retarded", educationally dis/abled, and intellectually inferior to any person identified as White (Annamma et al., 2018; Connor et al., 2016). The development of intelligence, laws, and

power became equivalent to being White (Connor et al., 2016). The rights of individuals to marry, own real property, or gain an education came into question due to the color of their skin, and therefore their legal rights and mental acuity (Annamma et al., 2018; Connor et al., 2016).

Whiteness As Ability and Property

Since the development of the Constitution and ratification of the Bill of Rights, the White elite have worked diligently to maintain their power to dominate the culture in the United States (Harris, 1993; Leonardo & Broderick, 2011). Culturally diverse individuals fought for their civil rights for decades. Men, women, and children of color worked for equity in education, the workplace, economic resources, etc. (Harris, 1993; Ladson-Billings, 2014; Leonardo & Broderick, 2011). The basic right to life, liberty, and the pursuit of happiness has been denied to those who are culturally and linguistically diverse (Connor et al., 2016; Harris, 1993; Leonardo & Broderick, 2011). During the early stages of development of the United States, being White equated to owning property (Harris, 1993; Leonardo & Broderick, 2011). People of color were denied the right to own property and the right to vote. As society developed and civil rights progressed, legal rulings were passed to end segregation in public settings and in the educational system, even though the White majority continued to fight against it (*Brown v. Board of Education,* 1954, 1955; *Cooper v. Aaron,* 1956; Harris, 1993; Ladson-Billings, 1998; Lash & Ratcliff, 2014; Leonardo & Broderick, 2011), Black and Brown students received an education in the same environment as their White peers.

After *Brown v. Board of Education* (1954, 1955), schools and school districts were mandated to integrate students of all races and all cultures. Schools and school districts responded with an alternate form of segregation, which was reinforced through state and federal statutes (Dunn, 1968; Lash & Ratcliff, 2014). Students were placed in separate classrooms through ability grouping and special education based upon stereotyping, cultural misrepresentation, personal biases, and a lack of understanding of student and family needs (*Diana v. Board of Education,* 1970; Dunn, 1968; *Hobson v. Hansen,* 1967; *Larry P. v. Riles,* 1986; *Lau v. Nichols,* 1974). The fallout from *Brown v. Board of Education* (1954) and *Cooper v. Aaron* (1956) led to the development of segregation through dis/ability and intellectual labeling (Cooper et al., 2016; Leonardo & Broderick, 2011). Separate school environments were developed to ensure students with intellectual dis/abilities and educational handicaps received "appropriate" education to meet their needs. These separate special education environments were buildings with a disproportionate overrepresentation of students who would have benefitted from general education settings yet were deprived due to the color of their skin, their primary language, or a diverse cultural heritage (Annamma et al, 2018; Cooper et al., 2016; Dunn, 1968; *Hobson v. Hansen,* 1967; Leonardo & Broderick, 2011).

Disproportionate overrepresentation of CLDS in special education has been a continued struggle in our education system. As early as 1967, the courts recognized disproportionate overrepresentation of specific racial groups in special education (*Hobson v. Hansen,* 1967). In 1968, Dunn noted that 60 to 80 percent of the students placed in special education day classes were either CLDS or experienced recent trauma

or poverty that was impacting their access to the general education environment. Since then, researchers continued to study possible causal factors and remedies to the disproportionate overrepresentation of CLDS in special education. For more than 60 years, educators, special educators, administrators, researchers, and policy makers documented the effects of segregation, tracking, ability grouping, and the resultant low levels of rigor and low expectations on student outcomes (Annamma et al., 2018; Connor et al., 2016; Dunn, 1968). These specialists documented the connection between tracking and ability grouping to segregation, unequal education, and overrepresentation of CLDS placed in special education environments, despite the of identification or restrictive environments (Annamma et al., 2018; Connor et al., 2016; Dunn, 1968).

Community actions, such as the civil rights movement, and key court cases throughout the nation brought forth awareness for the need of regulations to educational policy to ensure equity for all students, regardless of race/ethnicity or linguistic background. Through the years, the ESEA of 1965 continued to influence the education system in the United States through a series of amendments and reauthorizations, such as the Bilingual Education Act of 1967, the Equal Education Opportunity Act (EEOA) of 1974, EAHCA of 1975, the IDEA of 1990, the ADA of 1990, and the IDEIA of 2004. The legislative reauthorizations and amendments were directly affected by case law brought to the District Court, Appellate Court, and Supreme Court, in combination with community action.

In the next section, I review key federal laws that govern special education in K-12 schools in the United States beginning with the ESEA, a federal grant program

established in 1965 through the IDEIA of 2004 and its following amendments in 2011 and 2016 to understand what each law meant for parents and school leaders.

Key Federal Statutes in the United States Governing Special Education

In this section, I will discuss the key federal statutes in the United States that govern special education, the federal and Supreme Court cases that had a direct impact or were directly impacted by them, and what the legislation meant to educational leaders and the families of students with dis/abilities. The key federal statutes are as follows.

Elementary and Secondary Education Act (ESEA) of 1965

ESEA of 1965 was developed as a part of the "war on poverty". The spirit of the law was to ensure federal funding and a free education for children in elementary and secondary levels of education, regardless of their socioeconomic status. Funding for special education institutions and programs were implemented for rural and urban schools when schools were not in session under Title III of the Act (Zascavage & Zascavage, 2010).

In 1967, the United States District Court recognized that segregation was still occurring in school districts under the guise of tracking and ability grouping (*Hobson v. Hansen*, 1967). Students in the District of Columbia area were tested before being placed on one of four tracks. Students who scored lowest on the test were placed on the lower two tiers of the tracking system, the General and the Special Academic (Basic) tracks. Students who were placed in the Basic tracks if they scored below 75 on the intelligence quotient (IQ) tests, demonstrated academic performance that was three years or more below grade level expectations, or the student's teachers believed the student should be

placed in the Basic track. To move from Basic to General track, the student had to demonstrate academic performance that was no more than two years below grade level expectations (*Hobson v. Hansen*, 1967).

The U.S. District Court for the District of Columbia concurred that the standardized IQ tests were implemented to benefit the White middle class and upper middle-class students (*Hobson v. Hansen*, 1967). As stated in the decision of *Hobson v. Hansen* (1967):

> the aptitude tests used to assign children to various tracks [were] standardized primarily on [White] middle class children….because of the reduced curricula and the absence of adequate remediate and compensatory education, as well as the continued inappropriate testing, the chance of escape is remote. (p. 407)

Analysis of the student demographic and placement demonstrated a disproportionate number of Black and Brown students, and students quantified as poor, placed in the General and Basic tracks. The U.S. District Court, in *Hobson v. Hansen* (1967) determined that through the tracking system there was a disproportionate overrepresentation of CLDS in households with economic challenges, and students recovering from trauma placed in the lower two tracks. This overrepresentation of CLDS demonstrated a socioeconomic and racial method of segregation that did not benefit any student regardless of their race, linguistic, cultural, or socioeconomic status (*Hobson v. Hansen*, 1967).

Meaning for School Leaders and Families. Since *Hobson v. Hansen* (1967), the disproportionate overrepresentation of CLDS continued to remain an issue in special education (Annamma et al., 2013; Annamma et al., 2018; Connor et al., 2016; Connor et al., 2019). This theme continued through 1972 in *Mills v. Board of Education* (1972) and

Pennsylvania Association for Retarded Children (PARC) v. Commonwealth of Pennsylvania (1972) which demonstrated the devastating effects of disproportionate overrepresentation, lack of due process, and lack of free and appropriate education (FAPE) in the least restrictive environment (LRE). Policymakers developed legislation that attempted to address the concerns of overrepresentation and disproportionality in special education programs which was brought to Congress' attention in 1972 after the Congressional Investigation of 1972. Through *Mills v. Board of Education* (1972), *PARC v. Commonwealth of Pennsylvania* (1972), and then the Congressional Investigation of 1972, researchers and policy makers found that additional special education supports for students without dis/abilities were not beneficial to the average student when those services were implemented outside of the general education classroom. CLDS and low performing students without dis/abilities benefitted from classroom interaction with their grade level peers and a rigorous education without modifications. Students were removed from the classroom for inappropriate interventions and supports received an inadequate education (Congressional Investigation of 1972; Dunn, 1968; Leonardo & Broderick, 2011; *Mills v. Board of Education*, 1972; *PARC v. Commonwealth of Pennsylvania*, 1972).

Overall, Congress developed the ESEA of 1965 to provide supports to school leaders and families to close the performance divide in reading, writing, and mathematics between students from various economic households. The resulting consequences of tracking, ability grouping, subjective testing, and specialized programs contributed to the development of a more modern form of segregation in the public school system

(Congressional Investigation of 1972; Dunn, 1968; Leonardo & Broderick, 2011; *Mills v. Board of Education*, 1972; *PARC v. Commonwealth of Pennsylvania*, 1972). Congress introduced subsequent amendments and reauthorizations to address funding, allocations of resources, and introductions to needed additional programming. In 1967, Congress passed the reauthorization of ESEA with the addition of Title VII, which introduced programming for bilingual programming that set the stage for the Bilingual Education Act of 1968.

Bilingual Education Act of 1968

In 1968, Congress and President Johnson signed the Bilingual Education Act as an amendment to ESEA. Funding was provided to support education to students with "limited English" proficiency and non-English speaking students as they attempted to access academic content in their English instruction classrooms (Moran, 2005). The compensatory model endorsed by the Bilingual Education Act of 1968 treated diverse languages as a barrier to learning English, rather than an asset. (Moran, 2005). Community members who disagreed with the Bilingual Education Act (1968) endorsed more direct implementation and student supportive models, such as the enrichment model to be embedded within the Act.

Meaning for School Leaders and Families. Although the intent of the law was to meet the needs of linguistically diverse students, in 1978, with the case of *Guadalupe Org., v. Tempe Elementary School* (1978), linguistically diverse communities across the United States discovered that the needs of the non-English-speaking linguistically diverse majority would not have their needs met through the Bilingual Education Act of 1968 or

its subsequent amendments. The Supreme Court ruled that although most of the elementary school was non-English speaking, the school and school district did not have "the burden" to provide linguistically or culturally relevant instruction (*Guadalupe Org. v. Tempe Elementary School*, 1978). Historically, Supreme Court decisions have wavered on their expectations for schools and school districts.

In the U.S. District Court decision of Diana v. Board of Education (1970), the court determined that students who spoke a language other than English were inappropriately identified in special education due to a culturally biased IQ test. Linguistically diverse students must be assessed in their primary and/or native language for special education placement (*Diana v. Board of Education,* 1970). In Lau v. Nichols (1974), the U.S. Supreme Court determined that students who spoke a language other than English were guaranteed equitable instruction. CLDS were to receive meaningful instruction in English with their English-speaking peers or "adequate instructional procedures" to ensure equity in instruction and education (*Lau v. Nichols*, 1974). The controversy over appropriate instructional practices and interventions for CLDS in education and special education and the public schools' dependency on federal funding and allocation of funding from ESEA (1965) and the Bilingual Education Act (1968) prompted Congress to initiate an investigation into the representation of CLDS in special education (Congressional Investigation, 1972).

The Congressional Investigation of 1972

In 1972, the Supreme Court ruled against the Board of Education and the Commonwealth of Pennsylvania in the cases of *Mills v. Board of Education* (1972) and

PARC v. Commonwealth of Pennsylvania (1972). Even though the issues occurred states apart, the similarities in the cases sparked a Congressional Investigation (1972) into special education programming. In *Mills v. Board of Education* (1972), the court determined that all students had the right to a FAPE. They found that the Board of Education did not have the right to put cost of education over the rights of their students. In *PARC v. Commonwealth of Pennsylvania* (1972), the Court found the students were deprived a FAPE. In both cases, the courts recognized that Black and Brown students were overidentified in special education under the category of "mental retardation". This disproportionate overidentification was cause for violation of the students' educational rights and the parents' rights to due process (*Mills v. Board of Education*, 1972; *PARC v. Commonwealth of Pennsylvania*, 1972).

Meaning for School Leaders and Families. In response to the *Mills v. Board of Education* (1972) and *PARC v. Commonwealth of Pennsylvania* (1972) decisions, Congress initiated and completed an investigation into the inappropriate overidentification of students in special education programming (Congressional Investigation of 1972). Congress revealed reports which revealed that more than eight million children were identified with a dis/ability. Out of these 8 million children – 3.9 million children were receiving "appropriate" educational services; 2.5 million children were receiving "inappropriate" educational services; and 1.75 million children were not receiving any type of educational services at all. The Congressional investigation indicated an overrepresentation of CLDS identified as "handicapped" or "mentally retarded", yet proved inappropriate services being delivered to all students identified with

a dis/ability. Congress continued to attempt to remedy inappropriate services delivered to students identified with a dis/ability and the overrepresentation of CLDS in special education through the passage of legislation meant to support students with a dis/ability yet failed to address the overrepresentation of CLDS in special education. Appropriate educational services did not include access for students with dis/abilities (Newnham & LeBrecht, 2020). Access to public buildings, which included public school buildings, classrooms, and educational materials, were not guaranteed for students with dis/abilities. Students with dis/abilities did not always need special educational services to access the building (Newnham & LeBrecht, 2020). Section 504 of the Rehabilitation Act addressed some of the concerns of overidentification of students with dis/abilities who need accommodations to access the general education environment.

Section 504 of the Rehabilitation Act of 1973

Section 504 of the Rehabilitation Act was passed in 1973. This section of the Rehabilitation Act (1973) was enacted to provide protections to children and adults with dis/abilities. Students with dis/abilities were to receive equity of access within schools to their educational environment. Although this law was passed in 1973, enforcement of the Act did not happen until four years after it was passed (Christle & Christle, 2010). Civil unrest and community action calling for equity resulted in legal enforcement of Section 504 of the Rehabilitation Act (1973) (Christle & Christle, 2010). During the four years it took to enforce Section 504 of the Rehabilitation Act (1973), civil and community unrest called for Congress to pursue equity for all students in the public education system through the EEOA of 1974.

Meaning for School Leaders and Families? Section 504 of the Rehabilitation Act of 1973 was necessary to provide students access to the educational environment was the beginning of the movement of inclusivity for students with a physical or mental dis/ability (Newnham & LeBrecht, 2020). Section 504 provided students reasonable access to the educational environment in the public school system through "reasonable accommodations", which reduced the need for separate special education schools for students with a physical dis/ability, with the intent of bringing more students into the general school buildings (Newnham & LeBrecht, 2020). Section 504 of the Rehabilitation Act of 1973 and its subsequent amendments set up some foundational elements for the EEOA of 1974 and the ADA of 1990.

Equal Education Opportunity Act (EEOA) of 1974

A civil action was filed in California, *Diana v. State Board of Education* (1970), which implied the existence racial discrimination and segregation through special education placement. Diana was a limited-English speaking student attending a public school in California. Diana was identified as "mentally retarded" and placed in special education through the results of an English-delivered administration and interpretation of an IQ test. The delivery of the assessment and interpretation inaccurately identified her with a dis/ability due to her inability to access the language in which she was assessed. It was determined that speaking another language was not equivalent to having a dis/ability (*Diana v. State Board of Education*, 1970). The court ruled that non-English speaking students would be assessed in their primary language (*Diana v. State Board of Education*, 1970). In 1972, a class action lawsuit on the behalf of all Black children in California was

brought to the attention of the court (*Larry P. v. Riles*, 1972). The ruling was challenged in 1979 (*Larry P. v. Riles*, 1979), then appealed in 1986 (*Larry P. v. Riles*, 1986). The original ruling of *Larry P. v. Riles* (1972) combined with the ruling of *Diana v. State Board of Education* (1970) assisted in the development of the P.L. 94-142, otherwise known as the EAHCA of 1975 (MacMillan et al., 1988).

In the original ruling of *Larry P. v. Riles* (1972), the court recognized that IQ testing was used to discriminate against Black students in California. Black students were disproportionately placed in "educationally mentally retarded" classrooms, where there was no expectation for productivity, growth, or excellence. The court ordered a restriction of special education placement in "educationally mentally retarded" classrooms based on IQ testing due to racial bias and overrepresentation due to racial segregation (*Larry P. v. Riles*, 1972). This ruling was upheld in 1986, when brought to the appellate court (*Larry P. v. Riles*, 1986). The court maintained its stance on the cultural bias in IQ testing, which resulted in the overrepresentation of Black students in special education under the identification of "educationally mentally retarded" (*Larry P. v. Riles*, 1986).

Linguistically diverse students in California brought up a class action suit against San Francisco and the superintendent (*Lau v. Nichols*, 1974). The students claimed a Civil Rights violation and a violation of their 14th Amendment rights under the Equal Protection clause. They claimed the school district did not provide education for their limited English skills. As a result, the students did not receive equal access to education when compared to their English-speaking peers. The federal and appellate court

determined the school district did not violate the students' Civil Rights, nor did they violate the Equal Protection clause of the 14th Amendment (*Lau v. Nichols*, 1974). However, in 1974, the families of students, whose primary language was "Chinese" (i.e. Cantonese, Mandarin), brought their case to the Supreme Court of the United States. The justices determined the students were not receiving equitable access and that the San Francisco school district did violate the students' Civil Rights and the Equal Protection clause under the 14th Amendment. They determined that the San Francisco school district failed to provide instruction to more than 1,800 linguistically diverse students (*Lau v. Nichols*, 1974).

Although the United States has never declared an official language (Ryan, 2013), the Supreme Court held English as the standard for equitable education (*Lau v. Nichols*, 1974). The Court declared that proficiency in English and basic English skills were at the core of the public education system in the United States. Justice Douglas delivered his opinion:

> Any ability grouping or tracking system employed by the school system to deal with the special language skill need of national origin-minority group children must be designed to meet such language skill needs as soon as possible and must not operate as an educational dead end or permanent track. (p. 568)

The intent of the Justices was to ensure equity of all children, regardless of their "English" language development. The result of this decision and other legislation led to the creation of English language development classes, which were implemented through a "pull-out" model (Bilingual Education Act, 1967; *Diana v. Board of Education,* 1970; *Lau v. Nichols,* 1974). Students were routinely removed from their grade level peers for

specialized classes outside of their regular grade level instruction. Consequently, students were identified as English language learners, or emergent bilinguals, and were segregated into ability leveled groups, missing equitable instruction, a practice that continued through the writing of this paper (Bilingual Education Act, 1967; *Diana v. Board of Education*, 1970; *Lau v. Nichols*, 1974; Linn & Hemmer, 2011; Rodriguez & Rodriguez, 2017).

Families of children representing Mexican American and Native American heritage in Arizona brought a complaint to the courts for discriminatory practices and cultural bias (*Guadalupe v. Tempe*, 1978). More than 18% of the student population was of Mexican or Native American heritage within the school district. The children with Mexican American and Native American heritage in the elementary school represented 91.5% of the student population. The families stated that the children were not receiving culturally appropriate or linguistically relevant education due to the population of White students at the school. The families wanted bilingual education in the school which would take into account the special education needs of the Mexican American and Native American students attending the school. The courts referred to the legal precedence established through *Lau v. Nichols* (1974) and the EEOA of 1974 to determine their rulings. The district court and the appellate court ruled in favor of the elementary school, stating that "there is no suggestion that [Tempe Elementary School's] remedial program operates 'as an educational dead-end or permanent track'" (*Guadalupe Org. v. Tempe Elementary School*, 1978).

Meaning for School Leaders and Families. The ruling in Guadalupe Org. v. Tempe Elementary School (1978) determined that it was the LEA's burden to bear to ensure culturally or linguistically appropriate public education for CLDS. The Supreme Court's ruling contradicted the EEOA of 1974, which ensured equity in education for all students. Congress determined that equity for all students as defined in the EEOA (1974) needed more clarification for students with dis/abilities.

The EEOA (1974) was developed as an extension and continuation to the Bilingual Education Act (1968) and Section 504 of the Rehabilitation Act (1973) as a continued effort toward building equity in education for all students. As demonstrated through *Guadalupe Org. v. Tempe Elementary School* (1978), efforts made in the EEOA (1974) to codify the findings in *Lau v. Nichols* (1974) as a continuation of the Civil Rights movement and ensure equal access for all students, including the linguistically diverse, were insufficient (Linn & Hemmer, 2011; Rosenzweig & Rosenzweig, 2008). The EEOA (1974) was only the beginning of legislative reform in response to interpretations of the 14th Amendment, the ESEA (1965), the Bilingual Education Act (1968), the Congressional Investigation of 1972, and the Section 504 Rehabilitation Act (1973) (Linn & Hemmer, 2011; Rosenzweig & Rosenzweig, 2008), which was continued through the EAHCA of 1975.

Education for All Handicapped Children Act (EAHCA) of 1975

In 1975, Congress enacted the EAHCA in response to their findings through their Congressional Investigation of 1972 and as an adjusted amendment to the Section 504 of the Rehabilitation Act of 1973 (Christle & Christle, 2010) to ensure that all students with

dis/abilities had a right to equal access to education. All state and local education agencies were held accountable to ensure that students with dis/abilities were "provided" with an education (EAHCA, 1975). The quality, equity, or delivery of services were not specified or addressed through this law. For the first time since *Mills v. Board of Education* (1972), Congress legally ensured through public legislation that all students identified with a dis/ability were ensured a FAPE in the LRE (EAHSA, 1975).

Before 1972, the discussion of free and appropriate education was rarely discussed. Across the United States, children with dis/abilities were denied access to the educational environment due to high cost or lack of resources. In the landmark case *Mills v. Board of Education of District of Columbia* (1972), the Supreme Court determined that all students, regardless of ability or dis/ability were entitled to a FAPE. This was the first time in special education history that the mention of FAPE appeared. This would be adopted into public law three years later in 1975.

Meaning for School Leaders and Families. The EAHCA of 1975 ensured provisions for a FAPE in the LRE for students on an individualized education plan (IEP). In 1982, the question came before the Supreme Court to define "appropriate". The child's family believed that their child was not progressing academically as well as she would have without a handicap (*Board of Education v. Rowley*, 1982). The claim was made that because there was disparity between the child's potential and her achievement, she was not receiving a FAPE. The parents believed that their child should receive the opportunity to achieve her full potential through special education services. The Court disagreed, ruling in favor of the school board. The Court stated that student services under the spirit

of the EAHCA of 1975 and all of its subsequent amendments was for the state and local education agencies to open the door to students with dis/abilities and provide them with access to public education. They stated that there was no need to ensure equity of opportunity (*Board of Education v. Rowley*, 1982).

The definition of "reasonably calculated" and "reasonable progress" in relation to appropriate education continued to remain a controversial question in relation to students with dis/abilities. In 2017, the Supreme Court rejected the concept of "merely more than" or "de minimis" standards set through *Board of Education v. Rowley*, (1982). The Supreme Court set the standard that "every child should have the chance to meet challenging objectives" (*Endrew F. v. Douglas County Board of Education*, 2017; Turnbull, et al., 2018; United States Board of Education, 2017). Students with dis/abilities protected under IDEIA (2004) were entitled to an education and progress in their education that was "reasonably calculated to ensure" ideal progress (*Endrew F. v. Douglas County Board of Education*, 2017; Turnbull, et al. 2018; United States Board of Education, 2017).

A few months before *Mills v. Board of Education* (1972), *PARC v. Commonwealth of Pennsylvania* (1972) found that students were being refused access to education through exclusion, suspension, expulsion, or other methods without due process or notification. It was determined that students with dis/abilities or other needs were entitled to a FAPE in the LRE. Both the *PARC v. Commonwealth of Pennsylvania* (1972) and the *Mills v. Board of Education* (1972) provided the basis for FAPE and LRE, which was the basis for the Congressional Investigation of 1972 and set up the

foundations for the EAHCA of 1975. The EAHCA (1975) provided the foundations for its subsequent amendment, the HCPA of 1986.

Handicapped Children's Protection Act (HCPA) of 1986

In 1986, Congress passed an amendment to the EAHCA. The HCPA of 1986 added financial provisions and guarantees to parents of students with dis/abilities that they would be part of the decision-making process for student identification and student needs. Based upon the Supreme Court decision, *Smith v. Robinson* (1984), the HCPA (1986) was an amendment to the EAHCA (1975) to ensure enforceability against discrimination for students with dis/abilities.

In the case of *Parents in Action on Special Education (PASE) v. Hannon* (1980), PASE represented Black children in the Chicago public school system. PASE brought the claim that the standardized assessments that were used to identify and place children in special education under the identification of "educationally mentally retarded" were culturally biased against Black children, which resulted in an overrepresentation of Black children with the label of "educationally mentally retarded" and tracked them with lower educational standards. The judge reviewed the assessment process, the expert testimony, and each assessment item on three of the most common assessments used to place students in special education. The court ruled in favor of the superintendent and school board, stating that there was no evidence of intentional cultural bias on the assessments or through the evaluation process (*PASE v. Hannon*, 1980).

Meaning for School Leaders and Families. The court acknowledged the existence of bias within the assessments but determined that the amount of bias within the

assessments and evaluation process did not meet the burden of proof necessary to constitute intent (*PASE v. Hannon,* 1980). The court's ruling confirmed that the placement of students in special education removed parental rights and parental involvement in their student's special education programming. The HCPA (1986) was developed to improve access for students with dis/abilities through equity of access to the educational environment and curriculum. Students with dis/abilities continued to struggle to access their own educational buildings and, in some cases, their classrooms, which was later covered through the ADA of 1990.

Americans with Disabilities Act (ADA) of 1990

The Section 504 of the Rehabilitation Act (1973), EEOA (1974), the EAHCA (1975), and the HCPA (1986) were meant to afford children with dis/abilities with equity of access to education and their educational environment. Even with the establishment of the 14th Amendment in 1868 and *Brown v. Board of Education* (1954), when it was established that separate was not equal, and the Fair Housing Act of 1968, individuals with dis/abilities have been fighting for equity in treatment, access, and education.

Meaning for School Leadership and Families. After more than a century of struggle, the ADA of 1990 was finally passed, which legally provided equity of access and treatment for individuals with dis/abilities. Public buildings and facilities were required to ensure access to all individuals with physical, visual, cognitive and hearing dis/abilities. While Congress worked to develop and pass the ADA (1990), Congress was also working to reauthorize the EAHCA (1975) through the IDEA of 1990.

Individuals with Disabilities Act (IDEA) of 1990

Through community and civic action, individuals with dis/abilities continued to work toward equity and reform in the educational sphere, as well as the public domain. EAHCA (1975) was reauthorized as the IDEA of 1990. The implementation of IDEA was the start of reform and change in special education through the local education agencies and school buildings. Students identified with a dis/ability received interventions in accordance to their dis/ability rather than being perceived as a student with a handicap or "mentally retarded" (Yell & Yell, 2020). IDEA (1990) was the start of multiple changes to the education, treatment, access, and equity for students with a dis/ability (Yell & Yell).

Meaning for School Leaders and Families. Through IDEA (1990), students were entitled to regular intervention as identified in their IEP. To address overrepresentation and disproportionate identification of CLDS in special education (Fitzgerald, 2008), Congress added provisions in IDEA that mandated IEP teams to regularly evaluate the student for individual needs and services, such as transportation, necessary education related therapies, medical support, assistive technology, and interventions to ensure access to and benefits from the educational environment (IDEA, 1990). IDEA (1990) failed in the attempt to affect the overrepresentation of CLDS in special education (Fitzgerald, 2008). The consequences of IDEA (1990) proved more harmful than the intent by increasing the disproportionate representation of CLDS in special education (Fitzgerald, 2008). Congress directly addressed the critical issues of significant disproportionality in the reauthorization of IDEA (1997) by mandating SEAs

to monitor LEAs for disproportionality. The lack of directive in this mandate was addressed in the following reauthorization of the EAHCA (1975) in 2004 with the IDEIA.

Individuals with Disabilities Education Improvement Act (IDEIA) of 2004

The EAHCA reauthorizations of IDEA in 1997 and IDEIA in 2004 signified the continuation and reform in education through legislation of equity, treatment, and access for students with dis/abilities. In 1997, Congress authorized a reauthorization to IDEA, where for the first time, Congress recognized that SEAs should monitor overrepresentation and disproportionality in special education. In 2004, Congress reauthorized EAHCA and IDEA with the IDEIA of 2004, which was also known as the Individuals with Disabilities Education Act (IDEA) of 2004. The spirit of IDEIA (2004) and its subsequent amendments had two main goals. The first goal was to address the unique needs of students with dis/abilities as educators prepare them for college readiness, adult employment, or adult living skills. The second goal was to address the ongoing overrepresentation of CLDS in special education that was mentioned in the reauthorization to IDEA (1997).

Children enrolled in the Chicago public school system were struggling with inappropriate identification and disproportionate overrepresentation in special education. In the case of *PASE v. Hannon* (1980), the question was raised about biased IQ tests against African American children as they were being tested for special education services. Initially, the court considered the percentage of students from each ethnic group in the school system, the general education environment, and those identified as

educationally mentally handicapped (EMH). The court found that 3.7 percent of all Black children in the Chicago public school system were identified as EMH, while 1.3 percent of all White children were identified as EMH (*PASE v. Hannon*, 1980). The question addressed to the court was whether the assessments delivered to the students were culturally biased against Black students, not whether the students were inappropriately identified as EMH or if there was overrepresentation of any ethnicity in special education. Neither a ruling nor remedies for overrepresentation were addressed (*PASE v. Hannon*, 1980).

In 1994, the United States District Court of Arkansas recognized that overrepresentation of CLDS continued to predominate the public education school system in Augusta School District (*Simmons v. Hooks*, 1994). The question came to the court of whether the segregation of students existed in Augusta public school district through ability grouping. If there was segregation, the court needed to determine if it was intentional. The court was to decide if there was overrepresentation of African American students in special education. If it was determined that there was an overrepresentation, the court needed to determine if this constituted segregation (*Simmons v. Hooks*, 1994).

The court in *Simmons v. Hooks* (1994) determined that there was an overrepresentation of African American students in the lower ability groups in Augusta public school district. They determined that ability grouping was a form of racial segregation and that it was intentional on the part of the school district (*Simmons v. Hooks*, 1994). Even though ability grouping was determined to be racially motivated, the court looked at the racial motivation of overrepresentation in special education through a

different lens. In particular, the court recognized there was a significant overrepresentation of Black students identified with mental retardation when compared to their White counterparts (*Simmons v. Hooks,* 1994). Due to the federal guidelines of what constituted unlawful overrepresentation or unconstitutional overrepresentation and proof of intent, the court determined there was no intentional segregation or discrimination on the part of the school district (*Simmons v. Hooks*, 1994).

Meaning for School Leaders and Families. With the reauthorization of IDEIA in 2004, policy makers implemented requirements for State and Local Education Agencies to address the continued overrepresentation of CLDS students in special education. Through Indicator 9 and Indicator 10, SEAs were required to monitor and address "significant" overrepresentation of CLDS in special education and in special education categories that occurred through inappropriate identification (Albrecht et al., 2012). The Office of Special Education Programs (OSEP) was prevented from enforcing the additional provisions due to the conflicting passage within the same law that prevented the collection of data on "racial or ethnic minorities" (Albrecht et al., 2012). Albrecht et al. (2012) demonstrated that from the years 2005-2010, states reported a decrease in the overall rate of inappropriate identification through Indicators 9 and 10 to an almost zero rate of inappropriate identification. Albrecht et al. (2012) noted that even though SEAs and LEAs were able to report such low rates of inappropriate identification, almost all states, through a loophole in IDEIA (2004) raised their risk ratio thresholds, which skewed the statistical results in favor of the SEAs and LEAs.

Assessments and evaluations used in identifying students within the subjective special education categories (i.e., specific learning disability, intellectual disability, speech/language disability, serious emotional disability, etc.) were recognized for cultural biases against students of color and emergent multilingual students (Dunn, 1968). The IDEA 1997 officially recognized the innate bias that led to the overrepresentation of CLDS in special education and across special education categories (King Thorious & Maxcy, 2015). The reauthorization of IDEIA of 2004 and the subsequent amendments in IDEIA 2011 encouraged the implementation of Response to Intervention (RtI) and other intervention strategies to be used in the general education classroom in place of the discrepancy model. The expectation was that by eliminating the bias of cognitive assessments involved in the discrepancy model, there would be a reduction in the reported overrepresentation of students of color in specific special education categories (King Thorious & Maxcy, 2015). By moving away from the discrepancy model, the Federal Education Department and State Education Departments saw a decrease in overrepresentation of CLDS in special education and special education identification. The unforeseen consequences of states adopting the RtI strategies as part of the identification process were a greater disparity between disproportionate overrepresentation and disproportionate underrepresentation in the subjective categories of special education (King Thorious & Maxcy, 2015).

Through disaggregation, students identified as Black were disproportionately overrepresented under “significant emotional disability” or “intellectual disability” (Colker, 2013). These students were isolated and placed in an educational environment

with low expectations and low educational outcomes. Students identified as White, were disproportionately overrepresented under special education classifications of “autism”, “developmental delay,” “other health impairment,” or “orthopedic impairment” (Colker, 2013). Students identified under these classifications were placed in educational environments with higher expectations and higher educational outcomes (Colker, 2013). Historically, the most desirable forms of special education, which provides higher outcomes, have not been available to CLDS due to cultural biases, and lack of cultural and linguistic representation in state, local, and building policy (Colker, 2013).

The amendments to IDEIA (2004) in 2007, 2011 and 2016 continued to address the disparities in overrepresentation for CLDS in special education and special education categories. The implications of the Supreme Court’s decision in *Endrew v. Douglas County Board of Education* (2017) and the Congressional amendments to IDEIA for CLDS placed in special education and their families continued to evolve. The concept that “every child should have the chance to meet challenging objectives” (*Endrew F. v. Douglas County Board of Education*, 2017; Turnbull, et al., 2018; United States Board of Education, 2017) needed to be extended to be extended to the CLDS population to ensure the appropriate placement in special education, which would allow all student to demonstrate “appropriately ambitious progress" (*Endrew F. v. Douglas County Board of Education*, 2017; Turnbull, et al., 2018; United States Board of Education, 2017).

Starting in 1965 with the ESEA, Congress introduced legislation which provided equity in education regardless of the economic status within their family. Year after year, Congress attempted to pass legislation and amendments to legislation to meet the needs

of students to ensure students could strive to reach their dreams. Supreme Court cases and Federal District Court cases revealed interpretations and misinterpretations of the law, requiring Congress to address the gaps and holes in policies meant to serve the student population. Congress attempted to address the needs of linguistically diverse students through the Bilingual Education Act (1967) and the EEOA (1974). Gaps and holes in legislation persisted. Congress addressed policies to meet the needs of students and adults with dis/abilities in the education system and in through their daily lives after extensive fact gathering in the Congressional Investigation of 1972 and follow-up reports and legislative action. The EAHCA (1975) was the heart of all of the following reauthorizations and amendments to address and protect students identified with dis/abilities. With each reauthorization and amendment to the EAHCA (1975), policy-makers came closer and closer to addressing the segregation of CLDS through identification of an educational dis/ability. IDEIA (2004) started the process of monitoring and enforcing the need to reduce significant disproportionality of CLDS in special education. The subsequent amendments to IDEIA (2004) provided state guidelines and guidance for monitoring, defining, and addressing significant disproportionality of CLDS in special education.

Justification for Reviewing and Redefining Overrepresentation in Special Education

The goal behind the need to reduce disproportionate overrepresentation has been to ensure that students receive equity in education. CLDS have been placed in various special education classes, consequently removed from their general education peers. These students received less than adequate education in the name of "help" and "support"

when in fact, the students have been racially, culturally, and linguistically segregated from their White, grade level peers (Blanchet, 2006; Leonardo & Broderick, 2011).

For more than 60 years, researchers, educators, leaders, and legislators have reported on the existence of disproportionate representation of CLDS in special education. The Supreme Court wavered on the interpretation of legislation designed to support equitable education for CLDS in education and special education. Legislators passed federal laws to provide access and equity to students with disabilities, linguistic diversities, differing socio-economic backgrounds, and cultural/racial/ethnic differences. With each amendment, legislators have left gaps and holes for the SEAs to interpret and for the LEAs to identify what was in the best interest for their educational agency. The flexibilities in the amendment to IDEIA (2004, 2016) were designed to provide guidance to SEAs in monitoring and guiding LEAs in defining and enforcing significant disproportionality (Colorado Department of Education, 2020; IDEIA, 2016). The development for the amendment to IDEIA (2016) was to close the gaps in the policy that was left in the previous amendment and reauthorization designed to protect CLDS identified in special education. The protections that were supposed to be implemented to allow equity in education through each educational legislation since 1965 continues to be absent in the amendment to IDEIA (2016).

Disaggregation of student data according to language development and special education identification category has been suspiciously absent from federal and state policy. Students continued to be removed from the classroom for English Language Development classes in support of English language to support their access to curriculum

(Linn & Hemmer, 2011). These students have also been identified with a dis/ability that required them to be removed from the general education classroom for specialized instruction that may not be appropriate for their linguistic needs. Depending on their "needs" and goals, students could be out of the classroom for more than half of the school day to receive instruction and/or intervention (Fergus, 2017). In addition, CLDS identified in special education received additional supports which have not been disaggregated in the data but were required as a Response to Intervention (or a similar model) specified IDEIA (2004).

The courts have led the path toward equity, yet because they have been dominated by White middle-class men (Albrecht et al., 2012; Annamma et al., 2018; Blanchett, 2006; Lash & Ratcliff, 2014; Leonardo & Broderick, 2011), the results and the rulings have been flawed. The results and the rulings have either been in favor of those in charge, which were also ruled by the White middle class, or the rulings left open interpretations for the elite White middle class to adjust their policy to ensure continued racial inequity (Albrecht et al., 2012; Annamma et al., 2018; Blanchett, 2006; Lash & Ratcliff, 2014; Leonardo & Broderick, 2011). Federal and state policy worked together following court rulings, in the belief that they were following the needs of the community. The policy makers were also dominated by the White majority. These policies continued to leave loopholes for racial, cultural, and linguistic segregation within our schools from their White middle class peers. CLDS in special education were pulled out of the general education environment for academic interventions and linguistic support (Fergus, 2017; Linn & Hemmer, 2011). Their overrepresentation in special education has been supported

by multiple supreme court rulings through the determination that there was no intent of segregation even though there were apparent biases against CLDS (*Crawford v. Honig,* 1992; *Guadalupe Org. v. Tempe Elementary School,* 1978; *Larry P. v. Riles,* 1986; *PASE v. Hannon,* 1980; *Simmons v. Hooks*, 1994). Policy change affecting culturally diverse children viewed as successful change by many advocates were later identified as setbacks and increased racial and ethnic segregation in the form ability grouping and special education instruction (MacMillan et al., 1988).

In 1968, Dunn (1968) called on researchers, educators, and special educators to take action in supporting all children for better education than special education placement. CLDS, students recovering from trauma, and students living in low socioeconomic households were especially at risk of inappropriate special education placement (Dunn, 1968). More than 60 years after *Hobson v. Hansen* (1967), where the recognition of overidentification of CLDS in special education was racially motivated, the Supreme Court and Congress continued to address the issue of racial and cultural overrepresentation in special education. In each of the amendments to IDEIA (2004), overrepresentation was addressed as a concern that needed to be remedied through actions of the state education agency and the local education agency (Yell & Yell, 2010). The court system recognized that the labeling and placement of students in special education classes could have a negative stigma. In some situations, where a student is inappropriately identified, "without a doubt" those students suffer long term, emotionally and academically (*PASE v. Hannon,* 1980).

Researchers and experts who represented children with dis/abilities through the decades in District Court, Appellate Court, and Supreme Court reported the inadequacies and discrepancies of services for CLDS who were inappropriately identified for special education services. Educators and researchers continued to see inadequacies with low-quality instruction and curriculum in services when compared to the grade level peers (Colker, 2013). Colker (2013) noted that despite safeguards put into place through IDEIA (2004), students continued to be disproportionately represented under specific identification classifications, yet local education agencies and state education agencies report a proportionate representation risk ratio due to overall special education placement reporting.

Chapter Summary

In this chapter, I identified the methodology of my literature review. Then I discussed the legal and historical aspects of race and dis/ability. I reviewed the key federal statutes in the United States with the federal and Supreme Court cases that had a direct impact or were directly impacted by the legislation. With each federal statute, I reviewed the meaning the legislation had to educational leaders and families of students with dis/abilities. Finally, based upon the review of legislation and case law, I identified the justification for the review and redefinition for overrepresentation of CLDS in special education.

What I learned from the literature was that there was a well-documented history in research, policy, and case law around the existence of overrepresentation of CLDS in special education, but not enough was known about how overrepresentation was defined.

While we know that policy and research recognized the existence of overrepresentation of CLDS in special education, less was known about how significant disproportionality was defined and calculated through federal, state, and local policy. Knowing more about the definitions of significant disproportionality and using odds ratio to develop the definition and threshold of significant disproportionality of CLDS in special education would be important because CLDS have been removed from their general education peers due to cultural bias, stereotypes, and culturally/linguistically inappropriate evaluations that have removed them from the general education environment, which I pursued in this study and discussed in Chapter 3.

Chapter Three: Methods

Introduction

In this chapter, I discuss the research design and procedures that I followed to answer my research questions that guided my critical policy analysis of whether varying odds ratios (OR) yielded different statistical trends in disproportionality in special education programming and categories. After a discussion of my procedures, I discuss limitations that readers should consider when interpreting the results from my study. Finally, I end with a discussion of the ethical considerations that I followed throughout the study and the connections I identified between my positionality and this study.

Research Questions and Rationale

Disproportionality in special education programming and categories was defined and measured by risk ratios through educational policy and by OR through educational research. In 1997, the reauthorization of the Individuals with Disabilities Education Act (IDEA) indicated Congress' recognition of the impact of significant disproportionality of culturally and linguistically diverse students (CLDS) in special education through legislation. The recommendation in IDEA (1997) was for state education agencies (SEAs) to monitor their local education agencies (LEAs) for significant disproportionality. The federal mandate for monitoring continued through the reauthorization of IDEA in 2004 with the Individuals with Disabilities Education

Improvement Act (IDEIA). IDEA (1997) and IDEIA (2004) provided full autonomy to SEAs to establish disproportionality definitions and appropriate thresholds for least restrictive environment (LRE) placements for their LEAs. SEA autonomy was reduced when Congress passed the amendment to IDEIA (2016) that included a mandate for a regulated calculation of risk ratios (i.e., OR) and alternate risk ratio for SEAs to define and measure disproportionality in special education. The amendment to IDEIA in 2016, provided SEAs with provisional guidelines for developing state definitions, calculations, inclusionary and exclusionary factors, enforcement criteria, and factors of flexibility. While this amendment did not change the requirement that SEAs monitor and report disproportionate representation in special education programming and categories by race and ethnicity, it did provide additional regulation for the minimum student LRE placement level that SEAs and LEAs needed to include in their calculations and definitions. The minimum reporting standards and most restrictive LRE placement included students in alternate school settings and students placed in the general education classroom settings less than 40% of the time. This mandate took effect after July 1, 2018 (IDEIA, 2016).

The amendment to IDEIA (2016) was significant because it extended federal power and oversight, narrowed the SEAs' ability to self-define the risk ratio, and increased accountability and consequences if any disproportionate overrepresentation of CLDS within special education environments and other restrictive/disciplinary placements were not reduced. SEAs, however, still had flexibility in deciding what counted as disproportionate overrepresentation. The factors of flexibility provided to

SEAs included analyzing and reporting more than the minimum requirement of the student LRE placement status, which was identified in each student's Individualized Education Plan (IEP) (IDEIA, 2016). While SEA OR calculations must include a minimum student LRE placement status of less than 40% in the general classroom environment and alternate school settings, SEAs could use stakeholder meetings to determine if student LRE placement status of 40% or higher should be included in their OR calculations and SEA definitions. This is because SEAs still have autonomy to determine what constitutes student LRE placement in their OR calculations (IDEIA, 2016). For example, SEAs could decide that LRE placement is defined and measured by: a) the percentage of students learning in an alternate school setting (which was the most restrictive); b) in general education classrooms less than 40% of the time; c) the percentage of students learning in general education classrooms 40%-79% of the time; or d) percentage of students learning in general education classrooms 80% or more of the time in their risk ratio calculations (IDEIA, 2016).

Colorado stakeholders and legislators adopted the minimum requirement for their OR calculations and significant disproportionality definition (see Appendix C). That is, the Colorado Department of Education (CDE) only included the percentage of students learning in the alternate school setting and in the general education classrooms less than 40% of the time (which were the most restrictive environments) in their OR definition and calculation. This left out all the students whose time learning in general education classrooms which varied between 40%-100%. This meant these students were subsequently left out of the calculation, data collection, and statistical representation of

Colorado's OR for identifying disproportionality by race and ethnicity (Colorado Department of Education, 2020). Leaving the CLDS representation in the 40% and higher LRE placement categories out of the calculation and definition resulted in an inaccurate picture of disproportionate representation of CLDS in special education to the community and reporting agencies. Worse, the unmonitored or underreporting of CLDS in special education resulted in inadequate resources available and a disproportionate number of students who received classroom instruction in a segregated environment. As noted in *Brown v. Board of Education* (1954, 1955), a separate educational environment is not equivalent to equitable instruction or exposure to standards. Therefore, how disproportionality in special education programming and categories by varying OR was monitored and reported warranted further investigation. My investigation was guided by the following two research questions:

1. What do the statistical trends reveal about the disproportionality of CLDS in special education in Colorado using an odds ratio that define a student's LRE status whose time learning in the general education classrooms is 40% or greater?
2. What is the difference in the disproportionality of CLDS in special education between an odds ratio that define a student's LRE status of 40% or greater compared to an odds ratio that define a student's LRE status of less than 40% in general education classrooms in each special education category in Colorado?

While the intent of a federally mandated implementation of OR was deeply connected to ensure a desegregated educational experience regardless of race, ethnicity, and linguistic development, Colorado implemented the most lenient definition of LRE placement that could perpetuate within-school segregation (see Appendix C). An investigation of the implications of this decision was well suited for a critical policy analysis.

Critical Policy Analysis

I applied Young and Diem's (2017) critical policy analysis as a framework to CDE's definition of significant disproportionality in special education as represented through state, district, and building-level data to explore whether not including the 40% or greater student LRE placement in the definition of disproportionality created "winners or losers" (Young & Diem, 2017, p. 4). Apple (2019) and Young and Diem (2017) identified critical educational policy analysis as the exploration and understanding of the complexities of social power and its relationships to policy development, educational policy, and practices as it was developed, received and interpreted, while continually employing critical movements to challenge dominant forms of authority, policy, and practices that generated and/or encouraged inequities in the educational system.

There were five critical themes explored by critical policy analysts. These were 1) exploring the differences between policy discourse and the policy that was practiced; 2) understanding the policy itself, the roots of the policy, and how it was developed over time; 3) understanding how the "distribution of power, resources, and knowledge" (Young & Diem, 2017, p.4) resulted in the creation of a policy for "winners and losers"

(p. 4); 4) exploring how the social structures and societal classifications had an effect on policy development in relation to inequity and privilege; and 5) understanding the nature of resistance of non-dominant groups to the engagement in policy and policy development (Young & Diem, 2017). In this study, I focused on the "distribution of power, resources, and knowledge" (p. 4) which resulted in the creation of a policy of "winners and losers" (p. 4). The power discrepancy between the people who identified as able-bodied and the students being identified with a dis/ability expanded to the overrepresentation of CLDS in the subjective categories of special education (i.e., developmental delay, intellectual dis/ability, multiple dis/abilities, specific learning dis/ability, etc.). The innate bias and subjectivity of the evaluation process led to the inappropriate identification of CLDS (Fergus, 2017). CLDS that were significantly disproportionately placed in special education were pulled out of the general education classroom and removed from their general education peers to receive a less challenging education, which placed them in a lower tier on the power structure after graduation (Fergus, 2017; Young & Diem, 2017).

A Critical Look at Constructed "Winners and Loser" Through Statistical Trends.

I used CPA as my framework and guide for my quantitative analysis. My focus for this analysis was to explore the difference between the OR calculation of CLDS in special education with the inclusion of the LRE status of 40% or greater compared to the CDE acceptance of the federal mandate of the minimum requirement of the student LRE placement status of less than 40% and alternate school setting. I achieved this aim by comparing statistical trends in special education programming and categories by race,

ethnicity, and linguistic development and how this varied by two risk ratio definition thresholds. Since data was publicly available for all Colorado schools, inferential statistics was not needed. I analyzed statistical trends of the population.

Odds Ratio (OR) Definition One

The first OR definition included the statistical trends in measuring the representation of CLDS in special education for students placed in special education within the minimum required student LRE status. CLDS placed in an alternate school setting (which was the most restrictive environment), including separate school placement, homebound/hospital placement, and residential treatment facilities, and students placed in the general education classroom less than 40% of the school day were included in the OR definition for the calculation to determine the level of representation of CLDS in special education and each special education category. The risk of each racial, ethnic, and linguistic groups in the minimum LRE settings were calculated to define and develop the OR of each racial, ethnic, and linguistic group in the minimum LRE settings. The first OR definition served as the descriptive OR used by CDE. This data provided information on the statistical trends of CLDS identified in special education who have been monitored and reported to CDE, the Office of Civil Rights (OCR), and the United States Office of Special Education Programming (OSEP).

Odds Ratio (OR) Definition Two

The second OR definition included the statistical trends in measuring the representation of CLDS in special education for students placed in the general education classroom learning environment beyond the minimum flexibility requirement, set by the

guidelines within IDEIA (2016). CLDS identified in special education with an LRE placement of 40% and greater was included in the second OR definition and calculation to determine the level of representation of CLDS in special education and each special education category. The risk of each racial, ethnic, and linguistic group in the student LRE settings of 40% and greater was calculated to define and develop the OR of each racial, ethnic, and linguistic group in these LRE settings. The second OR definition was used as the descriptive OR of students who have been unmonitored and unreported by CDE. The data calculated from the second definition provided information on the statistical trends of CLDS identified in special education whose potential representation was not included in the reports to CDE, OCR, and OSEP.

Interpreting Odds Ratios (ORs)

An OR of 1.0 of any racial, ethnic, or linguistic group indicated there was a 1:1 proportionality (Bollmer et al., 2007; CDE, 2020; IDEIA, 2016). Student groups with an OR of 1.0 are in no greater risk of disproportionate over- or under-representation. Student groups with an OR that were greater than 1.0 were at risk of being disproportionate through overrepresentation (Bollmer et al., 2007; CDE, 2020; IDEIA, 2016). These student groups were at a greater risk of segregation in the public school setting (Bollmer et al., 2007). Student groups with an OR that were less than 1.0 were at risk of being disproportionate through underrepresentation (Bollmer et al., 2007; CDE, 2020). Students who were underrepresented were at a greater risk of inadequate education and supports in the public setting (Bollmer et al., 2007). According to the state guidance in the amendment to IDEIA (2016), SEAs should use state level data and

stakeholder meetings to determine the OR that defined significant disproportionality in special education (CDE, 2020).

Differences Between Odds Ratio (OR) Definitions

Based upon the results of this analysis, I shared implications of risk ratio definitions and thresholds through a policy brief that will be informative to state legislators and district administrators looking to assist the building-level leaders and educators in the reduction of the disproportionate representation of CLDS across all special education categories, thereby increasing students' exposure to their general education peers, as was intended by the spirit of the law, set by IDEA (1997), IDEIA (2004) and the subsequent amendments. Most students placed in special education programming were placed with a student LRE status of 40% and greater (CDE, 2020). Less than 10% of the special education population was placed in the student LRE status of less than 40% and alternate school setting (which was the most restrictive environment). OR Definition One implemented the minimum allowable inclusive learning environments in the OR definitions and thresholds for the SEAs to adopt. OR Definition Two included the majority of students placed in special education programming. This analysis explored the statistical trends between the disproportionate representation of CLDS in the special education categories and the relationship between the representation of CLDS in special education based on how the OR was defined and measured.

Data Analysis

The level of risk for each racial, ethnic, or linguistic (CLD) group was measured. To measure the level of risk, the number of students in CLD group identified with a dis/ability was divided by the total number of students in the CLD group enrolled. The level of risk was used to identify the OR for each CLD group under each special education category. The risk for the comparison group was calculated by adding all students reported under every other CLD group with a dis/ability, excluding the CLD group being measured, then dividing all students reported under every other CLD group who were enrolled in the LEA or SEA, excluding the total number of students in the CLD group being measured. To determine the OR, the risk of the CLD group being measured was divided by the risk of the comparison group.

Figure 3.1: ***Risk of CLD Group Being Measured***

$$Risk = \frac{n\ of\ students\ in\ the\ CLD\ group\ identified\ with\ a\ disability}{N\ of\ students\ in\ the\ CLD\ group\ enrolled}$$

Source: Adapted from Bollimer et al., 2007; Colorado Department of Education, 2020.

Figure 3.2: ***Risk of Comparison Group***

Let Group A = the CLD group being measured

$$Risk\ of\ Comparison\ Group$$

$$= \frac{n\ of\ (Group\ A + Group\ B + Group\ C - Group\ A)\ total\ identified\ with\ a\ disability}{N\ of\ (Group\ A + Group\ B + Group\ C - Group\ A)\ total\ enrolled}$$

Source: Adapted from Bollimer et al., 2007; Colorado Department of Education, 2020.

Figure 3.3: ***Odds Ratio***

$$OR = \frac{Risk\ of\ CLD\ group\ being\ measured}{Risk\ of\ comparison\ group}$$

Source: Adapted from Bollimer et al., 2007; CDE, 2020.

To reduce inaccuracies through false positives or false negatives for possible overrepresentation in accordance with IDEIA (2016) SEAs were required to adopt the alternate risk ratio. In cases where the CLD group that was being measured had an $n<10$, the *n* size was too small to calculate an OR without obtaining a false positive, therefore Colorado could not calculate an OR for that group. In cases where the comparison group had an $n<30$, the alternate risk ratio was used to reduce inaccuracies. Instead of using the risk of the comparison group within the school district, the state level risk of the comparison group could be used to reduce the likelihood of false positives or false negatives (Colorado Department of Education, 2020; IDEIA, 2016). Due to state student privacy protection laws, Children's Online Privacy Protection Act (COPPA, 1998), student data with an $n<16$ would not be released to the public or researchers for fear of releasing too much information about individual students (Colorado Department of Education, 2021). Comparison groups used in this study did not have an $n<30$. As a result, the alternate risk ratio was not applicable to this study.

Any administrative unit (AU) that met CDE's definition of significantly disproportionate was mandated to make adequate progress of growth towards meeting CDE's threshold definition (see Appendix C), as determined by the SEA across two years (Colorado Department of Education, 2020). If an AU failed to meet CDE's definition threshold after three years or failed to make adequate progress across two years (See

Appendix C), the AU was required to allocate 15% of their special education funds to early intervention and prevention of disproportionate overrepresentation in the specified special education category (Colorado Department of Education, 2020; IDEIA, 2016).

I reviewed the disproportionate representation policy in special education and within each special education category in the state of Colorado. I analyzed the definition of overrepresentation for disproportionality in special education through CDE's OR definition and the protections identified for CLDS populations in all LRE placement categories in Colorado in the 2019-2020 school year. I reviewed the policies developed to protect students identified in special education in Colorado.

I analyzed the SEA policies for the AUs in reducing disproportionate representation in special education in accordance with IDEIA (2004) and the amendment of IDEIA (2016) in the 2019-2020 school year. I compared mandates in the federal policies to the mandates in the SEA regulations then followed it with the LEA interpretations for reducing disproportionate overrepresentation of CLDS in special education. I reviewed the LRE flexibility option CDE selected and analyzed the impact this had on the OR definition and threshold levels for the different LRE placement levels for each CLD group in each special education category.

The data collected in this quantitative critical educational policy analysis identified if any group benefited from the policies adopted from flexibilities embedded within the IDEIA (2016) significant disproportionality state guidance. Although flexibilities in federal and state policies were developed to ensure that all groups and subgroups benefitted and majority or minority groups would not emerge as a "winner" or

"loser," this quantitative policy analysis explored the efficacy of LRE flexibility in the state of Colorado.

Data Collection

By using publicly available data on CLDS in special education in Colorado, I analyzed the statistical trends in representation for each special education category between OR Definition One and OR Definition Two. Data were collected at the state level for each AU that provided special education support and received federal and state funding for special education and related services.

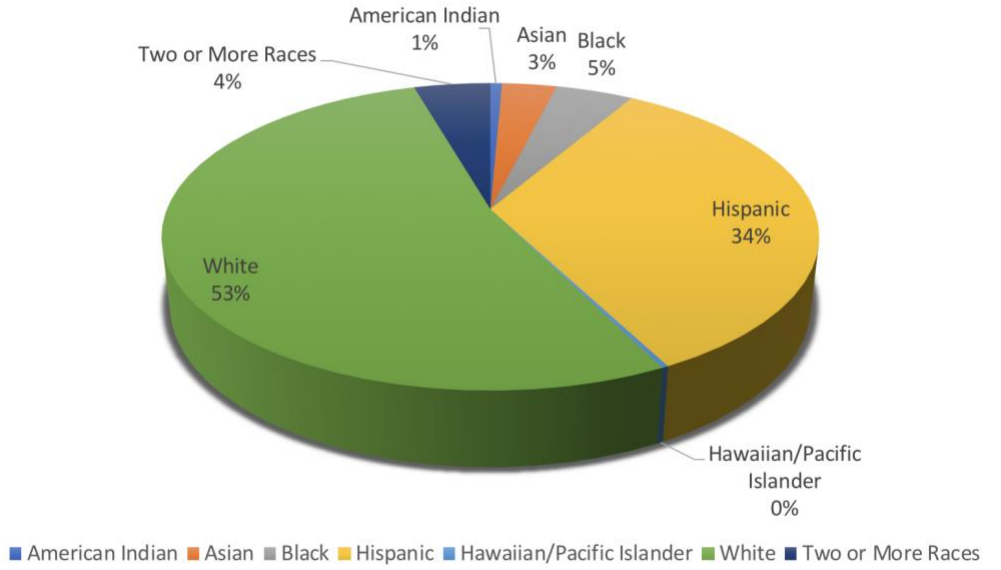
Population Data

In this study, the population was defined as the total population of students who attended public schools who received special education services in the state of Colorado, including various stages of restrictive environments in the state of Colorado during the 2019-2020 school year. The recorded student population for students enrolled in public schools for the 2019-2020 school year in the state of Colorado was 913,223 for students in grades kindergarten through 12 (Colorado Department of Education, 2020). I analyzed the total number of students identified in special education in the state of Colorado. I disaggregated the proportion of students by identification category, least restrictive environment, racial identification, and English learner (EL) status, including students identified as non-English proficient (NEP) and limited English proficient (LEP).

In the 2019–2020 school year, 106,238 students were identified with a dis/ability and placed on or remained on an IEP (Colorado Department of Education, 2020). Out of the total population of students, 6,210 students identified as American Indian, 29,209

identified as Asian/Asian American, 41,554 identified as Black, 309,972 identified as Hispanic, 2,433 identified as Hawaiian/Pacific Islander, 483,051 identified as White, and 40,794 identified as Two or More Races (Colorado Department of Education, 2020).

Figure 3.4: *Colorado Student Demographic* Population



Source: Colorado Department of Education, 2020.

The 2016 amendment to the Individuals with Disabilities Improvement Act (IDEIA), CDE mandated a federal standardized calculation for risk ratio, and alternate risk ratio to determine each SEA's and AU's risk of significant disproportionality over a two-to-three-year period of monitoring (Colorado Department of Education, 2020). CDE's definition (see Appendix C) complied with the minimal regulation within IDEIA (2004, 2016) and met minimum requirement for monitoring AUs for significant disproportionality and enforcement of the 15% allocation of special education funds if the AU failed to meet the SEA's definition of reasonable progress toward reducing

disproportionate representation in special education and across special education categories (IDEIA, 2016).

In this analysis, I focused on the quantitative data collection that has already been collected within the state of Colorado, including school districts and AUs in the Rocky Mountain West. The SEA and other data collection entities retrieved LRE data through data-pulls. For this analysis, I collected publicly available data that was not at the individual level. The data collected was data made publicly available by CDE, OCR, the Unites States Department of Education, and other public data collecting entities, and have been disaggregated through group levels. No interactions with individuals, institutions, or companies occurred to obtain documentation for this analysis. No personal information or personal identifiable information was collected. There was no need to make direct or indirect contact with individuals to obtain information for this analysis.

Research Question One

To address the first research question: What do the statistical trends reveal about the disproportionality of CLDS in special education in Colorado using an odds ratio that define a student's LRE status whose time learning in general education classrooms is greater than 40%? I explored the implications of the statistical trends within the calculations of the OR of CLDS in special education as it informed relationships of proportionality of racial, ethnic, and linguist factors with student LRE placement in special education for the OR definitions. The number of students who were placed in special education in the state of Colorado was collected from CDE, COPAA, and the OCR. The total number of students placed in special education who attended public

school in Colorado in the 2019-2020 school year that was disaggregated into special education identification, special education category, racial/ethnic identification, and EL identification (NEP and LEP placement) was identified as the dependent variable. I explored the effect of LRE placement status on OR as it related to the definition and representation within significant disproportionality. The student LRE placement status was the independent variable with two levels: 1) alternate school setting and less than 40% placement in the general education classroom environment; and 2) 40% to 79% placement in the general classroom environment and more than 80% placement in the general education classroom environment.

Research Question Two

To address the second research question: What is the difference in the disproportionality of CLDS in special education between a odds ratio that define a student's LRE status of 40% or greater compared to a odds ratio that define a student's LRE status of less than 40% in general education classrooms in each special education category in Colorado? The total number of students placed in special education who attended public school in Colorado in the 2019-2020 school year was disaggregated into special education identification, special education category, racial/ethnic identification, and EL identification (NEP and LEP placement) was identified as the dependent variable. I explored the implications of the statistical trends of the student LRE placement status on OR as it related to the definition and identification significant disproportionality across the subjective special education dis/ability category as identified by IEP teams in grades kindergarten through 12: 1) Autism Spectrum Disorder; 2) Developmental Delay; 3)

Intellectual Dis/ability; 4) Multiple Dis/abilities; 5) Other Health Impaired (OHI); 6) Serious Emotional Dis/ability (SED); 7) Specific Learning Dis/ability (SLD); and 8) Speech or Language Impairment. The student LRE placement status was the independent variable with two levels: 1) alternate school setting and less than 40% placement in the general education classroom environment; and 2) 40% to 79% placement in the general classroom environment and more than 80% placement in the general education classroom environment.

Ethical Considerations

Historically, CLDS have been identified with a dis/ability through culturally and linguistically biased assessments and identification practices (Annamma et al., 2018; *Diana v. Board of Education*, 1970; Dunn, 1968; Fergus, 2017; *Hobson v. Hansen*, 1967). In our most recent political era where racial divisiveness was encouraged through our national leadership, I was concerned and aware of the political and cultural implications of this policy analysis. The purpose of this analysis was to analyze the SEA policy in place, analyze the LEA policy interpretations of the SEA recommendations, and identify the consequences (intended or unintended) of the policy on the population of students it was intended to affect.

As an employee of the Colorado Department of Education, I was aware of the ethical considerations of restricted access to state and district data. All information used was free of personally identifiable information (PII) and followed compliance practices of the COPPA. I ensured that the data and/or documents used in this policy analysis was

publicly available or accessible through the Colorado Open Records Act (CORA), therefore available to any individual for free and available access.

Summary of Research Procedures

CLDS students who were identified with a dis/ability have a history of disproportionate representation and an increased likelihood of removal from their general education peers or lack of representation in the general education environment; thus, their exposure to general education standards was inequitable or the resources available did not meet their unique needs and they receive a less rigorous education along with a reduced exposure to their peers who would help them achieve the level of success they needed to close the gap between where they were and the trajectory of their White middle class peers. (Ahram et al., 2011; Annamma et al., 2013; Bario 2017; Blanchett 2006; Connor et al. 2019; Fergus, 2017; Grindal et al., 2019). IDEIA (2004, 2016) addressed the disproportionate overrepresentation of CLDS in special education and special education categories. The amendment to IDEIA (2016) addressed remedies to overrepresentation for SEAs to address to their AUs.

Colorado's adoption of measuring and reporting only the students placed in the LRE categories of less than 40% and alternate school settings left out a sizable portion of CLDS that could be receiving an education in an inequitable environment. The OR calculations left this area of research for students in the LRE placement categories of 40% or greater unexplored for the students in Colorado. In this critical policy analysis, I explored the trends in disproportionality reporting by OR definitions (if the student LRE placement were to include 40% or greater placement levels within the general classroom

environment). I explored the distribution of power in the public education system as it applied to policy development and the intended support for CLDS identified in special education. I explored the development and implementation of policy as "winners and losers" as students were removed from the general education environment without being monitored through possible overrepresentation in the OR Definition Two. I explored the implications of excluding the student LRE placement of 40% and greater in the general education environment for CLDS identified in special education who were not included in the OR calculations for each special education category. This analysis supported the development of a policy brief to address disproportionate representation in special education and special education categories in urban and non-urban schools in the state of Colorado addressing student LRE placement in the general education environment.

Chapter Summary

In this chapter, I identified my research questions with a rationale through the lens of Colorado policy. I introduced critical educational policy analysis and took a critical look at the "winners" and "losers" that resulted from the Colorado policy that selected the minimum requirement for student LRE placement in the risk ratio definition. Then I proposed my methods for data collection and analysis. Next, I explored possible ethical considerations. Finally, I provided a summary of my research procedures.

CDE was a local control state, where the AUs had the authority and discretion to make local decisions and local policy under the guidance of the SEA. The SEA offered policy and guidance through interpretation of federal and state legislation where flexibility was allowed (IDEAI, 2016). Although AUs developed local policy based upon

state policy, the identification, overrepresentation, and/or under-identification of CLDS was dependent upon building level assessment, evaluation, and body of evidence. Because special education identification began at the building level, student LRE placement was analyzed at the state level to determine the root cause of disproportionate representation of CLDS in special education and in each special education category in the AU and the SEA.

Congress and the U.S. Department of Education provided guidance with a minimum set of standards for defining significant disproportionality as state stakeholders and policymakers determined the best practices for their LEAs (Colorado Department of Education, 2020; IDEIA, 2016). Through the lens of critical policy analysis, I explored the "distribution of power, resources, and knowledge as well as the creation of policy" as it affected and enhanced this distribution to the "winners and losers" (Young & Diem, 2017, p. 4). As CLDS identified in special education continued to remain unmonitored in the student LRE placement status of 40% and greater, I explored the distribution of "winners and losers" (Young & Diem, 2017, p. 4) as the special education environment became the proverbial "dumping ground" (Fowler, 2013, p. 228) for students who did not fit in with the White middle class narrative (Ahram et al., 2011; Annamma et al., 2018; Fergus, 2017; Leonardo & Broderick, 2011).

The CLDS, who have been disproportionately overrepresented in special education, were deprived of an equitable educational experience and the ability to gain power in the mainstream community. These students have been identified as "other" and provided with a less than adequate education. The proportion of CLDS in special

education that were unaccounted for would be lost in the system. As they grew into adulthood, the CLDS identified in special education would lose the power struggle to attain and maintain careers and financial security that their general education peers would have equitable access to (Annamma et al., 2013; Fergus, 2017; Young & Diem, 2017). The CLDS population that was overrepresented and disproportionately identified in special education, yet unrecognized, would lose out in their access to educational curriculum and social interactions they could receive as they integrated with their general education peers.

Chapter Four: Findings

In this chapter, I present the findings of this study. The purpose of my research was to examine the statistical trends in the representation of culturally and linguistically diverse students (CLDS) in special education across instructional environments. I wanted to compare the statistical trends in the disproportionality of all student racial/ethnic and linguistic groups based on two different definitions. The first definition of disproportionality, which Colorado's legislature adopted, used the calculation of students in the alternate school setting and the least restrictive environment (LRE) of less than 40% of the time. The second definition of disproportionality was the percentage of students in the LRE more than 40% of the time. I wanted to examine the extent to which the statistical trends indicated the creation of "winners" and "losers" based on the definition of Colorado's odds ratio for disproportionality of CLDS.

I used the odds ratios (OR) and Risk Difference to investigate the trends for student placement in each special education category based upon the students' racial/ethnic group and/or linguistic status. My findings were based on the OR formula as defined by the amendment to the Individuals with Disabilities Education Improvement Act (IDEIA, 2004, 2016) and the Risk Difference between the OR Definition One and the OR Definition Two. The LRE Definition One encompassed the students placed with their general education peers less than 40% of the day or in an alternate school setting.

The LRE Definition Two included students placed with their general education peers 40% of the day or greater. The results indicated that certain racial/ethnic groups are more likely to demonstrate a higher odds ratio in OR Definition Two than OR Definition One. First, I reviewed the descriptive parameters within this study. After presenting the descriptive statistics, I presented the OR and Risk Difference findings by each research question. Finally, I identified the limitations of the findings.

Descriptive Statistics

In this section, I identify the prevalence of students with a dis/ability in the state of Colorado. I compare the incidence of students identified with a dis/ability to race/ethnicity. I identify the occurrence of race/ethnicity within each dis/ability category. I compared the incidence of English learners identified with a dis/ability. Finally, I identify the occurrence of English learners within each dis/ability category.

Categories Requiring Medical Diagnosis

In the 2019–2020 school year, there were 913,223 students enrolled in Colorado public schools. Ninety-four thousand two hundred forty-seven students were identified with a dis/ability that was determined by the individualized education plan (IEP) team. These students' IEPs outlined intensive academic interventions that, when performed with fidelity, contributed to students receiving equitable access to the educational system through the general education curriculum. In the state of Colorado, there were 13 categories in which a student could be identified with a dis/ability in grades kindergarten through 12. Five out of the thirteen categories required a medical diagnosis and objective

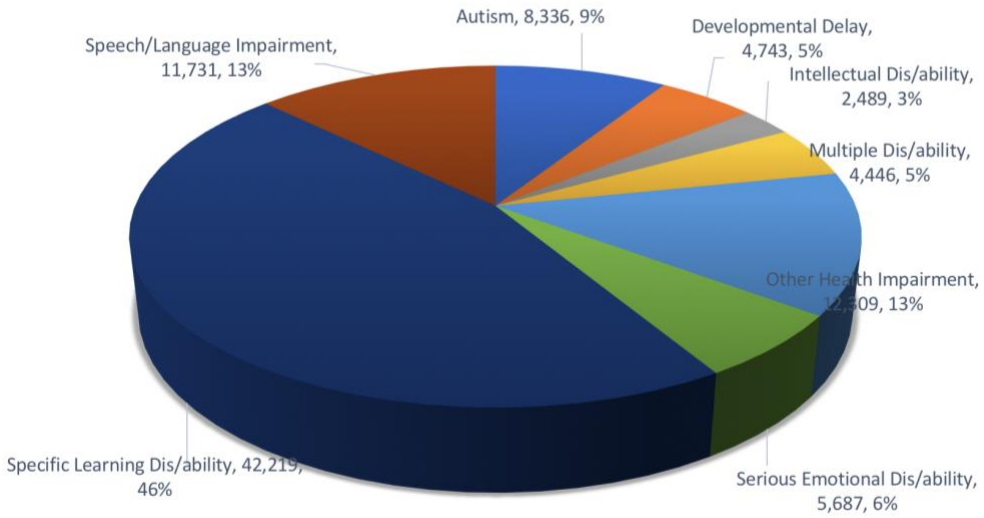
testing to qualify for an IEP under Colorado and federal law (Exceptional Children's Education Act (ECEA), 2016; IDEIA, 2004). These categories were: 1) Deaf-Blind; 2) Hearing Impairment; 3) Orthopedic Impairment; 4) Traumatic Brain Injury; and 5) Visual Impairment. The medical nature and the objective identification process for these five dis/ability categories yielded a low *n* count and high incidence of suppressed data. I determined that due to the medical nature of these dis/ability categories, excluding these categories from my findings would not disrupt the integrity of my findings and subsequent interpretations.

Categories Requiring Subjective Evaluations

Out of the 188 school districts in Colorado, 112 administrative units (AUs) were responsible for providing special education supports and monitoring and reporting special education and demographic data (Colorado Department of Education (CDE), 2018). Thirteen dis/ability categories were monitored and reported to the Office of Civil Rights (OCR) and the United States Office of Special Education Programs (OCEP) for students attending Kindergarten through 12th grades. Eight out of the 13 categories required subjective special education evaluations as part of the referral and identification process (Colorado Department of Education, 2016). Eight dis/ability categories were analyzed across 112 AUs. The categories investigated were: 1) Autism; 2) Developmental Delay; 3) Intellectual Dis/ability; 4) Multiple Dis/abilities; 5) Other Health Impairment; 6) Serious Emotional Dis/ability; 7) Specific Learning Dis/ability; and 8) Speech/Language Impairment. Out of the 94,247 total population of students identified for special

education services in Colorado, 8,336 were identified under Autism, 4,713 were identified under Developmental Delay, 2,489 were identified with an Intellectual Dis/ability, 4,446 were identified with Multiple Dis/abilities, 12,309 were identified under Other Health Impairment, 5,687 were identified with a Serious Emotional Dis/ability, 42,219 were identified with a Specific Learning Dis/ability, and 11,731 were identified with a Speech/Language Impairment (see Figure 4.1; Colorado Department of Education, 2020).

Figure 4.1: ***2019–2020 Special Education Member Count***



Source: Colorado Department of Education (2020).

Representation of Asian/Asian American Students by Special Education Category

I identified the prevalence of students identified with a dis/ability in each special education category within each race/ethnic group reported by the 112 AUs in the state of

Colorado. Out of the 1,610 students reported as Asian/Asian American, 28.63% of the students were identified under Specific Learning Dis/ability.

Out of the 1,610 students reported as Asian/Asian American, 15.16% of the students were identified under Autism, 5.71% of the students were identified under Developmental Delay, 3.79% of the students were identified under Intellectual Dis/ability, 8.89% of the students were identified under Multiple Dis/ability, 9.13% of the students were identified under Other Health Impairment, 2.36% of the students were identified under Serious Emotional Dis/ability, 28.63% of the students were identified under Specific Learning Dis/ability, and 17.45% of the students were identified under Speech/Language Impairment (see Figure 4.2; Colorado Department of Education, 2021). Students reported as Asian/Asian American had the greatest representation in the special education category of Specific Learning Dis/ability. These students had the least representation in the special education category of Serious Emotional Dis/ability.

Representation of Black/African American Students by Special Education Category

Out of the 5,340 students reported as Black/African American, 6.76% of the students were identified under Autism, 4.79% of the students were identified under Developmental Delay, 4.51% of the students were identified under Intellectual Dis/ability, 5.51% of the students were identified under Multiple Dis/abilities, 13.31% of the students were identified under Other Health Impairment, 7.70% of the students were identified under Serious Emotional Dis/ability, 46.40% of the students were identified under Specific Learning Dis/ability, and 8.63% of the students were identified under

Speech/Language Impairment (see Figure 4.2; Colorado Department of Education, 2021). Students reported as Black/African American had the greatest representation in the special education category of Specific Learning Dis/ability. These students had the least representation in the special education category of Intellectual Dis/ability.

Representation of Hispanic/Latinx Students by Special Education Category

Out of the 36,069 students reported as Hispanic/Latinx, 5.98% of the students were identified under Autism, 5.33% of the students were identified under Developmental Delay, 3.07% of the students were identified under Intellectual Dis/ability, 4.47% of the students were identified under Multiple Dis/abilities, 9.19% of the students were identified under Other Health Impairment, 5.12% of the students were identified under Serious Emotional Dis/ability, 63.88% of the students were identified under Specific Learning Dis/ability, and 13.66% of the students were identified under Speech/Language Impairment (see Figure 4.2; Colorado Department of Education, 2021). Students reported as Hispanic/Latinx had the greatest representation in the special education category of Specific Learning Dis/ability. These students had the least representation in the special education category of Intellectual Dis/ability.

Representation of Native American/Alaskan Native by Special Education Category

Out of the 962 students reported as Native American/Alaskan Native, 6.13% of the students were identified under Autism, 6.55% of the students were identified under Developmental Delay, 1.77% of the students were identified under Intellectual Dis/ability, 4.57% of the students were identified under Multiple Dis/abilities, 11.12% of

the students were identified under Other Health Impairment, 4.16% of the students were identified under Serious Emotional Dis/ability, 50.42% of the students were identified under Specific Learning Dis/ability, and 10.50% of the students were identified under Speech/Language Impairment (see Figure 4.2; Colorado Department of Education, 2021). Students reported as Native American/Alaskan Native had the greatest representation in the special education category of Specific Learning Dis/ability. These students had the least representation in the special education category of Intellectual Dis/ability.

Representation of Pacific Islander/Hawaiian Native by Special Education Category

Out of the 165 students reported as Pacific Islander/Hawaiian Native, 32.12% of the students were identified under Autism, 16.97% of the students were identified under Developmental Delay, 9.70% of the students were identified under Intellectual Dis/ability, 6.06% of the students were identified under Multiple Dis/abilities, 16.36% of the students were identified under Other Health Impairment, 12.73% of the students were identified under Serious Emotional Dis/ability, 43.64% of the students were identified under Specific Learning Dis/ability, and 13.33% of the students were identified under Speech/Language Impairment (see Figure 4.2; Colorado Department of Education, 2021). Students reported as Pacific Islander/Hawaiian Native had the greatest representation in the special education category of Specific Learning Dis/ability. These students had the least representation in the special education category of Multiple Dis/abilities.

Representation of Students with Two or More Races by Special Education Category

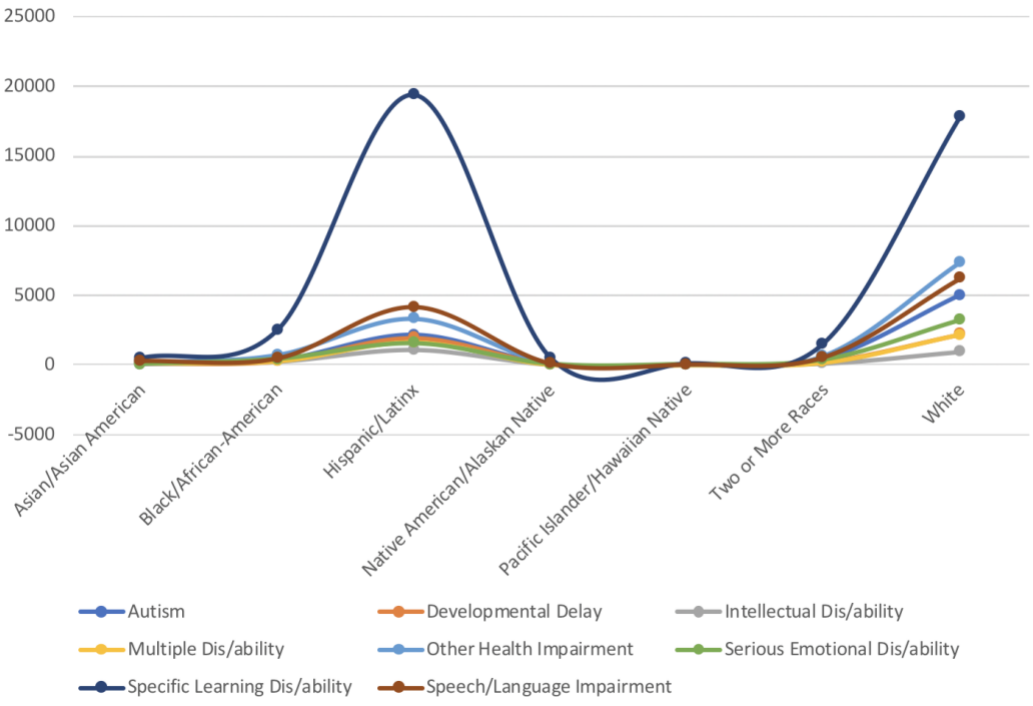
Out of the 4106 students reported as two or more races, 11.25% of the students were identified under Autism, 5.21% of the students were identified under Developmental Delay, 2.22% of the students were identified under Intellectual Dis/ability, 4.55% of the students were identified under Multiple Dis/abilities, 15.68% of the students were identified under Other Health Impairment, 8.56% of the students were identified under Serious Emotional Dis/ability, 36.95% of the students were identified under Specific Learning Dis/ability, and 13.13% of the students were identified under Speech/Language Impairment (see Figure 4.2; Colorado Department of Education, 2021). Students reported as Two or More Races had the greatest representation in the special education category of Specific Learning Dis/ability. These students had the least representation in the special education category of Intellectual Dis/ability.

Representation of White Students by Special Education Category

Out of the 45995 students reported as White, 10.87% of the students were identified under Autism, 4.72% of the students were identified under Developmental Delay, 2.07% of the students were identified under Intellectual Dis/ability, 4.69% of the students were identified under Multiple Dis/abilities, 16.00% of the students were identified under Other Health Impairment, 7.11% of the students were identified under Serious Emotional Dis/ability, 38.72% of the students were identified under Specific Learning Dis/ability, and 13.43% of the students were identified under Speech/Language Impairment (see Figure 4.2; Colorado Department of Education, 2021). Students reported

as White had the greatest representation in the special education category of Specific Learning Dis/ability. These students had the least representation in the special education category of Intellectual Dis/ability.

Figure 4.2: ***Dis/ability Ratio for Each Race/Ethnicity Group***



Source: Colorado Department of Education (2021).

Special Education Categories Requiring a Subjective Evaluation

Autism. Students identified with a dis/ability under Autism met the criteria of Autism Spectrum Disorder (ASD), which significantly affected the child's social communication, social interactions, verbal and non-verbal communications and interactions, and emotional exchanges and had a significant educational impact (Colorado Department of Education, 2020). Out of the 8,336 students identified under the Autism

category, 244 students were classified as Asian/Asian American, 361 students were classified as Black/African American, 2,157 students were classified as Hispanic/Latinx, 59 students were classified as Native American/Alaskan Native, 53 students were classified as Pacific Islander/Hawaiian Native, 91 students were classified as two or more races, and 5,000 students were classified as White (see Figure 4.3; Colorado Department of Education, 2021).

Developmental Delay. Students identified with Developmental Delay were within the ages of three through eight years of age and had been determined to have a significant developmental delay through one or more of the following criteria: 1) cognitive; 2) physical; 3) communication; 4) social or emotional; or 5) adaptive. It was determined that the impact of their Developmental Delay prevented the student from receiving a reasonable educational benefit from general education alone. Out of the 4,743 students identified under the Developmental Delay category, 92 students were classified as Asian/Asian American, 256 students were classified as Black/African American, 1,921 students were classified as Hispanic/Latinx, 63 students were classified as Native American/Alaskan Native, 28 students were classified as Pacific Islander/Hawaiian Native, 214 students were classified as two or more races, and 2,169 students were classified as White (see Figure 4.3; Colorado Department of Education, 2021).

Intellectual Dis/ability. Students identified with an Intellectual Dis/ability have been determined to have a significantly reduced intellectual functioning that existed

concurrently with adaptive behavior and cognitive functioning that manifested during the child's developmental period. It was determined that the impact of this dis/ability prevented the student from receiving a reasonable education benefit from general education alone (Colorado Department of Education, 2020). Out of the 2,498 students identified under Intellectual Dis/ability, 61 students were classified as Asian/Asian American, 241 students classified as Black/African American, 1,109 students classified as Hispanic/Latinx, 17 students were classified as Native American/Alaskan Native, 16 students were classified as Pacific Islander/Hawaiian Native, 91 students were classified as two or more races, and 954 students were classified as White (see Figure 4.3; Colorado Department of Education, 2021).

Multiple Dis/abilities. Students identified with Multiple Dis/abilities were determined to have been identified with an Intellectual Dis/ability and one or more of the following dis/abilities: 1) Autism Spectrum Disorder; 2) Deaf-Blindness; 3) Hearing Impairment, including Deafness; 4) Orthopedic Impairment; 5) Other Health Impairment; 6) Serious Emotional Dis/ability; 7) Specific Learning Dis/ability; 8) Speech/Language Impairment; 9) Traumatic Brain Injury; or 10) Visual Impairment, including Blindness. Out of the 4,446 students identified under Multiple Dis/abilities, 143 students were classified as Asian/Asian American, 294 were classified under Black/African American, 1,613 were classified as Hispanic/Latinx, 44 students were classified as Native American/Alaskan Native, 10 students were classified as Pacific Islander/Hawaiian

Native, 187 students were classified as two or more races, and 2,155 students were classified as White (see Figure 4.3; Colorado Department of Education, 2021).

Other Health Impairment. Students identified with Other Health Impairment have been determined to have:

> limited strength, vitality, or alertness, including heightened alertness to environmental stimuli that results in limited alertness with respect to the educational environment due to a chronic or acute health problem, including but not limited to asthma, attention deficit disorder, or attention deficit hyperactivity disorder, diabetes, epilepsy, a heart condition, hemophilia, leukemia, kidney disease, sickle cell anemia, or Tourette syndrome [which prevented the student from receiving a reasonable educational benefit from general education alone]. (Colorado Department of Education, 2020)

Out of the 12,309 students identified under Other Health Impairment, 147 students were classified as Asian/Asian American, 711 students were classified as Black/African American, 3,313 students were classified as Hispanic/Latinx, 107 students were classified as Native American/Alaskan Native, 27 students were classified as Pacific Islander/Hawaiian Native, 644 were classified as two or more races, and 7,360 students were classified as White (see Figure 4.3; Colorado Department of Education, 2021).

Serious Emotional Dis/ability. Students identified with a Serious Emotional Dis/ability have been determined to have a significant emotional or social dis/ability that prevented the child from receiving a reasonable educational benefit from general education alone (Colorado Department of Education, 2020). Out of the 5,687 students identified under Serious Emotional Dis/ability, 38 students were classified as Asian/Asian American, 411 students were classified as Black/African American, 1,555 students were classified as Hispanic/Latinx, 40 students were classified as Native

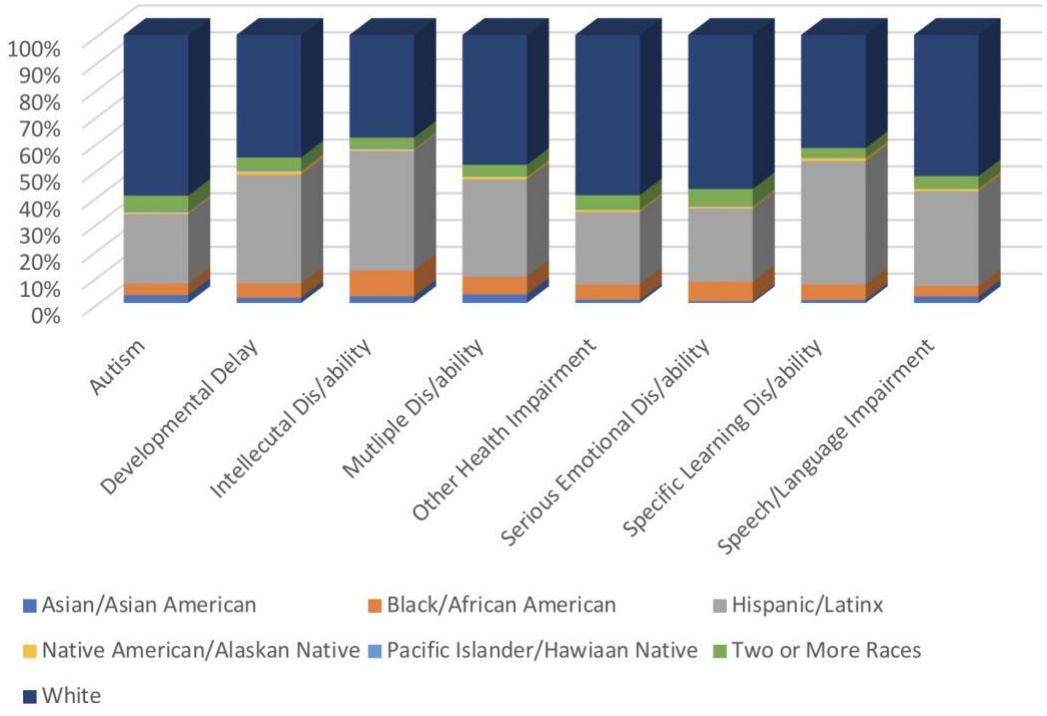
American/Alaskan Native, 21 students were classified as Pacific Islander/Hawaiian Native, 353 students were classified as two or more races, and 3,269 students were classified as White (see Figure 4.3; Colorado Department of Education, 2021).

Specific Learning Dis/ability. Students identified with a Specific Learning Dis/ability have been determined to have an educational learning disorder in which one or more of the psychological process (i.e. understanding or using language) impacted one or more of the eight academic domains of learning; 1) basic reading skills; 2) listening comprehension; 3) mathematical calculation; 4) mathematical problem solving; 5) oral expression; 6) reading comprehension; 7) reading fluency skills; or 8) written expression that prevented the child from receiving a reasonable educational benefit from general education alone (Colorado Department of Education, 2020). Out of the 42,219 students identified under Specific Learning Dis/ability, 461 students were classified as Asian/Asian American, 2,478 students were classified as Black/African American, 19,399 students were classified as Hispanic/Latinx, 485 students were classified as Native American/Alaskan Native, 72 students were classified as Pacific Islander/Hawaiian Native, 1,517 students were classified as two or more races, and 17,807 were classified as White (see Figure 4.3; Colorado Department of Education, 2021).

Speech/Language Impairment. A student identified with Speech/Language Impairment has been determined to have a significant communication disorder in one or more of the following areas: 1) articulation (i.e., phonology, morphology, syntax); 2)

semantics; or 3) pragmatics (i.e. the function of language in communication) which prevented the child from receiving a reasonable educational benefit from general education alone (Colorado Department of Education, 2020). Out of the 11,731 students identified under Speech/Language Impairment, 281 students were classified as Asian/Asian American, 461 students were classified as Black/African American, 4,148 students were classified as Hispanic/Latinx, 101 students were classified as Native American/Alaskan Native, 22 students were classified as Pacific Islander/Hawaiian Native, 539 students were classified as two or more races, and 6,177 students were classified as White (see Figure 4.3; Colorado Department of Education, 2021).

Figure 4.3: ***Race/Ethnicity Within Each Dis/ability Category***

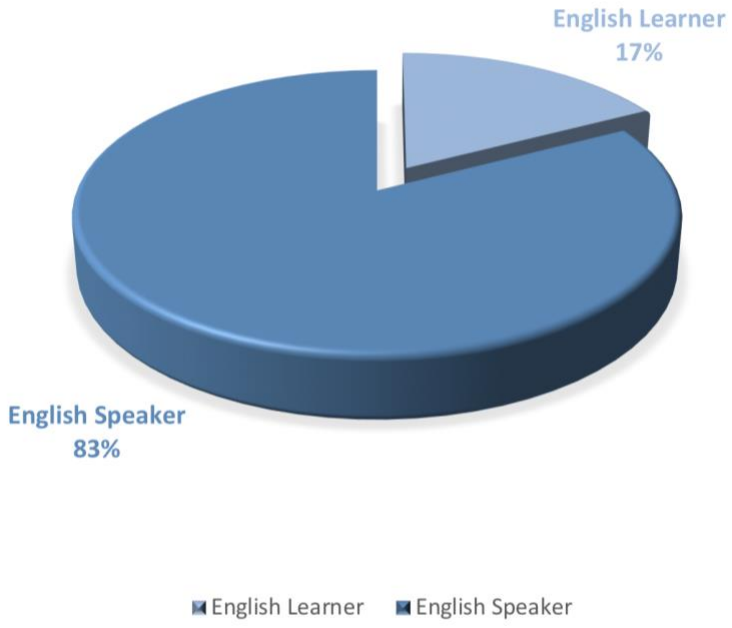


Source: Colorado Department of Education (2021).

English Learner with Dis/ability

A student identified as an English learner was a student who had been identified as benefitting from English language development services (Colorado Department of Education, 2020). I identified the prevalence of English learners who were identified with a dis/ability in the 112 reporting AUs in the state of Colorado. In 2019-2020 there were 16,311 students identified as English learners, who were also identified as students with a dis/ability significant enough to be placed on an IEP (see Figure 4.4; Colorado Department of Education, 2020). Seventy-seven thousand nine hundred thirty-six students were identified as English fluent or English speaking (see Figure 4.4; Colorado Department of Education, 2020).

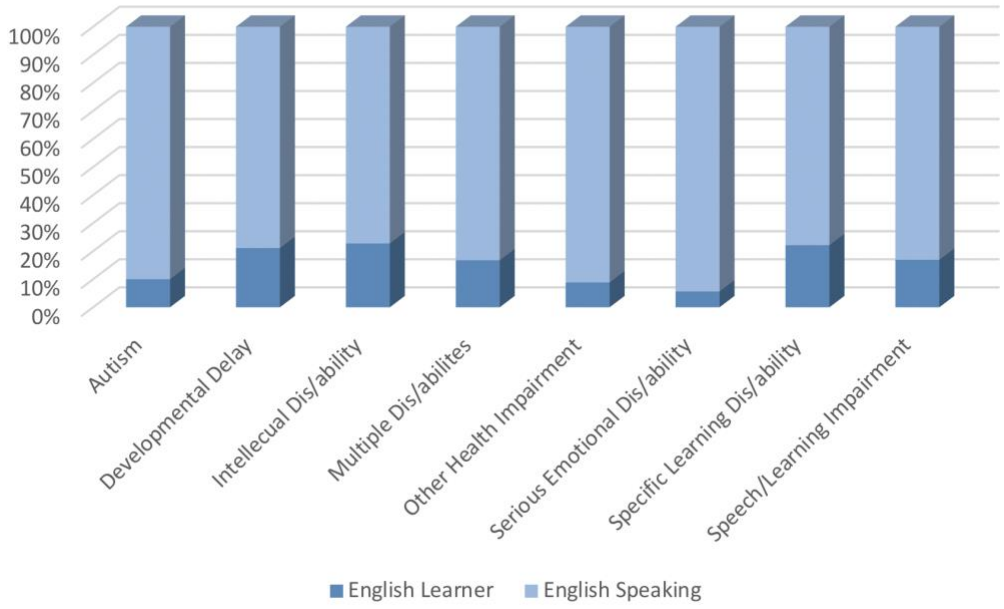
Figure 4.4: ***English Learner to English Speaker Percentage with Dis/ability***



Source: Colorado Department of Education (2020).

Out of the 16,113 students identified as an English learners and as a student with a dis/ability, 834 students were identified with Autism, 1,001 students were identified with Developmental Delay, 566 students were identified with Intellectual Dis/ability, 745 students were identified with Multiple Disabilities, 1,091 students were identified with Other Health Impairment, 321 students were identified with Serious Emotional Dis/ability, 9,348 students were identified with Specific Learning Dis/ability, 1,985 students were identified with Speech/Language Impairment (see Figure 4.5; Colorado Department of Education, 2021).

Figure 4.5: ***English Learner to English Speaker Ratio for Students with Each Dis/ability Category***



Source: Colorado Department of Education (2021).

English Speaker with a Dis/ability

An English speaker was a student who may have been a native English speaker or may have exited out of the English language development services (i.e., considered a fluent English speaker; Colorado Department of Education, 2020). Out of the 77,936 students identified as an English speaker and as a student with a dis/ability, 7,503 students were identified with Autism, 3,742 students were identified with Developmental Delay, 1,921 students were identified with Intellectual Dis/ability, 3,699 students were identified with Multiple Disabilities, 11,219 students were identified with Other Health Impairment, 5367 students were identified with Serious Emotional Dis/ability, 32,870 students were identified with Specific Learning Dis/ability, 9,746 students were identified with Speech/Language Impairment (see Figure 4.5; Colorado Department of Education, 2021).

Students attending public schools in Colorado attend to receive special education services through federal and state funding in 178 urban, suburban, and rural school districts. School districts that do not have the resources to provide partial or total services to students who require special education services outsource and/or insource services through the Boards of Cooperative Educational Services (BOCES). The total number of districts distributing services were 188 districts (Colorado Department of Education, 2020). The AUs, which include school districts, BOCES, and the State Charter School Institute that provides special education services to qualifying students, encompasses the

112 reporting entities in the state of Colorado (Case Text, 2015; Colorado Department of Education, 2020).

Limitations

There are important data limitations for the reader to consider as the reader interprets the results. Demographic data collection practices set by federal and state policies clumped some CLD groups into one category that may not have represented the students' true cultural identification or heritage, which had a potential for homogenizing cultural groups of students. For example, students reported as Asian/Asian American encompassed a large range of cultural practices and heritages ranging from Russian, Chinese, Vietnamese, Indian, etc.

Policymakers developed guidelines that described the calculations to determine significant disproportionality with the term "risk ratio" (Colorado Department of Education. 2018). The methodology and calculations the data collectors at the state used to determine significant disproportionality fit the definition of odds ratio (Cochrane Training, 2021). The inconsistency in vocabulary and terminology in policy and research could increase the likelihood of ambiguities within this policy analysis.

To protect student privacy and personally identifiable information, CDE policymakers required suppression of student count when the count is less than sixteen. In some cases, an AU did not report student information. The reasoning I was given by CDE data managers was that either the numbers were zero or there was no report provided. The suppressed or missing data affected my ability to calculate the odds ratio

and risk difference for some special education categories of some CLD groups. I was not able to obtain any valuable information for the risk difference of students who were reported as Pacific Islander/Hawaiian Native.

Risk Difference Findings

In this section, I presented the Risk Difference between the median Odds Ratio (OR) for LRE Definition One and the median OR for the LRE Definition Two. Through the OR, I was able to find overrepresentation, underrepresentation, and 1:1 representation. For student groups who were found to have an overrepresentation, these groups were more than likely to be overidentified with a dis/ability than students from all other groups combined. Student groups that were found to have an underrepresentation were more likely to be under identified with a dis/ability than students from all other groups combined. Student groups with a 1:1 representation were found to be equally as likely to have a dis/ability in that category than any other student group combined. The LRE Definition One encompassed the students placed with their general education peers less than 40% of the day or in an alternate school setting. The LRE Definition Two included students placed with their general education peers 40% of the day or greater. To protect student privacy, the Colorado Department of Education suppressed student reporting for any AU with student numbers less than sixteen. In these situations, the median OR for the definition and/or CLD variable and the resulting difference were unattainable due to missing data. I chose to calculate the median OR over the mean OR

due to the amount of missing and suppressed data. The median OR provided a more reliable state representation of OR for each variable in each category.

Summary of Findings

I found disproportionate representation across all special education categories for each CLD group. There was disproportionate overrepresentation and underrepresentation of CLDS within LRE Definition One and LRE Definition Two. Student groups with an OR greater than 1.0 were found to have a disproportionate overrepresentation in those special education categories. These student groups were overrepresented with a dis/ability compared to students from all other CLD groups combined (see Table 4.1). Student groups with an OR less than 1.0 were found to have a disproportionate underrepresentation in those special education categories. These student groups were underrepresented with a dis/ability compared to students from all other CLD groups combined (see Table 4.1). Student groups with an OR of 1.0 were found to be proportionate with a 1:1 representation in those special education categories. These student groups were found to be equally likely to have a dis/ability in that category than any other CLD group combined (see Table 4.1).

Table 4.1: ***CLD Proportionality Table***

	Median OR > 1.0	Median OR < 1.0	Median OR = 1.0
CLD Proportionality	CLD group was disproportionately overrepresented	CLD group was disproportionately underrepresented	CLD group was proportionately represented (1:1)

Source: Bollmer et al. (2007); Colorado Department of Education (2018); IDEIA (2016).

The Median OR for students reported as Black/African American overrepresented in six out of the eight categories. The Median OR for Definition One for students

identified as Hispanic/Latinx reported a higher median OR in Definition Two in five out of eight special education category areas. The Median OR for Definition Two overrepresented students identified as Native American /Alaskan Native in five out of eight categories. The Median OR for Definition Two for students identified as Two or More Races in five out of eight categories. The Median OR for Definition Two for students identified as White in three out of eight categories. The Median OR for Definition Two for students reported as English Learners in five out of eight categories. The Median OR for Definition Two for students reported as English Speaking in three out of eight categories (see Table 9 & 10).

Overrepresentation continued to be prevalent across special education categories in CLD groups and throughout LRE placement levels. An overrepresentation for a CLD group means that the median OR was found to be disproportionately overrepresented in the special education category for that CLD group when compared to all other groups combined. Overrepresentation was prevalent in OR Definition Two for students identified as Black/African American, Hispanic/Latinx, Native American, and Two or More Races. This means that students reported as Black/African American, Hispanic/Latinx, Native American, and Two or More Races were overwhelmingly placed in the LRE of 40% or greater. These students were with their general education peers 40% of the time or more according to their IEP. This data did not include the amount of time the students were removed from the class for EL support, Tier 2 interventions, disciplinary actions, etc. Students who attended a seven-hour school day, would have

been remained with their general education peers anywhere from 7 hours to 4.2 hours. The undocumented hours students were removed from the general education for Tier 2 intervention, EL services, or disciplinary actions reduced their exposure to academic instruction and interactions with their grade level peers.

Students reported as Black/African American identified with an Intellectual Dis/ability were 1.82 (median) times more likely than their non-Black peers to be identified with an Intellectual Dis/ability and placed in the LRE Definition Two environment. By taking 40% of an average seven-hour school day, I calculated the least amount of time students would have remained with their general education peers through LRE Definition Two. Students reported as Hispanic/Latinx identified with a Specific Learning Dis/ability were 1.7 (median) times more likely than their non-Hispanic peers to be identified with a Specific Learning Dis/ability and be placed in the LRE Definition Two environment. Students reported as Native American identified with Developmental Delay were 2.1 (median) times more likely to be identified with a Developmental Delay and placed in the LRE Definition Two environment than their non-Native American peers. Students reported with Two or More Races were 1.4 (median) times more likely to be identified with a Serious Emotional Dis/ability and placed in the LRE Definition Two environment than their non-Two or More Race peers. Students reported as Black/African American, Hispanic/Latinx, Native American, and Two or More Races identified with dis/abilities placed LRE Definition Two were not reported to OSEP or COPPA. These

students continued to remain an unnoticed group of disproportionate overrepresentations in the special education environment (see Tables 4.2–4.10).

Students reported as English Learners who were identified with dis/abilities were significantly overrepresented in six out of eight categories in LRE Definition One and LRE Definition Two. Students reported as EL were 2.7 (median) times more likely to be identified with Developmental Delay and placed in LRE Definition Two environment than their English-Speaking peers. Students reported as EL were 3.1 (median) times more likely to be identified with an Intellectual Dis/ability and placed in LRE Definition 1 environment than their English-Speaking peers (see Tables 4.9 & 4.10).

Research Question One

What do the statistical trends reveal about the disproportionality of CLDS in special education in Colorado using an Odds Ratio that defines a student's LRE status whose time learning in general education classrooms is greater than 40%?

Median OR for Asian/Asian American Placed in LRE Definition Two. I found that missing and suppressed data from the 112 AUs affected some of the findings for the CLD variable for students reported as Asian/Asian American. I found the median OR calculation indicated that students reported as Asian/Asian American were underrepresented for LRE Definition Two in the special education categories of Developmental Delay, Intellectual Dis/ability, Multiple Dis/abilities, Other Health Impairment, Serious Emotional Dis/ability, Specific Learning Dis/ability, and

Speech/Language Impairment. These students had the lowest level of underrepresentation through Specific Learning Dis/ability (see Table 2).

An underrepresentation in these categories indicated that this group of students was less likely to be identified for special education than students in all other racial/ethnic groups combined. Positive stereotypes could be just as harmful as negative stereotypes. The indication for underrepresentation for Asian/Asian Americans would be that students in this racial/ethnic group were under-served and under-identified for special education services. Students with a dis/ability may not have been identified or recognized as having a dis/ability, and thus did not receive proper interventions to access the general education environment.

Table 4.2: ***Median Odds Ratio and Risk Difference of Students Reported as Asian/Asian American Identified with a Dis/ability***

Special Education Category	OR Definition 1	OR Definition 2	Risk Difference	Difference
Autism	1.2891	—	—	—
Developmental Delay	—	0.6669	—	—
Intellectual Dis/ability	0.8169	0.7346	0.1034	Lower
Multiple Dis/abilities	1.0650	0.9529	0.1121	Lower
Other Health Impairment	—	0.3993	—	—
Serious Emotional Dis/ability	—	0.2680	—	—
Specific Learning Dis/ability	—	0.2497	—	—
Speech/Language Impairment	—	0.7799	—	—

Note. OR listed in each category was the median OR reported for the 112 reporting AUs. OR Definition 1 reflects students placed in the less than 40% and alternate school setting LRE. OR Definition 2 reflects students placed in the 40% and greater school setting LRE. The Difference is determined through Lower, Same, or Higher as the comparison of the OR between LRE Definition 1 and LRE Definition 2. Lower indicated that placement in LRE Definition 2 was at a lower risk than placement in LRE Definition 1. Same indicated that placement in LRE Definition 2 and LRE Definition 1 was the same. Higher indicated that placement in LRE Definition 2 was at a higher risk than placement in LRE Definition 1.
Source: Colorado Department of Education (2021).

Median OR for Black/African American Students Placed in LRE Definition Two. I found that missing and suppressed data from the 112 AUs did not affect the findings for Research Question One for the CLD variable of students reported as Black/African American. I found the median OR calculation indicated that students reported as Black/African American were underrepresented for LRE Definition Two in the special education categories of Autism and Speech/Language Impairment. These students had the lowest level of underrepresentation through Autism (see Table 4.3). An underrepresentation in Autism and Speech/Language Impairment indicated that Black/African American students were less likely to be identified for special education in these categories than students from all other racial/ethnic groups combined. The indication for underrepresentation for Black/African Americans would be that students in this racial/ethnic group were under-served and under-identified for special education services under the categories of Autism and Speech/Language Impairment.

The median OR calculation indicated that students reported as Black/African American were overrepresented for LRE Definition Two in the special education categories of Developmental Delay, Intellectual Dis/ability, Multiple Dis/abilities, Other Health Impairment, Serious Emotional Dis/ability, and Specific Learning Dis/ability. These students had the highest level of overrepresentation through Intellectual Dis/ability (see Table 4.3). An overrepresentation in Developmental Delay, Intellectual Dis/ability, Multiple Dis/abilities, Other Health Impairment, Serious Emotional Dis/ability, and Specific Learning Dis/ability indicated that Black/African American students were more

likely to be identified for special education in these categories that students from all other racial/ethnic groups combined. Black/African American were at the greatest risk of being overrepresented in the special education category of Intellectual Dis/ability.

Table 4.3: ***Median Odds Ratio and Risk Difference of Students Reported as Black/African American Identified with a Dis/ability***

Special Education Category	OR Definition 1	OR Definition 2	Risk Difference	Difference
Autism	1.7674	0.79927	0.9681	Lower
Developmental Delay	2.7270	1.1254	1.6016	Lower
Intellectual Dis/ability	3.0713	1.8235	1.8235	Lower
Multiple Dis/abilities	1.5707	1.1511	0.4196	Lower
Other Health Impairment	2.5971	1.2818	1.3153	Lower
Serious Emotional Dis/ability	2.7201	1.3130	1.4071	Lower
Specific Learning Dis/ability	1.8831	1.3485	0.5346	Lower
Speech/Language Impairment	—	0.8953	—	—

Note. OR listed in each category was the median OR reported for the 112 reporting AUs. OR Definition 1 reflects students placed in the less than 40% and alternate school setting LRE. OR Definition 2 reflects students placed in the 40% and greater school setting LRE. The Risk Difference is determined through Lower, Same, or Higher as the comparison of the OR between LRE Definition 1 and LRE Definition 2. Lower indicated that placement in LRE Definition 2 was at a lower risk than placement in LRE Definition 1. Same indicated that placement in LRE Definition 2 and LRE Definition 1 was the same. Higher indicated that placement in LRE Definition 2 was at a higher risk than placement in LRE Definition 1. *Source*: Colorado Department of Education (2021).

Median OR for Hispanic/Latinx Students Placed in LRE Definition Two. I found that missing and/or suppressed data did not affect the findings for Research Question One for the CLD variable of students reported as Hispanic/Latinx. I found the median OR calculation indicated that students reported as Hispanic/Latinx were underrepresented for LRE Definition Two under the categories of Autism, Other Health Impairment, and Serious Emotional Dis/ability. These students had the lowest level of underrepresentation Autism (see Table 4.4). An underrepresentation in these categories indicated that students reported as Hispanic/Latinx were less likely to be identified for

special education than students in all other racial/ethnic groups combined. The indication for underrepresentation for students reported as Hispanic/Latinx would be that students in this racial/ethnic group were under-served and under-identified for these special education categories. Students with a dis/ability may not have been identified or recognized as having a dis/ability, and thus did not receive proper interventions to access the general education environment.

The median OR calculation indicated that students reported as Hispanic/Latinx were overrepresented for LRE Definition Two under the categories of Developmental Delay, Intellectual Dis/ability, Multiple Dis/abilities, Specific Learning Dis/ability, and Speech/Language Impairment. These students had the highest level of overrepresentation through Specific Learning Dis/ability (see Table 4.4). An overrepresentation in Developmental Delay, Intellectual Dis/ability, Multiple Dis/abilities, Specific Learning Dis/ability, and Speech/Language Impairment indicated that Hispanic/Latinx students were more likely to be identified for special education in these categories that students from all other racial/ethnic groups combined.

Table 4.4: ***Median Odds Ratio and Risk Difference of Students Reported as Hispanic/Latinx Identified with a Dis/ability***

Special Education Category	OR Definition 1	OR Definition 2	Risk Difference	Difference
Autism	0.7806	0.6776	0.1030	Lower
Developmental Delay	1.0872	1.3377	-0.2505	Higher
Intellectual Dis/ability	1.2498	1.5338	-0.284	Higher
Multiple Dis/abilities	1.2598	1.1572	0.1026	Lower
Other Health Impairment	0.6838	0.7372	-0.0534	Higher
Serious Emotional Dis/ability	0.7667	0.7199	0.0468	Lower
Specific Learning Dis/ability	1.3099	1.7118	-0.4019	Higher
Speech/Language Impairment	0.8869	1.1075	-0.2206	Higher

Note. OR listed in each category was the median OR reported for the 112 reporting AUs. OR Definition 1 reflects students placed in the less than 40% and alternate school setting LRE. OR Definition 2 reflects students placed in the 40% and greater school setting LRE. The Difference is determined through Lower, Same, or Higher as the comparison of the OR between LRE Definition 1 and LRE Definition 2. Lower indicated that placement in LRE Definition 2 was at a lower risk than placement in LRE Definition 1. Same indicated that placement in LRE Definition 2 and LRE Definition 1 was the same. Higher indicated that placement in LRE Definition 2 was at a higher risk than placement in LRE Definition 1. *Source:* Colorado Department of Education (2021).

Median OR for Native American/Alaskan Native Students Placed in LRE Definition Two. I found that missing and suppressed data from the 112 AUs affected some of the findings for the CLD variable for students reported as Native American/Alaskan Native. I found the median OR calculation indicated that students reported as Native American/Alaskan Native were underrepresented for LRE Definition Two under the category of Autism. Although the median OR for Autism was underrepresented it was close enough to the 1.0 threshold set for equitable representation (see Table 5; Bollmer et al., 2007; Colorado Department of Education, 2020).

The median OR calculation indicated that students were overrepresented under the LRE Definition Two for the categories of Developmental Delay, Multiple Dis/abilities, Other Health Impairment, Serious Emotional Dis/ability, Specific Learning Dis/ability, and Speech/Language Impairment. Students reported as Native American/Alaskan Native had the highest level of overrepresentation through Developmental Delay (see Table 5). An overrepresentation in Developmental Delay, Multiple Dis/abilities, Other Health Impairment, Serious Emotional Dis/ability, Specific Learning Dis/ability, and Speech/Language Impairment indicated that students reported

as Native America/Alaskan Native were more likely to be identified for special education in these categories than students from all other racial/ethnic groups combined.

Table 4.5: ***Median Odds Ratio and Risk Difference of Students Reported as Native American/Alaskan Native Identified with a Dis/ability***

Special Education Category	OR Definition 1	OR Definition 2	Risk Difference	Difference
Autism	1.5299	0.9218	0.6081	Lower
Developmental Delay	—	2.0659	—	—
Intellectual Dis/ability	—	—	—	—
Multiple Dis/abilities	1.3221	1.5869	-0.2648	Higher
Other Health Impairment	—	1.3330	—	—
Serious Emotional Dis/ability	—	1.3622	—	—
Specific Learning Dis/ability	—	1.7455	—	—
Speech/Language Impairment	—	1.2299	—	—

Note. OR listed in each category was the median OR reported for the 112 reporting AUs. OR Definition 1 reflects students placed in the less than 40% and alternate school setting LRE. OR Definition 2 reflects students placed in the 40% and greater school setting LRE. The Difference is determined through Lower, Same, or Higher as the comparison of the OR between LRE Definition 1 and LRE Definition 2. Lower indicated that placement in LRE Definition 2 was at a lower risk than placement in LRE Definition 1. Same indicated that placement in LRE Definition 2 and LRE Definition 1 was the same. Higher indicated that placement in LRE Definition 2 was at a higher risk than placement in LRE Definition 1. *Source:* Colorado Department of Education (2021).

Median OR for Pacific Islander/Hawaiian Native Students Placed in LRE Definition Two.

I found that missing and suppressed data from the 112 AUs affected some of the findings for the CLD variable for students reported as Pacific Islander/Hawaiian Native. I found the median OR calculation indicated that students reported as Pacific Islander/Hawaiian Native were underrepresented under the LRE Definition Two for the special education categories of Specific Learning Dis/ability and Speech/Language Impairment. These students had the lowest level of underrepresentation through the special education category of Specific Learning Dis/ability (see Table 4.6).

An underrepresentation in these categories indicated that students reported as Pacific Islander/Hawaiian Native were less likely to be identified for special education than students in all other racial/ethnic groups combined. The indication for underrepresentation for students reported as Pacific Islander/Hawaiian Native would be that students in this racial/ethnic group were under-served, under-identified, and in many cases, not monitored, due to suppressed or missing data, (see Table 4.6) for special education services. These students with a dis/ability may not have been identified or recognized as having a dis/ability, and thus did not receive proper interventions to access the general education environment.

Table 4.6: ***Median Odds Ratio and Risk Difference of Students Reported as Pacific Islander/Hawaiian Native Identified with a Dis/ability***

Special Education Category	OR Definition 1	OR Definition 2	Risk Difference	Difference
Autism	—	—	—	—
Developmental Delay	—	—	—	—
Intellectual Dis/ability	—	—	—	—
Multiple Dis/abilities	—	—	—	—
Other Health Impairment	—	—	—	—
Serious Emotional Dis/ability	—	—	—	—
Specific Learning Dis/ability	—	0.6475	—	—
Speech/Language Impairment	—	0.7103	—	—

Note. OR listed in each category was the median OR reported for the 112 reporting AUs. OR Definition 1 reflects students placed in the less than 40% and alternate school setting LRE. OR Definition 2 reflects students placed in the 40% and greater school setting LRE. The Difference is determined through Lower, Same, or Higher as the comparison of the OR between LRE Definition 1 and LRE Definition 2. Lower indicated that placement in LRE Definition 2 was at a lower risk than placement in LRE Definition 1. Same indicated that placement in LRE Definition 2 and LRE Definition 1 was the same. Higher indicated that placement in LRE Definition 2 was at a higher risk than placement in LRE Definition 1. *Source*: Colorado Department of Education (2021).

Median OR for Two or More Races Students Placed in LRE Definition Two.

I found that missing and suppressed data from the 112 AUs did not affect the findings for

Research Question One of the CLD variable for students reported as Two or More Races. I found the median OR calculation indicated that students reported as Two or More Races were underrepresented under the LRE Definition Two for the special education categories of Intellectual Dis/ability, Multiple Dis/abilities, and Specific Learning Dis/ability. These students had the lowest level of underrepresentation through the special education category of Intellectual Dis/ability (see Table 4.7). An underrepresentation in these categories indicated that students reported as Two or More Races were less likely to be identified for special education than students in all other racial/ethnic groups combined. The indication for underrepresentation for students reported as Two or More Races would be that students in this racial/ethnic group were under-served and under-identified for these special education categories. Students with a dis/ability may not have been identified or recognized as having a dis/ability, and thus did not receive proper interventions to access the general education environment.

The median OR calculation indicated an overrepresentation for students identified under Autism, Developmental Delay, Other Health Impairment, Serious Emotional Dis/ability, and Speech/Language Impairment. These students had the greatest amount of overrepresentation in the special education category of Serious Emotional Dis/ability (see Table 4.7). An overrepresentation in Developmental Delay, Other Health Impairment, Serious Emotional Dis/ability, and Speech/Language Impairment indicated that students reported as Two or More Races were more likely to be identified for special education in these categories than students from all other racial/ethnic groups combined.

Table 4.7: ***Median Odds Ratio Risk Difference of Students Reported as Two or More Races Identified with a Dis/ability***

Special Education Category	OR Definition 1	OR Definition 2	Risk Difference	Difference
Autism	0.9820	1.3224	-0.3404	Higher
Developmental Delay	—	1.0957	—	—
Intellectual Dis/ability	0.8923	0.7746	0.1177	Lower
Multiple Dis/abilities	1.0043	0.8807	0.1236	Lower
Other Health Impairment	1.7658	1.1519	0.6139	Lower
Serious Emotional Dis/ability	1.6074	1.3554	0.2520	Lower
Specific Learning Dis/ability	0.7199	0.8378	-0.1179	Higher
Speech/Language Impairment	—	1.0152	—	—

Note. OR listed in each category was the median OR reported for the 112 reporting AUs. OR Definition 1 reflects students placed in the less than 40% and alternate school setting LRE. OR Definition 2 reflects students placed in the 40% and greater school setting LRE. The Difference is determined through Lower, Same, or Higher as the comparison of the OR between LRE Definition 1 and LRE Definition 2. Lower indicated that placement in LRE Definition 2 was at a lower risk than placement in LRE Definition 1. Same indicated that placement in LRE Definition 2 and LRE Definition 1 was the same. Higher indicated that placement in LRE Definition 2 was at a higher risk than placement in LRE Definition 1. *Source*: Colorado Department of Education (2021).

Median OR for White Students Placed in LRE Definition Two. I found that missing and suppressed data from the 112 AUs did not affect the findings for Research Question One of the CLD variable for students reported as White. I found the median OR calculation indicated that students reported as White were underrepresented under the LRE Definition Two for the special education categories of Developmental Delay, Intellectual Dis/ability, Multiple Dis/abilities, Specific Learning Dis/abilities, and Speech/Language Impairment. Students who reported as White had the lowest amount of underrepresentation in the special education category of Specific Learning Dis/ability (see Table 8). An underrepresentation in these categories indicated that students reported as White were less likely to be identified for special education than students in all other racial/ethnic groups combined. The indication for underrepresentation for students

reported White would be that students in this racial/ethnic group were under-identified for special education services.

The median OR calculation indicated that the students were overrepresented under the special education categories of Autism, Other Health Impairment, and Serious Emotional Dis/ability. Students who reported as White had the greatest amount of overrepresentation in the special education category of Autism (see Table 4.8). An overrepresentation in Autism, Other Health Impairment, and Serious Emotional Dis/ability indicated that students reported as White were more likely to be identified for special education in these categories than students from all other racial/ethnic groups combined.

Table 4.8: ***Median Odds Ratio and Risk Difference of Students Reported as White Identified with a Dis/ability***

Special Education Category	OR Definition 1	OR Definition 2	Risk Difference	Difference
Autism	0.9686	1.4372	-0.4686	Higher
Developmental Delay	0.6818	0.7554	-0.0736	Higher
Intellectual Dis/ability	0.4842	0.6172	-0.1330	Higher
Multiple Dis/abilities	0.7429	0.9392	-0.1963	Higher
Other Health Impairment	0.9603	1.2435	-0.2832	Higher
Serious Emotional Dis/ability	1.0367	1.3625	-0.3258	Higher
Specific Learning Dis/ability	0.7463	0.6438	0.1025	Lower
Speech/Language Impairment	1.0060	0.9107	0.0953	Lower

Note. OR listed in each category was the median OR reported for the 112 reporting AUs. OR Definition 1 reflects students placed in the less than 40% and alternate school setting LRE. OR Definition 2 reflects students placed in the 40% and greater school setting LRE. The Difference is determined through Lower, Same, or Higher as the comparison of the OR between LRE Definition 1 and LRE Definition 2. Lower indicated that placement in LRE Definition 2 was at a lower risk than placement in LRE Definition 1. Same indicated that placement in LRE Definition 2 and LRE Definition 1 was the same. Higher indicated that placement in LRE Definition 2 was at a higher risk than placement in LRE Definition 1. *Source*: Colorado Department of Education (2021).

Median OR for English Learner Students Placed in LRE Definition Two. I found that missing and suppressed data from the 112 AUs affected some of the findings for the CLD variable for students reported as English Learner. I found the median OR calculation indicated that students reported as English Learner were underrepresented under the LRE Definition Two for the special education categories of Autism and Other Health Impairment. Students who reported as English Learners had the lowest underrepresentation in the special education category of Other Health Impairment. Although the median OR for Autism was underrepresented it was close enough to the 1.0 threshold set for equitable representation (see Table 9; Bollmer et al., 2007; Colorado Department of Education, 2020). An underrepresentation in Other Health Impairment indicated that students reported as English Learners were less likely to be identified for special education under this specific category than their English Speaking peers. The indication for underrepresentation for students reported as English Learners would be these students were under-served and under-identified for this special education category. Students with a dis/ability may not have been identified or recognized as having a dis/ability, and thus did not receive proper interventions to access the general education environment.

The median OR calculation indicated that students reported as English Learner were overrepresented for the special education categories of Developmental Delay, Intellectual Dis/ability, Multiple Dis/abilities, Specific Learning Dis/ability, and Speech/Language Impairment. Students who reported as English Learners had the

greatest amount of overrepresentation under the special education category of Developmental Delay (see Table 4.9). These students were more than two times as likely to be identified with Developmental Delay as their English Speaking peers. An overrepresentation in Developmental Delay, Intellectual Dis/ability, Multiple Dis/abilities, Specific Learning Dis/ability, and Speech/Language Impairment indicated that students reported as English Learners were more likely to be identified for special education in these categories than their English Speaking peers.

Table 4.9: ***Median Odds Ratio and Risk Difference of Students Reported as English Learner Identified with a Dis/ability***

Special Education Category	OR Definition 1	OR Definition 2	Risk Difference	Difference
Autism	1.0587	0.9898	0.0689	Lower
Developmental Delay	2.1325	2.2781	-0.1456	Higher
Intellectual Dis/ability	3.0713	1.8235	1.246	Lower
Multiple Dis/abilities	2.1685	1.7504	0.4181	Lower
Other Health Impairment	0.8273	0.7347	0.0926	Lower
Serious Emotional Dis/ability	0.5226	—	—	—
Specific Learning Dis/ability	1.2592	2.2183	-0.9591	Higher
Speech/Language Impairment	0.6985	1.6694	-0.9709	Higher

Note. OR listed in each category was the median OR reported for the 112 reporting AUs. OR Definition 1 reflects students placed in the less than 40% and alternate school setting LRE. OR Definition 2 reflects students placed in the 40% and greater school setting LRE. The Difference is determined through Lower, Same, or Higher as the comparison of the OR between LRE Definition 1 and LRE Definition 2. Lower indicated that placement in LRE Definition 2 was at a lower risk than placement in LRE Definition 1. Same indicated that placement in LRE Definition 2 and LRE Definition 1 was the same. Higher indicated that placement in LRE Definition 2 was at a higher risk than placement in LRE Definition 1. *Source*: Colorado Department of Education (2021).

Median OR for English Speaking Students Placed in LRE Definition Two. I found that missing and suppressed data from the 112 AUs did not affect the findings for Research Question One of the CLD variable for students reported as English Speaking. I

found the median OR calculation indicated that students reported as English Speaking were underrepresented under the LRE Definition Two for the special education categories of Developmental Delay, Intellectual Dis/ability, Multiple Dis/abilities, Specific Learning Dis/ability, Speech/Language Impairment. Students reported as English Speaking had the lowest level of underrepresentation under Developmental Delay (see Table 10). An underrepresentation in the categories of Developmental Delay, Intellectual Dis/ability, Multiple Dis/abilities, Specific Learning Dis/ability, and Speech/Language Impairment indicated that students reported as English Speakers were less likely to be identified for special education under this specific category than their English Learner peers.

The median OR calculation indicated that students were overrepresented under the special education categories of Autism, Other Health Impairment, and Serious Emotional Dis/ability. Students reported as English Speaking had the greatest amount of overrepresentation under the special education category of Serious Emotional Dis/ability (see Table 10). An overrepresentation in Autism, Other Health Impairment, and Serious Emotional Dis/ability, is not unlike the overrepresentation seen in the students reported as White, which indicated that students reported as English Speaking and White, both dominant groups, were more likely to be identified for special education in these categories than students from all other racial/ethnic or linguistic groups combined.

Table 4.10: ***Median Odds Ratio and Risk Difference of Students Reported as English Speaking Identified with a Dis/ability***

Special Education Category	OR Definition 1	OR Definition 2	Risk Difference	Difference
Autism	0.9728	1.0103	-0.0375	Higher
Developmental Delay	0.4689	0.4390	0.0299	Lower
Intellectual Dis/ability	0.3891	0.4432	-0.0541	Higher
Multiple Dis/abilities	0.4612	0.5713	-0.1101	Higher
Other Health Impairment	1.2087	1.3610	-0.1523	Higher
Serious Emotional Dis/ability	1.9133	1.7537	0.1596	Lower
Specific Learning Dis/ability	0.7942	0.4513	0.3429	Lower
Speech/Language Impairment	1.4316	0.5995	0.8321	Lower

Note. OR listed in each category was the median OR reported for the 112 reporting AUs. OR Definition 1 reflects students placed in the less than 40% and alternate school setting LRE. OR Definition 2 reflects students placed in the 40% and greater school setting LRE. The Difference is determined through Lower, Same, or Higher as the comparison of the OR between LRE Definition 1 and LRE Definition 2. Lower indicated that placement in LRE Definition 2 was at a lower risk than placement in LRE Definition 1. Same indicated that placement in LRE Definition 2 and LRE Definition 1 was the same. Higher indicated that placement in LRE Definition 2 was at a higher risk than placement in LRE Definition 1. *Source*: Colorado Department of Education (2021).

Using Odds Ratio in the Development of Policy and the Creation of "Winners" and "Losers." I calculated the odds ratios from the 112 reporting AUs in the state of Colorado. To protect student privacy and individual information, the data collectors at CDE suppressed student data in AUs, where each variable contained a student count less than sixteen. Alternate risk ratio, weighted ratio, or an alternate odds ratio formula may have increased the likelihood of determining "winners" and "losers" based on policy implementation for CLDS with a low member count. I found the lack of reporting and/or suppressed data for students reported as Asian/Asian American, Black/African American, Native American/Alaskan Native, Pacific Islander/Hawaiian Native, Two or More Races, and English Learners affected the statistical trends and the

calculations of the odds ratio in the LRE Definition Two and LRE Definition One (see Table 4.2, Table 4.3, Table 4.5, Table 4.6, Table 4.7, and Table 4.9). The underreporting and suppressed data would affect the resources that would be available by policy to the non-dominant members of society (Young & Diem, 2017).

Research Question Two

What is the difference in the disproportionality of CLDS in special education between a risk ratio that define a student's LRE status of 40% or greater compared to a risk ratio that define a student's LRE status of less than 40% in general education classrooms in each special education category in Colorado?

Risk Difference for Asian/Asian American Students Between LRE Definition One and LRE Definition Two. I found that missing and suppressed data from the 112 AUs affected some of the findings of Research Question Two for the CLD category for students reported as Asian/Asian American. I found the risk difference for students identified under Intellectual Dis/ability and Multiple Dis/abilities were at lower risk for placement under LRE Definition Two than for placement under LRE Definition One (see Table 4.2). With 29,209 students who were reported as Asian/Asian American students in Colorado, only 1,610 Asian/Asian American students were identified with a dis/ability (Colorado Department of Education, 2020). By dividing the number of students with a dis/ability by the number of students enrolled, I calculated that only 5.5% of students reported as Asian/Asian American were identified with a dis/ability. With a small percentage and number of students identified with a dis/ability, this indicates that the

suppressed data affected the reported information for students placed in LRE Definition One.

Risk Difference for Black/African American Students Between LRE Definition One and LRE Definition Two. I found that missing and suppressed data from the 112 AUs affected some of the findings of Research Question Two for the CLD variable for students reported as Black/African American. I found the risk difference for students identified under Autism, Developmental Delay, Intellectual Dis/ability, Multiple Dis/abilities, Other Health Impairment, Serious Emotional Dis/ability, and Specific Learning Dis/ability were at lower risk for placement under LRE Definition Two than for placement under LRE Definition 1 (see Table 4.3). Despite the lower risk for being placed in LRE Definition Two than LRE Definition One, students were still overrepresented in LRE Definition Two. In fact, students reported as Black were 3.1 times more likely to be identified with an Intellectual Dis/ability and placed in LRE Definition One than their non-Black/African American peers. They were 1.8 times more likely to be identified with an Intellectual Dis/ability and placed in LRE Definition Two than their non-Black/African American peers. With 41,554 students who were reported as Black/African American students in Colorado, 5,340 Black/African American students were identified with a dis/ability (Colorado Department of Education, 2020). By dividing the number of students with a dis/ability by the number of students enrolled, I calculated that only 12.9% of students reported as Black/African American were identified with a

dis/ability. With this percentage of students identified with a dis/ability, this data was consistent with the overrepresentation that was reported across LRE Definitions.

Risk Difference for Hispanic/Latinx Students Between LRE Definition One and LRE Definition Two. I found that missing and suppressed data from the 112 AUs did not affect the findings of Research Question Two for the CLD category for students reported as Hispanic/Latinx. I found the risk difference for students identified under Autism, Multiple Dis/abilities, and Serious Emotional Dis/ability were lower for placement under LRE Definition Two than for placement under LRE Definition One. The risk difference for students identified under Developmental Delay, Intellectual Dis/ability, Other Health Impairment, Specific Learning Dis/ability, and Speech/Language Impairment were higher for placement under LRE Definition Two than for placement under LRE Definition One see Table 4.4). With 483,051 students who were reported as Hispanic/Latinx students in Colorado, only 45,995 Hispanic/Latinx students were identified with a dis/ability (Colorado Department of Education, 2020). By dividing the number of students with a dis/ability by the number of students enrolled, I calculated that only 9.5% of students reported as Hispanic/Latinx were identified with a dis/ability.

Risk Difference for Native American/Alaskan Native Students Between LRE Definition One and LRE Definition Two. I found that missing and suppressed data from the 112 AUs affected some of the findings of Research Question Two for the CLD category for students reported as Native American/Alaskan Native. I found that the risk

difference for students identified under Autism was lower for placement under LRE Definition Two than for placement under LRE Definition One. The risk difference for students identified under Multiple Dis/abilities was higher for placement under LRE Definition Two than for placement under LRE Definition One (see Table 4.5). With 6,210 students who were reported as Native American/Alaskan Native students in Colorado, only 962 Pacific Native American/Alaskan Native students were identified with a dis/ability (Colorado Department of Education, 2020). By dividing the number of students with a dis/ability by the number of students enrolled, I calculated that only 15.5% of students reported as Native American/Alaskan Native were identified with a dis/ability. With this percentage of students identified with a dis/ability, this data was consistent with the overrepresentation that was reported across LRE Definitions.

Risk Difference for Pacific Islander/Hawaiian Native Students Between LRE Definition One and LRE Definition Two. I found that missing and suppressed data from the 112 AUs affected the findings of Research Question Two for the CLD category for students reported as Pacific Islander/Hawaiian Native. The missing and suppressed data prevented the calculation of the risk difference for students in all special education categories (see Table 4.6). With 2,433 students who were reported as Pacific Islander/Hawaiian Native students in Colorado, only 165 Pacific Islander/Hawaiian Native students were identified with a dis/ability (Colorado Department of Education, 2020). By dividing the number of students with a dis/ability by the number of students enrolled, I calculated that only 6.8% of students reported as Pacific Islander/Hawaiian

Native were identified with a dis/ability. With a small percentage and number of students identified with a dis/ability, this indicates that the suppressed data affected the reported information for students placed in LRE Definition One.

Risk Difference for Two or More Races Students Between LRE Definition One and LRE Definition Two. I found that missing and suppressed data from the 112 AUs affected some of the findings of Research Question Two for the CLD category for students reported as Two or More Races. I found that the risk difference for students identified under Intellectual Dis/ability, Multiple Dis/abilities, Other Health Impairment, and Serious Emotional Dis/ability were lower for placement under LRE Definition Two than for LRE Definition One. The risk difference for students identified under Autism and Specific Learning Dis/ability was higher for placement under LRE Definition Two than for placement under LRE Definition One (see Table 4.7). With 40,794 students who were reported as Two or More Races students in Colorado, only 4,106 Two or More Races students were identified with a dis/ability (Colorado Department of Education, 2020). By dividing the number of students with a dis/ability by the number of students enrolled, I calculated that only 10.1% of students reported as Two or More Races were identified with a dis/ability.

Risk Difference for White Students Between LRE Definition One and LRE Definition Two. I found that missing and suppressed data from the 112 AUs did not affect the findings of Research Question Two for the CLD category for students reported as White. I found that the risk difference for students identified under Specific Learning

Dis/ability and Speech/Language Impairment was lower for the student placement under LRE Definition Two than for the student placement under LRE Definition One. The risk difference for students identified under Autism, Developmental Delay, Intellectual Dis/ability, Multiple Dis/abilities, Other Health Impairment, and Serious Emotional Dis/ability was higher for the student placement under LRE Definition Two than for placement under LRE Definition One (see Table 4.8). With 309,972 students who were reported as White students in Colorado, only 36,069 White students were identified with a dis/ability (Colorado Department of Education, 2020). By dividing the number of students with a dis/ability by the number of students enrolled, I calculated that only 11.6% of students reported as White were identified with a dis/ability.

Risk Difference for English Learner Students Between LRE Definition One and LRE Definition Two. I found that missing and suppressed data from the 112 AUs affected some of the findings of Research Question Two for the CLD category for students reported as English Learner. I found that the risk difference for students identified under Autism, Intellectual Dis/ability, Multiple Dis/abilities, and Other Health Impairment was lower for the student placement under LRE Definition Two than for placement under LRE Definition One. The risk difference for students identified under Developmental Delay, Specific Learning Dis/ability, and Speech/Language Impairment was higher for the student placement under LRE Definition Two than for placement under LRE Definition 1 (see Table 4.9). For the two categories of Developmental Delay and Specific Learning Dis/ability, students reported as English Learners developed a

greater risk of overrepresentation as the placement changed from LRE Definition One to LRE Definition Two. With 88,625 students who were reported as English Learners in Colorado, only 16,311 English Learner students were identified with a dis/ability (Colorado Department of Education, 2020). By dividing the number of students with a dis/ability by the number of students enrolled, I calculated that only 18.4% of students reported as English Learners were identified with a dis/ability. With this percentage of students identified with a dis/ability, this data was consistent with the overrepresentation that was reported across LRE Definitions.

Risk Difference for English Speaking Students Between LRE Definition One and LRE Definition Two. I found that missing and suppressed data from the 112 AUs did not affect the findings of Research Question Two for the CLD category for students reported as English Speaking. I found that the risk difference for students identified under Developmental Delay, Serious Emotional Dis/ability, Specific Learning Dis/ability, and Speech/Language Impairment was lower for the student placement under LRE Definition Two than for placement under LRE Definition One. The risk difference for students identified under Autism, Intellectual Dis/ability, Multiple Dis/abilities, and Other Health Impairment was higher for the student placement under LRE Definition Two than for placement under LRE Definition One (see Table 4.10). With 824,589 students who were reported as English Speaking students in Colorado, only 77,936 English Speaking students were identified with a dis/ability (Colorado Department of Education, 2020). By dividing the number of students with a dis/ability by the number of students enrolled, I

calculated that 9.5% of students reported as English Speaking were identified with a dis/ability.

Chapter Summary

In this chapter, I presented the findings for this study. The purpose of this critical policy analysis was to examine the statistical trends in the representation of CLDS in special education across instructional environments against the policies that were developed to protect and ensure equitable representation. I explored what the statistical trends of Colorado's legislative definition of disproportionality revealed using the calculation of students in the alternate school setting and in the least restrictive environment (LRE) of less than 40% when compared to the difference calculating disproportionality of CLDS in the LRE of 40% and greater. I examined the statistical trends that indicated the creation of "winners" and "losers" based on the definition of Colorado's odds ratio for disproportionality of CLDS.

I used the odds ratios (OR) to examine the trends for student placement in each special education category based upon the students' racial/ethnic group and/or linguistic status. The findings were based on the OR formula as defined by the amendment to the Individuals with Disabilities Education Improvement Act (IDEIA, 2004, 2016). I calculated the Risk Difference between the LRE Definition One and the LRE Definition Two to explore the difference in disproportionality of CLDS for each ethnic/racial and linguistic group. The results indicated that certain racial/ethnic groups were more likely to demonstrate a higher odds ratio in LRE Definition Two than LRE Definition One. For

some groups, this meant that the gap of underrepresentation from LRE Definition One was closing and increasing the likelihood of reach a 1:1 proportionality in LRE Definition Two. For other groups, where the OR was already overrepresented in LRE Definition One, the increase in LRE Definition Two meant an increased overrepresentation.

Through this critical educational policy analysis, I addressed the gap in Colorado's policy meant to ensure equity in education for CLDS. The policymakers in Colorado adopted the least robust and least rigorous environments to measure significant disproportionality in Colorado's LEAs and AUs. By choosing the minimal requirements for student LRE placement when monitoring significant disproportionality, Colorado policymakers failed to monitor more than 91% of the student population identified with an educational dis/ability who were placed in special education. Through this study, I contributed to scholarly research, practices in the field, and to policy by addressing the gap in quantitative analysis in critical policy analysis for CLDS receiving special education and related services.

Chapter Five: Conclusion

The purpose of my study was to examine the statistical trends in the representation of culturally and linguistically diverse students (CLDS) in special education across instructional environments. I wanted to know what the statistical trends revealed about Colorado's legislative definition of disproportionality using the calculation of students in the alternate school setting and students in the least restrictive environment (LRE) of less than 40% when compared to the difference calculating disproportionality of CLDS in the LRE of 40% and greater. I wanted to examine the extent to which the statistical trends indicated the creation of "winners" and "losers" based on the definition of Colorado's risk ratio for disproportionality of CLDS. I reviewed the Colorado policymaker's decision to monitor disproportionality using LRE Definition 1 and how the adoption of this definition to monitor disproportionality constructs "winners" and "losers."

In this chapter, I provide an overview of the study and address a summary of my findings by each research question. Based on findings from this critical policy analysis, I provide recommendations to policymakers in the amendment of policies to monitor and protect CLDS who were disproportionately represented in special education and special education categories and thus improve equity of access to the general education

environment. Specifically, I discuss the representation of CLDS in special education categories based on two LRE Definitions. Idealistically, this policy was designed to ensure equity for racially/ethnically diverse students identified with a dis/ability in Colorado. The policy within Colorado's Exceptional Children's Education Act (2016) called for adopting a standard methodology in monitoring and analyzing significant disproportionality in the local education agencies (LEAs). In cases of disproportionality without reasonable progress, special education budgeting resources must be set aside for Comprehensive Coordinated Early Intervening Services (CCEIS) to address factors that may contribute to significant disproportionality in that LEA (Colorado Department of Education, 2018; Exceptional Children's Education Act, 2016; IDEIA, 2016). However, when Colorado stakeholders and legislators adopted LRE Definition 1, which is based on minimum requirements to monitor significant disproportionality, a large group of students are consequently left unmonitored and unprotected, thus becoming the "losers" of this policy.

Definition of Disproportionality and Representation

CLDS identified for special education programming received interventions and services that may have been listed on their IEP but were not reflected in their LRE due to the nature of the interventions and services (IDEIA, 2004). For example, Tier 2 interventions provided by reading specialists, math specialists, or in English language development (ELD) classes provided by a certified ELD teacher are lessons provided outside of the general education setting. These supports were not reflected in the student

LRE calculation because not all students receiving Tier 2 and/or ELD supports were receiving interventions through an Individualized Education Plan (IEP). To receive intensive interventions through an IEP, a student must be identified with a dis/ability, as defined through IDEIA (2004), that had an educational impact. By the very nature of Tier 2 interventions and ELD services, students receiving these lessons did not have these minutes outside of the classroom recorded in their IEP because not all students receiving these services were identified with a dis/ability. The students receiving service outside of the classroom and undocumented disciplinary actions without an IEP were outside the scope of this study. Undocumented disciplinary procedures for students with an IEP, such as sitting outside of the classroom, being sent to the office, or being sent to another classroom for the buddy system resulted in the student being removed from the general education environment without formally recording the change to student's LRE (Farnsworth & Mackenzie, 2015; Linn & Hemmer, 2011; Rodriguez & Rodriguez, 2017). The more chronic the disciplinary actions, the greater the impact was on the student's LRE placement without notifying the student's family or formally reporting the LRE impact to the SEA or other reporting agencies, such as the Office of Civil Rights (OCR). Tier 2 intervention, ELD services, and undocumented disciplinary procedures became unmonitored services for students with dis/abilities on their LRE. It took time away from the general education learning environment, exposure to grade-level content standards, socialization with peers, understanding social norms, developing academic and social

vocabulary, and preparing students for college-level or adult-level readiness (Cooc & Kiru, 2018; Fergus, 2017, Rodrigues & Rodriguez, 2017; Sprague, 2018).

When a disproportionate number of CLDS were placed into special education programming due to a lack of understanding of cultural norms, language development, or the impact of economic distress and trauma, a disservice is provided to students, families, and communities by creating an alternate form of segregation (Fergus, 2017; Annamma et al., 2018). Students were removed from their grade level peers when they needed them to develop academic and conversational language skills, social skills, academic content knowledge, and motivation to continue to pursue academic and career goals (Fergus, 2017). In accordance with IDEIA (2016), Colorado's Exceptional Children's Education Act (2016) adopted state-level policies to meet compliance regulations with the significant disproportionality policies in IDIEA (2016). Colorado State Legislatures adopted minimum requirements to monitor, evaluate, and enforce student LRE placement criteria in the risk ratio calculations for significant disproportionality (IDIEA, 2016; Colorado 2016; Colorado, 2020). Through the minimum monitoring and enforcement requirements for student LRE placement in the risk ratio calculations for significant disproportionality, several CLDS identified in special education went unmonitored for disproportionate identification in special education and special education categories (Ahram et al., 2011; Fergus, 2017). The lack of monitoring and reporting of CLDS in special education for all LRE placement categories prevented many of these students

from accessing the same rigorous academic standards as their general education peers and placed them in the losing end of the Colorado (2016) policy adoption of IDEIA (2016).

For this study, disproportionate underrepresentation and overrepresentation was connected to the policies adopted by the Colorado legislators and stakeholders to manage significant disproportionality in Colorado's LEAs and to maintain compliance with the amendment to IDEIA (2016). I focused on Colorado's policy of disproportionality as it pertained to 1) the ability to monitor CLDS and their LRE placement; 2) the ability to monitor student placement; 3) the protection of CLDS receiving special education services; and 4) availability of resources for CLDS as a construct for "winners" and "losers". The representation of CLDS was not intended to infer the proper or improper identification and labeling of students who did or did not have a dis/ability as it was determined by the IEP teams in the LEAs based upon gender, race/ethnicity, or linguistic development.

Summary of Findings

I obtained secondary data from the Colorado Department of Education through the Colorado Open Records Act (CORA) for descriptive data from 188 local education agencies (LEAs), which includes 112 Administrative Units (AUs) across the state of Colorado. School districts that do not have the resources to provide partial or total services to students who require special education services outsource and/or insource services through the Boards of Cooperative Educational Services (BOCES). The AUs, which include school districts, BOCES, and the State Charter School Institute that

provides special education services to qualifying students, encompasses the 112 reporting entities in the state of Colorado (Case Text, 2015; Colorado Department of Education, 2020). My findings were based on the OR formula as defined by the amendment to the IDEIA (2016) and the Risk Difference between the OR Definition 1 and the OR Definition 2. I calculated the odds ratio for each of two LRE Definitions for each of the CLD groups across eight out of the 13 special education categories used to support students in kindergarten through 12th grade. LRE Definition 1 included students identified with a dis/ability placed in the least restrictive environment (LRE) less than 40% of their time. The remaining time these students learned in the general education environment with their peers or placed in an alternative learning setting. LRE Definition 2 included students with a dis/ability placed in an LRE of 40% and greater in the general education environment with their peers.

Research Question One

What do the statistical trends reveal about the disproportionality of CLDS in special education in Colorado using an odds ratio that defines a student's LRE status whose time learning in general education classrooms is 40% and greater?

IDEIA (2016) provided the power of flexibility to SEAs in deciding the minimum requirement of student LRE placement status, which was identified in the student's individualized education plan (IEP). Stakeholders and legislators in Colorado determined that the calculation of the odds ratio (OR) must include only the minimum requirement as mandated in IDEIA (2016) of less than 40% in the general education environment and

alternate school settings. CLDS representation in the 40% and higher categories of LRE placement were left out of calculation and definition which resulted in an inaccurate picture of disproportionate representation of CLDS in special education to the community, reporting agencies, and resources.

Suppressed or missing data affected my ability to calculate the OR for the special education categories of Autism, Developmental Delay, Intellectual Dis/ability, Multiple Dis/abilities, Other Health Impairment, Serious Emotional Dis/ability, Specific Learning Dis/ability, and Speech/Language Impairment for some CLD groups. To protect student privacy, the Colorado Department of Education suppressed student reporting for any AU with student numbers less than sixteen. In these situations, the median OR for the definition and/or CLD variable and the resulting difference were unattainable due to missing data. I chose to calculate the median OR over the mean OR due to the amount of missing and suppressed data. The median OR provided a more reliable state representation of OR for each variable in each category. I calculated the Median OR for each special education category in each CLD group across each LRE Definition to avoid unreliable data. I explored the Median OR data across 112 reporting AUs in Colorado.

Discussion. Students reported as English Learners identified with a dis/ability remain unreported to OSEP, COPPA, and other agencies. Students reported as EL and students reported as Black/African American with an identification of Intellectual Dis/ability had the greatest likelihood overrepresentation compared to all other CLD groups. There was no policy monitoring the amount of time ELs with a dis/ability were

removed from the general education environment (Ahram et al., 2011; Colorado 2016; Fergus, 2017; IDEIA, 2016), and therefore no protection under IDEIA (2016). Students reported as EL were the least likely to have their data monitored, have their overrepresentation corrected, or addressed through talking points with the AU.

The Creation of Winners and Losers. Colorado legislators and policymakers determined that by following the minimum guidelines from IDEIA (2016) and ensuring that Colorado was compliant with IDEIA (2016) policies, the inequities of the public school system would be addressed (Voulgarides, 2018). SEA and LEA policies were designed to meet the minimum IDEA (2016) criteria to reduce or eliminate CLD disproportionate overrepresentation in special education and special education categories. The concept of meeting IDEIA's (2016) minimum standards in the LRE flexibility as an achievement was shortsighted. Students who identified as CLD were placed into special education programming and removed from their general education and neuro-typical peers without thought to the consequence of the educational, academic, emotional, behavioral, social, or economic impact it would have on the students pulled out of the general education environment (Voulgarides, 2018). Students who were reported as White and students who were reported as English Speaking had a greater likelihood of being underrepresented in most special education categories. These students spent more time in the general education classroom environment. The lack of reporting criteria exacerbated racial and linguistic disparities for students who identified as CLD

(Annamma et al, 2018; Cooper et al., 2016; Dunn, 1968; *Hobson v Hansen*, 1967; Leonardo & Broderick, 2011).

IDEIA (2016) set regulations to improve equity for students reported as CLD identified with a dis/ability. The numerical regulations within IDEIA (2016) to ensure equity set constraints on monitoring disproportionality. These regulations required LEAs to identify all possible students with dis/abilities regardless of the increased disproportionality placed upon the LEAs and CDE, which created a bureaucratic "Catch-22" paradox (Artiles, 2013; Sullivan & Osher, 2019). Colorado depended upon stakeholder meetings to choose the flexibility rules within IDEIA (2016) to ensure student equity and achieve success within the standards set within IDEIA (2016; Colorado Department of Education, 2016, 2020). Colorado stakeholders had a vested interest in holding Colorado LEAs to the minimum flexibility standards. Students needed to be protected from segregation across LRE settings.

Research Question Two

What is the difference in the disproportionality of CLDS in special education between an OR that defines a student's LRE status of 40% and greater compared to an Odds Ratio that defines a student's LRE status of less than 40% in general education classrooms in each special education category in Colorado?

I found that students reported as Hispanic/Latinx were less likely to be placed in an LRE of 40% or greater than an LRE of less than 40% or alternate school letting in three out of the eight special education categories. In other words, they were more likely

to be placed in an LRE of 40 % or higher than and LRE of less than 40% or alternate setting in five out of the eight special education categories (see Appendix D, Table D3). These students were disproportionately overrepresented in the special education categories of Developmental Delay, Intellectual Dis/ability, and Specific Learning Dis/ability. They were disproportionately underrepresented in the special education categories of Autism, Other Health Impairment, and Serious Emotional Dis/ability.

Students reported as Two or More Races were less likely to be placed in an LRE of 40% or greater than an LRE of less than 40% or alternate school setting in four out of the eight special education categories. They were more likely to be placed in an LRE of 40% or greater than an LRE of less than 40% or alternate setting in two out of the eight special education categories (see Appendix D, Table D6). These students were disproportionately overrepresented in the special education categories of Autism, Other Health Impairment, and Serious Emotional Dis/ability. They were disproportionately underrepresented in the special education categories of Intellectual Dis/ability, and Specific Learning Dis/ability. There was equitable proportionality in the special education categories of Developmental Delay, Multiple Dis/abilities, and Speech/Language Impairment.

I found students reported as Black/African American with a dis/ability were less likely be placed in an LRE of 40% or greater than an LRE less than 40% or alternate setting in seven out of the eight special education categories (see Appendix D, Table D2). They were disproportionately underrepresented in the special education categories of

Autism and Speech/Language Impairment. This group of students was disproportionately overrepresented in the special education categories of Developmental Delay, Intellectual Dis/ability, Multiple Dis/abilities, Other Health Impairment, Serious Emotional Dis/abilities, and Specific Learning Dis/ability.

Overall, students reported as White identified with a dis/ability were more likely to be placed in an LRE of 40% or greater than an LRE of less than 40% or alternate school setting than any other CLD group (see Appendix D, Table D7). This group of students was disproportionately overrepresented in the special education categories of Autism, Other Health Impairment, and Serious Emotional Dis/ability. They were disproportionately underrepresented in the special education categories of Developmental Delay, Intellectual Dis/ability, Multiple Dis/abilities, and Specific Learning Dis/ability. There was a proportionate representation in the special education category of Speech/Language Impairment.

I found that students reported as EL were less likely to be placed in an LRE of 40% or greater than an LRE of less than 40% or alternate setting in four out of the eight special education categories. They were more likely to be placed in an LRE of 40% or greater than an LRE of less than 40% or alternate setting in three out of the eight special education categories (see Appendix D, Table D8). This group of students was disproportionately overrepresented in the special education categories of Developmental Delay, Intellectual Dis/ability, Multiple Dis/abilities, and Specific Learning Dis/ability. They were disproportionately underrepresented in the special education categories of

Other Health Impairment and Serious Emotional Dis/ability. There was a proportionate representation in the special education category of Speech/Language Impairment.

Students reported as English Speaking were less likely to be placed in an LRE of 40% or greater than an LRE of less than 40% or alternate setting in four out of the eight special education categories. They were more likely to be placed in an LRE of 40% or greater than LRE of less than 40% or alternate setting in four out of the eight special education categories (see Appendix D, Table D9). They were disproportionately overrepresented in the special education categories of Other Health Impairment and Serious Emotional Dis/ability. They were disproportionately underrepresented in the special education categories of Developmental Delay, Intellectual Dis/ability, Multiple Dis/abilities, and Specific Learning Dis/ability. There was a proportionate representation in the special education category of Speech/Language Impairment.

Discussion. For more than 60 years, researchers have been tracking segregation and inequity in education through overrepresentation of CLDS placed in special education (Annamma et al., 2018; Connor et al., 2016; Dunn, 1968). Colorado policymakers concluded that by reporting the representation of CLDS in special education placed in LRE Definition 1, adequate information would be reported to OSEP, OCR, and COPPA. I explored the difference in disproportionality of CLDS in special education categories between LRE Definition 1 and LRE Definition 2.

Regardless of whether the Risk Difference demonstrated a higher or lower risk of placement in LRE Definition 2, the entire picture of student placement could not be

answered through Risk Difference alone. Students reported as White were more likely to be placed in an LRE of 40% or greater in most special education categories than in an LRE of less than 40% or alternate setting, (i.e. Developmental Delay, Intellectual Dis/ability, and Multiple Dis/abilities). Even though this phenomenon brought these students closer to a proportionate representation, they remained disproportionately underrepresented in these same categories. Students reported as EL were less likely to be placed in an LRE of 40% or greater in the special education categories of Intellectual Dis/ability and Multiple Dis/abilities. Even though these students were moving closer to a proportionate representation, they remained disproportionately overrepresented in these same categories.

The overall Risk Difference indicated that there was more proportionate representation for some special education categories in many CLD groups. In some areas where disproportionate underrepresentation already existed in the LRE of less than 40% or alternate setting, the disproportionate underrepresentation of that group for the special education category improved in the LRE of 40% or greater. This means that the students were more likely to be placed in an LRE of less than 40% or alternate setting with higher-level segregation from their grade level peers than in an LRE of 40% or greater with a more inclusive environment, even though disproportionate underrepresentation persisted. Regardless of placement, this group of students within specific categories were less likely to be identified for services than their CLD peers. The continued over-and under-representation was not consistent across LRE Definitions in any special education

category or CLD group. Representation either moved higher or lower from LRE Definition 1 to LRE Definition 2. In accordance with IDEIA (2004, 2016) all students with a dis/ability must be identified to ensure access to the general education curriculum (Artiles, 2013; Sullivan & Osher, 2019; IDEIA 2004, 2016). A disproportionate underrepresentation indicated a lack of resources, power, and knowledge for CLDS, which cultivated a foundation for the non-dominant members of society to lose out on potential success (Young & Diem, 2017).

Although Risk Difference was misleading when used alone in determining the difference between placement of LRE Definition 1 and LRE Definition 2, this would be a helpful indicator in identifying the movement of disproportionality from year to year. The use of Risk Difference in identifying the difference of disproportionality between the placement of LRE Definition 1 and LRE Definition 2 without the context of the initial levels of proportionality in each definition was not beneficial. Within the context of proportionality, Risk Difference provided valuable information as to whether there was a higher or lower risk of disproportionality in LRE Definition 1 over LRE Definition 2. There was absence of information due to the innate loopholes of undocumented removal from the classroom (Annamma et al, 2018; Cooper et al., 2016; Dunn, 1968; *Hobson v Hansen*, 1967; Leonardo & Broderick, 2011). Students were removed from the general education environment due to disciplinary reasons, Tier 2 interventions, instruction in the back of the room, EL services, etc. without documentation through their LRE statement (Annamma et al, 2018; Cooper et al., 2016; Dunn, 1968; *Hobson v Hansen*, 1967;

Leonardo & Broderick, 2011). This would have impacted their placement on the LRE Definition and the level of disproportionality.

Even though there was a lower risk of disproportionality in LRE Definition 2 for CLDS in many special education categories, CLDS were still disproportionately placed in LRE Definition 2 in many special education categories through either over-or under-representation. The changes in the policy set forth by policies that led up to the amendment in IDEIA (2016) and adopted by Colorado (2016) were celebrated as a success toward equity by advocacy groups across the United States (MacMillan et al., 1988). The disproportionate overrepresentation of CLDS in special education resulted in consequences that affected the students and community the SEA failed to address through rigorous standards within the state policy (Becker & Deris, 2019; *PACE v. Hannon*, 1980; Sullivan & Osher, 2019; Yell & Yell, 2010). The lack of monitoring and reporting the true data of students outside of the general education environment led to a lack of available resources for all CLDS.

The Creation of Winners and Losers. The missing and suppressed data prevented the calculation for the Risk Difference in many categories for most CLD groups. The inability to gather the data transparently at a state-level prevented my ability to accurately calculate the OR and, consequently, the Risk Difference.

Student data needed to be protected. Through CORA requests I sent out, there were no reasons for student privacy to be breached. Suppose the policy was to be changed to encompass greater transparency to COPPA, OSEP, and OCR. In that case, the

policy changes could benefit students who remained unmonitored or underreported due to missing or suppressed data. This underreported, suppressed, or unmonitored data provided an additional barrier for CLDS across Colorado. Without adequate information reporting the level of proportionality in the LEAs, the resources needed for the CLDS in these LEAs remained unknown, which resulted in the dependence on resources for the group they had data on, the dominant White, English Speaking members. Every student should be considered valuable. No student should be lost through an antiquated system that deems bureaucratic systems as more valuable than the students it was designed to serve and protect.

The concept of providing "appropriate" education to meet the needs of students has been a justification for special education placement and education in separate school environments since the 1900s (Annamma et al., 2018; Cooper et al., 2016; Dunn, 1968; *Hobson v. Hansen*, 1967; Leonardo & Broderick, 2011). Separate education environments continued to exist through special education programming, targeted interventions, pull-out EL services, and disciplinary practices. These undocumented practices and interventions provided an inaccurate picture of improvement toward reducing disproportionate representation. The loopholes created by the policy reduced the amount resources available to CLDS in the general classroom across Colorado by encouraging more students to remain outside of the general education environment.

Implications

The Equal Education Opportunity Act of 1974 and the Education for All Handicapped Children Act of 1975 responded to investigations and court cases to provide an equal education for all students. Despite the attempts to use policies to provide equity within the education system, segregation continued to persist within the education system (Annamma et al., 2018; Cooper et al., 2016). With the implementation of the policies to address significant disproportionality in the amendment to IDEIA (2016), there was hope to reduce significant disproportionality in Colorado. Colorado policymakers and stakeholders held it a success that Colorado's level of disproportionality was reducing over time (Colorado Department of Education, 2020). By enacting legislation that addressed only the minimum standards of IDEIA (2016), Colorado legislators and stakeholders mislead OCR, OSEP, and the Colorado community into believing that the level of disproportionate overrepresentation was lower than reported and that the level of disproportionality was improving. Colorado legislators and stakeholders celebrated success in equity for the CLD population, where equity gaps continued to persist.

Overrepresentation continued to persist across LRE Definitions, CLD groups, and special education categories. The minimum LRE flexibility policy Colorado legislators and stakeholders determined was best for Colorado only benefitted the teachers, educational leaders, and district-level leaders. The primary stakeholders and CLD community were the people that did not benefit from the LRE flexibility policy decision. With the lack of accountability, the continued student labeling fed into the individual

stigma that affected the students academically, emotionally, behaviorally, and economically beyond the public school system (Annamma et al., 2018; Fergus, 2017).

IDEIA (2004) and its subsequent amendments (2011, 2016) focused on identifying and correcting the overrepresentation of ethnic and racial groups in special education and special education categories. The consequence of underrepresentation of ethnic and racial groups, let alone linguistic underrepresentation, was not addressed as a concern for equity. CLD groups who were disproportionately underrepresented in special education may not have received services in the general education classroom or interventions to provide them with the academic supports needed to succeed in the general education classroom (Artiles, 2013). Underrepresentation was prevalent throughout CLD groups, LRE Definitions, and special education categories. As I interpreted the data, additional questions presented themselves regarding the underrepresented CLDS students (Artiles, 2013; Becker & Deris, 2019; Sullivan & Osher, 2019). Students who were underrepresented in both LRE Definitions indicated that CLD groups were less likely to receive interventions or supports needed to learn to adapt to their dis/ability (Fergus, 2017). Whether the student groups were disproportionately overrepresented or underrepresented, the stereotypes involved through cultural perceptions affected the appropriateness of instructional and community resources available (Becker & Deris, 2019; Fergus, 2017; Sullivan & Osher, 2019). Students reported as Asian/Asian American were disproportionately underrepresented in special education. It was unclear whether the underrepresentation was due to teacher

perception, lack of cultural awareness, lack of cultural representation, or parental resistance. Additional research is recommended to analyze teacher, parent, student, and community perspectives of underrepresentation in special education.

Under IDEIA (2004, 2011, 2016), EL is not recognized as a demographic population to monitor or report under significant disproportionality. SEAs have not been held accountable for over-or under-representation for students reported as EL. The data demonstrated that students reported as EL were overrepresented in both LRE placement definitions. Students reported as EL in Colorado were three times more likely to be identified with an intellectual dis/ability and placed in LRE Definition 1 than their English Speaking peers. This data went unreported to OCR, OSEP, and the Colorado community. The lack of reporting these students to OCR, OSEP, and the Colorado Community prevented additional resources in the form of bilingual special educators, education, training, professional development, and curriculum to be made available to the LEAs. The continuity of inequity between the English Speaking community and the EL community reinforced an imbalance of power and privilege where the non-dominant members of society was hidden and silenced (Young & Diem, 2017).

The lack of data was an additional, yet unexpected finding. Suppressed, missing, and unreported data impacted my findings. For example, students reported as Pacific Islander/Native Hawaiian had the least amount of information reported. Data managers at the Colorado Department of Education (2021) suppressed any student data where the number of students were less than 16. In a society where every student counted, up to 15

students in many LEAs across Colorado in CLD groups identified with a dis/ability did not count. The consequence of the reporting data resulted in resources being allocated to the White dominant group (Diem, 2014; Young & Diem, 2017). Students of the suppressed data group lost valuable resources due to this policy (Diem, 2014; Young & Diem, 2017).

The amendment to IDEIA (2016) requires that all students with a dis/ability must be provided with reasonable services through an IEP, regardless of disproportionality. The double-bind, or Catch-22 policy, within IDEIA (2016) addressed significant disproportionality that mandated a reallocation of funding to early interventions when an LEA was significantly disproportionate and could not reasonably reduce the disproportionality within their LEA (Sullivan & Osher, 2019). IDEIA (2016) guided SEAs and LEAs to identify all students with a dis/ability regardless of the students' CLD status and guided that if they exceed proportionality limits, they would be subject to penalties. Colorado stakeholders have the LEAs' best interest at heart. With appearance of significant disproportionate representation, as defined by Colorado (2016), 15% of the LEAs' special education funding would be reallocated to early intervention and preventative programming (IDEIA, 2016). The state of Colorado and the LEAs were pulled in multiple directions to support students identified with a dis/ability. Resources were regularly at risk of being removed or reallocated by failing to comply with both policies.

Recommendations

CLDS in Colorado were disproportionately overrepresented in most special education categories. Students placed in LRE Definition 2 were left unaccounted for, where a disproportionate overrepresentation continued to remain 1.5 to 2.5 times more likely than their peers. Students reported as EL with a dis/ability remained unmonitored and unreported as their levels of disproportionate overrepresentation exceeded 3.0 times their English Speaking peers. The state-level policy perpetuated the power and distribution of resources to the dominant members of the community. The policies adopted by the Exceptional Children's Education Act (2016) enabled disproportionality within the LEAs by overlooking undocumented classroom removal practices, underestimating the monitoring and reporting criteria, and overlooking non-dominant groups within the Colorado community.

Closing the Loophole: Documenting Classroom Removal. Student removal from the classroom environment would have added time to the LRE, yet this time remained undocumented. Whether the students were pulled out of the classroom for EL services, Tier 2 interventions, additional services, behavioral interventions, or disciplinary practices, time spent out of the classrooms remained undocumented and would have affected these findings (Fergus, 2017; *Lee v. Lee County Board of Education*, 2007). Students placed in LRE Definition 2 continued to receive unreported additional services outside of the general education classroom in addition to the services in their IEP (Fergus, 2017; Linn & Hemmer, 2011).

Two questions remain: “How much time are the students in LRE Definition 2 really spending in the general education classroom? How many of these students qualify for placement in LRE Definition 1?” IDEIA (2016) compliance should be the baseline of which the SEA and LEA should not fall short, not the state-level standard. Policymakers should address the needs of all students by addressing the standards that go above and beyond the minimum requirements of IDEIA (2016). By reporting all CLDS with a dis/ability in special categories, SEAs would be more likely to identify the necessary resources to improve the level of success for CLDS with a dis/ability.

Closing the Loophole: Monitoring and Reporting Criteria. Colorado stakeholders and legislators should update the monitoring and reporting criteria for underrepresentation for students in all categories. Underrepresentation could be an indicator of a lack of focus on CLDS in certain schools or communities. All students need to know they are essential and that their education is valuable. By focusing on CLD equity, Colorado can remove the barriers of systemic racism within the public education system.

Colorado stakeholders and legislators need to update the monitoring and reporting criteria to include the LRE Definition 2, encompassing all students identified in special education. Advocates will be able to monitor the representation of CLD in speciation based upon more than just LRE. CLDS will be protected from the negative emotional impact, lack of cultural responsiveness, disproportionate representation, negative self-image, negative cultural image, pseudo-academic instruction, and a system that

encourages them to fail. Students will be provided with inclusive instruction and interventions, exposure to rigorous academic standards, higher graduation rates, a chance for economic success, and opportunities to support their community as a leader.

Closing the Loophole: Update State-Level Policy. Updated state-level policy needs to address students who report as EL and identified with a dis/ability. CDE and their LEAs need to start monitoring the disproportionate representation of students reported as EL in special education. Action plans need to be put into place for the LEAs who have a significant disproportionate representation for their students reported as EL in special education and in the specific special education categories. State-level policy needs to reflect the community of Colorado, which encompasses the diverse linguistic population in Colorado's rural, urban, and suburban communities.

Suppressed data, missing data, and unreported data contributed to an alternate form of inequity. Students that remained unaccounted for would not have resources available that they needed. By not allowing representation of a non-dominant group of society, Colorado policy has perpetuated the inequity of these non-dominant members. Colorado policy needs to be updated to allow an alternate form of data collection, which ensures student privacy, yet allows educators, researchers, and leaders access to the data they need to ensure resources are available for all members of society, not just the dominant members. Where suppression cannot be avoided, resources should not be allocated based upon the White dominant class.

Chapter Summary

Students needed regular policy protections at the local, state, and federal levels. Disproportionate over-and under-representation in special education continued to be pervasive across LRE Definitions. The diverse populations within Colorado's rural, urban, and suburban communities demanded a vast array of resources to ensure that all students could succeed. The policies within Colorado's Exceptional Children's Education Act (2016) should have reflected the diverse needs of Colorado's diverse student population, rather than catering to the dominant members of society. State-level policy should be updated to reflect current populations and practices. Reporting criteria should include all students in all LRE Definitions, rather than the smallest populated LRE Definition. State-level policy should also be updated to reflect the practices of classroom removal allowing accurate LRE data. Suppression of data needs to be updated and rethought to ensure resources are allocated to reflect all cultures in Colorado. The monitoring and reporting of EL students in special education would provide the data Colorado needed to support students reported as EL with a dis/ability in the public schools. Through the adoption of the flexibility rule, use of suppressed data, covering up data for students reported as EL and students pulled out of the classroom, Colorado's policy set up a foundation of "winners" for the White, English Speaking dominant students, and "losers" for the culturally and linguistically diverse students with a dis/ability within the public education system.

References

Abram, R., Fergus, E., & Noguera, P. (2011). Addressing racial/ethnic disproportionality in special education: Case studies of suburban school districts. *Teachers College Record, 113*(10), 2233-2266. http://www.tcrecord.org.du.idm.oclc.org/library/content.asp?contentid=16432

Albrecht, S. F., Skibi, R. J., Losen, D. J., Chung, C. G., Middelberg, L. (2012). Federal policy on disproportionality in special education: Is it moving us forward? *Journal of Disability Policy Studies, 23* (1), 14-25. https//doi.org/10.1177/1044207311407917

Americans with Disabilities Act, 42 U.S.C. § 12101 (1990). https://www.ada.gov/pubs/adastatute08.htm

Anderson-Irish, N. (2013). The over identification of minority males in middle school special education programs: Examining the RTI model. *Journal of American Academy of Special Education Professional, Win*63-72. https://files.eric.ed.gov/fulltext/EJ1135565.pdf

Annamma, S. A., Connor, D., & Ferri, B. (2013). Dis/ability critical race studies (DisCrit): Theorizing at the intersections of race and dis/ability. *Race Ethnicity and Education, 16*(1), 1-31. https://doi.org/10.1080/13613324.2012.730511

Annamma, S. A., Ferri, B. A., & Connor, D. J. (2018). Disability critical race theory: Exploring the intersectional lineage, emergence, and potential futures of discrit in

education. *Review of Research in Education, 42*, 46-71. https://doi:10.3102/0091732X18759041

Apple, M. W. (2019). On doing critical policy analysis. *Educational Policy, 33*(1), 276-287. https://doi.org/10.1177/0895904818807307

Artiles, A. J. (2013). Untangling the racialization of disabilities: An intersectionality of critique across disability models. *Du Bois Review, 10*(2), 329-347. https://doi.org/10.1017/S1742058X13000271

Becker, G. I., & Deris, A. R. (2019). Identification of Hispanic English language learners in special education. *Educational Research International, 2019*1-9. https://doi.org/10.1155/2019/2967943

Bilingual Education Act of 1968 Pub. L. No. 90-247, 79 Stat. 55 (1968). https://www.govinfo.gov/content/pkg/STATUTE-81/pdf/STATUTE-81-Pg783.pdf#page=32

Blanchett, W. J. (2006). Disproportionate representation of African American Students in Special education: Acknowledging the role of white privilege and racism. *Educational Researcher, 35*(6), 24-28. https://doi.org/10.3102/0013189x035006024

Board of Education v. Rowley, 458 U.S. 176 (1982). https://supreme.justia.com/cases/federal/us/458/176/

Bolling v. Sharpe, 347 U.S. 497 (1954). https://supreme.justia.com/cases/federal/us/347/497/

Bollmer, J., Bethel, J., Garrison-Mogren, R., & Brauen, M. (2007). Using the risk ratio to assess racial ethnic disproportionality in special education at the school-district level. *The Journal of Special Education, 41*(3), 186-198. https://doi.org/10.1177/00224669070410030401

Brown v. Board of Education of Topeka, 347 U.S. 483 (1954). https://supreme.justia.com/cases/federal/us/347/483/

Brown v. Board of Education of Topeka, 349 U.S. 294 (1955). https://supreme.justia.com/cases/federal/us/349/294/

Children's Online Privacy Act of 1998, 15 U.S.C. 6501-6505 (1998). https://www.ftc.gov/enforcement/rules/rulemaking-regulatory-reform-proceedings/childrens-online-privacy-protection-rule

Christle, C.A., & Christle. (2010). Section 504 of the Rehabilitation Act. In T.C. Hunt, J.C. Carper, & T.J. Lasley (Eds.), *Encyclopedia of educational reform and dissent.* Sage Publications. Credo Reference: http://du.idm.oclc.org/login?url=https://search.credoreference.com/content/entry/sageerd/section_504_of_the_rehabilitation_act/0?institionld=1676

CO Rev Stat § 24-72-203 (2019). Colorado Open Records Act (CORA). https://law.justia.com/codes/colorado/2019/title-24/

Cochrane Training. (2021, January 2021). Calculating the risk ratio, odds ratio and risk difference in a randomized controlled trial [Video file]. https://www.youtube.com/watch?v=4Iq_78hNfBU

Colker, R. (2013). *Disabled education: A critical analysis of the Individuals with Disabilities Education Act*. New York Press. http://ssrncom/abstract=1974478

Colorado Department of Education. (2012). *Glossary of terms.* http://www.cde.state.co.us/sites/default/files/documents/cdesped/download/pdf/cld_glossaryarticles.pdf

Colorado Department of Education. (2013). *ECEA rules: Rules for the administration of the Exceptional Children's Educational Act.* https://www.cde.state.co.us/cdsped/index.asp

Colorado Department of Education (2017). *Significant disproportionality in Colorado - Vol. 1.* http://cde.state.co.us/cdesped/factsheet_sigdispro_vol01

Colorado Department of Education. (2017). *Significant disproportionality in special education – vol 1*. http://cde.state.co.us/cdesped/factsheet_sigdispro_vol01

Colorado Department of Education (2018). *Consolidated state plan under the every student succeeds act (ESSA).* https://www.cde.state.co.us/fedprograms/co-consolidatedstateplan-final-websitepdf

Colorado Department of Education (2018). *Significant disproportionality in special education – vol. 2.* https://www.cde.state.co.us/cdesped/factsheet_sigdispro_vol02

Colorado Department of Education. (2019). *Disability categories.* https://www.cde.state.co.us/cdesped/sd-main

Colorado Department of Education. (2019). *Significant disproportionality workbook.* https://www.cde.state.co.us/cdesped/sig_dis_pro_wkbk

Colorado Department of Education. (2020). *Colorado's definition of significant disproportionality.* http://www.cde.state.co.us/cdesped/colorado_definition2018_sigdispro

Colorado Department of Education. (2020). *Colorado educational facts and figures.* Retrieved from https://www.cde.state.co.us/communications/coeducationfactsandfigures

Colorado Department of Education. (2020). *Disability categories*. https://www.cde.state.co.us/cdesped/sd-main

Colorado Department of Education. (2020). *MTSS resources.* http://www.cde.state.co.us/mtss/resources

Colorado Department of Education. (2020). *Multi-tiered systems of supports (MTSS).* http://www.cde.state.co.us/mtss

Colorado Department of Education. (2020). *Schoolview data center*. https://edx.cde.state.co.us/SchoolView/DataCenter/reports.jspx?_adf_ctrl-state=pac20phbp_4&_afrLoop=675463759173598&_afrWindowMode=0&_adf.ctrl-state=xp0y69m3_4

Colorado Department of Education. (2020). *Significant disproportionality webinar #1 - What is significant disproportionality?* [Video file]. http://www.cde.state.co.us/cdesped/web-sig-dispo1

Colorado Department of Education. (2020). *Significant disproportionality webinar #2 - How is significant disproportionality defined, calculated, and examined in*

Colorado? - Part 1 [Video file]. http://www.cde.state.co.us/cdesped/web-sig-dispo2-1

Colorado Department of Education. (2020). *Significant disproportionality webinar #2 - How is significant disproportionality defined, calculated, and examined in Colorado? - Part 2* [Video file]. http://www.cde.state.co.us/cdesped/web-sig-dispo2-2

Colorado Department of Education. (2020). *Significant disproportionality webinar #3 - To AU directors: "How do I know if my AU has or is close to significant disproportionality?"* [Video file]. http://www.cde.state.co.us/cdesped/sig_dis_pro_web3

Colorado Department of Education. (2020). *Significant disproportionality webinar #4 - Requirements for AUs determined as significantly disproportionate* [Video file]. http://www.cde.state.co.us/cdesped/sig_dis_pro_web4

Connor, D. J., Ferri, B. A., & Annamma, S. A. (2016). *Discrit: Disability studies and critical race theory in education*. New York, NY: Teachers College Press.

Cooc, N., & Kiru, W. (2018). Disproportionality in special education: A synthesis of international research and trends. *Journal of Special Education, 52*(3), 163-173. https://doi.org/10.1177/0022466918772300

Cooper v. Aaron, 358 U.S. 1 (1958). https://supreme.justia.com/cases/federal/us/358/1/

Council of Parent Attorneys and Advocates, Inc. (2020). *COPAA: Protecting the legal and civil rights of students with disabilities and their families*. https://www.copaa.org

Council of Parent Attorneys and Advocates, Inc. (COPAA) v. DeVos et al, No. 1:2018cv01636 – Document 31 (D.D.C. 2019). https://law.justia.com/cases/federal/district-courts/district-of-columbia/dcdce/1:2018cv01636/198455/31/

Crawford v. Honig, 37 F.3d 485 (9th Cir. 1995). https://law.justia.com/cases/federal/appellate-courts/F3/37/485/509223/

Diana v. State Board of Education, No. C-70-37 RFP (N.D.Cal. 1970). https://lawaspect.com/diana-vs-state-board-of-education-1970/

Diem, S., Young, M. D., Welton, A. D., Mansfield, K. C., & Lee, P. (2014). The intellectual landscape of critical policy analysis. *International Journal of Qualitative Studies in Education, 27*(9), 1068-1090. https://doi.org/10.1080/09518398.2017.916007

Dunn, L. M. (1968). Special education for the mildly retarded – Is much of it justifiable? *Exceptional Children, 35*(1), 5-22. https://doi.org/10.1177/001440296803500101

Education for All Handicapped Students Act of 1975, Pub. L. No. 94-142, 89 Stat. 773 (1975). https://www.govinfo.gov/content/pkg/STATUTE-89/pdf/STATUTE-89-Pg773.pdf

Education for All Handicapped Children Act. (2006). In A.W. Lerner, B.W. Lerner, & K.L. Lerner (Eds.), *Human and Civil Rights: Essential Primary Sources* (p. 459-462). Gale: https://link-gale-com.du.idm.oclc.org/apps/doc/CX2560000165/GVRL?u=udenver&sid=GVRL&xid=41018b63

Elementary and Secondary Act of 1965, Pub. L. No. 89-10, 64 Stat. 1100 (1965). https://www.govinfo.gov/content/pkg/STATUTE-79/pdf/STATUTE-79-Pg27.pdf#page=1

Endrew v. Douglas County School District RE-1, 580 U.S. (2017). https://supreme.justia.com/cases/federal/us/580/15-827/

Every Student Succeeds Act, 20 U.S.C. § 6301 (2015). https://www.congress.gov/114/plaw/publ195/PLAW-114pub195.pdf

Exceptional Children's Education Act, 1 C.C.R. § 301-8 (2016). https://www.sos.state.co.us/CCR/GenerateRulePdf.do?ruleVersionId=6624&fileName=1%20CCR%20301-8

Farnsworth, M., & Mackenzie, J. Z. (2015). What inclusive dispositions contribute to culturally linguistically diverse exceptional students' success. *International Journal of Special Education, 30*(3), 52-70. https://eric.ed.gov/?id=EJ1094963

Fergus, E. (2017). *Solving disproportionality and achieving equity: A leader's guide to using data to change hearts and minds*. Thousand Oaks, CA: Corwin.

Fowler, F. C. (2013). *Policy studies for educational leaders* (4 ed.). Upper Saddle River, NJ: Pearson.

Goss v. Lopez, 419 U.S. 565 (1975). https://supreme.justia.com/cases/federal/us/419/565/

Griffin v. School Board of Prince Edward County, 377 U.S. 218 (1964). https://supreme.justia.com/cases/federal/us/377/218/

Grindal, T., Schifter, L. A., Schwartz, G., & Hehir, T. (2019). Racial differences in special education identification and placement: Evidence across three states. *Harvard Educational Review, 89*(4), 525-553. https://doi.org/10.17763/1943-5045-89.4.525

Guadalupe Org., Inc. v. Tempe Elementary School, 587 F.2d 1022 (9th Cir. 1978). https://casetext.com/case/guadalupe-org-inc-v-tempe-elem-school

Harris, C. I. (1993). Whiteness as property. *Harvard Law Review, 106*(8), 1707-1791. https://doi.org/10.2307/1341787

Hobson v. Hansen, 269 F.Supp. 401 (D.D.C. 1967). https://law.justia.com/cases/federal/district-courts/FSupp/269/401/1800940/

Hurwitz, S., Rodriguiz, N., & Dixon, A. (2020). Who are the students with disabilities?: Identification, nondiscriminatory evaluation, and eligibility. In J. A. Rodriguez & W. W. Murawski (Eds.), *Special education law and policy: From foundation to application* (pp. 195-224). Plural Publishing Inc.

Individuals with Disabilities Act Amendments of 1997, 20 U.S.C. § 1400 et seq. (1997). https://www2.ed.gov/policy/speced/leg/idea/idea.pdf

Individuals with Disabilities Improvement Education Act of 2004, 20 U.S.C. §1400 et seq. (2004). http://www.p12.nysed.gov/specialed/idea/108-446.pdf

Individuals with Disabilities Education Improvement Act of 2004. (2004). *Pub. L. No. 108-446.*

Individuals with Disabilities Improvement Education Act Amendment of 2016: Assistance to States for the Education of Children with Disabilities, 34 C.F.R. §300 (2016). https://sites.ed.gov/idea/files/20161219-Part_B_final_regulations.pdf

Individuals with Disabilities Improvement Education Act Amendment of 2016: Assistance to States for the Education of Children with Disabilities, 34 C.F.R. §300 (2016). https://sites.ed.gov/idea/files/20161219-Part_B_final_regulations.pdf

King Thorious, K. A., Maxcy, B. D. (2015). Critical practice analysis of special education policy: An RTI example. *Remedial and Special Education, 36(2),* 116-124.

Ladson-Billings, G. (1998). Just what is critical race theory and what's it doing in a nice field like education? *International Journal of Qualitative Studies in Education, 11*(1), 7-24. https://doi.org/10.1080/095183998236863

Ladson-Billings, G. (2014). Culturally relevant pedagogy 2.0: a.k.a. the remix. *Harvard Educational Review, 84*(1), 74-84. https://doi.org/10.17763/haer.84.1p2rj131485484751

Larry P. v. Riles, 343 F.Supp. 1306 (N.D. Cal. 1972). https://law.justia.com/cases/federal/district-courts/FSupp/343/1306/1691183/

Larry P. v. Riles, 495 F.Supp. 926 (N.D. Cal. 1979). https://law.justia.com/cases/federal/district-courts/FSupp/495/926/2007878/

Larry P. v. Riles, 793 F.2d 969 (9th Cir. 1986). https://law.justia.com/cases/federal/appellate-courts/F2/793/969/119286/

Lash, M., & Ratcliff, M. (2014). The journey of an African American teacher before and after Brown v. Board of Education. *The Journal of Negro Education, 83*(3), 327-337. https://doi.org/10.7709/jnegroueducation.83.3.0327

Lau v. Nichols, 414 U.S. 563 (1974). https://supreme.justia.com/cases/federal/us/414/563/

Lee v. Lee County Board of Education, 476 F.Supp.2d 1356 (M.D. Alabama 2007). https://www.leagle.com/decision/20071832476fsupp2d135611705

Leonardo, Z. & Broderick, A. A. (2011). Smartness as property: A critical exploration of intersections between whiteness and disability studies. *Teachers College Record, 113*(10), 2206-2232. http://www.tcrecord.org.du.idm.oclc.org/library/content.asp?contentid=16431

Linn, D., & Hemmer, L. (2011). English language learner disproportionality in special education: Implications for the scholar-practitioner. *Journal of Educational Research and Practice, 1*(1), 70-80. https://doi.org/10.5590.JERAP.201101.1.06

MacMillan, D. L., Hendrick, I. G., & Watkins, A. V. (1988). Impact of Diana, Larry P., and P.L. 94-142 on minority students. *Exceptional Children, 54*(5), 426-432. https://doi.org/10.1177/001440298805400505

Marbury v. Madison, 5 U.S. 137 (1803). https://supreme.justia.com/cases/federal/us/5/137/

Mental Retardation Facilities and Community Mental Health Centers Construction Act of 1963, Pub. L. No. 88-164, 70 Stat. 717 (1963). https://www.govinfo.gov/content/pkg/STATUTE-77/pdf/STATUTE-77-Pg282.pdf

Mills v. Board of Education of District of Columbia, 348 F. Supp. 866 (D.C.C. 1972). https://law.justia.com/cases/federal/district-courts/FSupp/348/866/2010674/

Moran, R. (2005). Bilingual Education Act. In S. Oboler & D.J. Gonzalez (Eds.) *The Oxford encyclopedia of Latinos and Latinas in the United States.* Oxford University Press. https://www-oxfordreference-com.du.idm.oclc.org/view/10.1093/acref/9780195156003.001.0001/acref-9780195156003-e-81

National Council on Disability. (2018). IDEA series: The segregation of students with disabilities. Retrieved from: https://ncd.gov/sites/default/files/NCD_Segregation-SWD_508.pdf

Newnham, N., & LeBrecht, J. (2020). *Crip camp: A disability revolution* [Motion picture]. Netflix.

Parents in Action on Special Education (PASE) v. Hannon, 506 F.Supp. 831 (N.D. Ill. 1980). https://law.justia.com/cases/federal/district-courts/FSupp/506/831/1654128/

Pennsylvania Association of Retarded Children (PARC) v. Commonwealth of Pennsylvania, 343 F.Supp. 279 (E.D. Pa. 1972). https://law.justia.com/cases/federal/district-courts/FSupp/343/279/1691591/

Plessy v. Ferguson 163 U.S. 537 (1896). https://supreme.justia.com/cases/federal/us/163/537/

Rodriguez, A., & Rodriguez, D. (2017). English learners with learning disabilities: What is the current state? *Insights into Learning Disabilities, 14*(1), 97-112. https://files.eric.ed.gov/fulltext/EJ1165743.pdf

Rosenzweig, S. M., & Rosenzweig. (2008). Equal education opportunity act of 1974. In J.M. Gonzalez (Ed.), *Encyclopedia of bilingual education*. Sage Publications. Credo Reference: http://du.idm.oclc.org/login?url=https://search.credoreference.com/content/entry/sageble/equal_educational_opportunity_act_of_1974/0?institutionId=1676

Ryan, C. (2013). Language use in the United States: 2011. *U.S. Census Bureau,* 1-16. https://www.census.gov

Simmons on Behalf of Simmons v. Hooks, 843 F.Supp. 1296 (E.D. Ark. 1994). https://law.justia.com/cases/federal/district-courts/FSupp/843/1296/2594103/

Sleeter, C. (2010). Why is there learning disabilities? A critical analysis of the birth of the field in its social context. *Disability Studies Quarterly, 30*(2), 210-237. https://doi.org/10.18061/dsq.v30i2.1261

Smith v. Robinson 468 U.S. 992 (1984). https://supreme.justia.com/cases/federal/us/468/992/

Spatz, C. (2019). *Exploring statistics: Tales of distribution* (12 ed.). Outcrop Publishers, LLC.

Sprague, J. R. (2018). Closing in on discipline disproportionality: We need more theoretical, methodological, and procedural clarity. *School Psychology Review, 47*(2), 196-198. https://doi.org/10.17105/SPR-2018-0017.V47-2

Sullivan, A. L., & Bal, A. (2013). Disproportionality in special education: Effects of individual and school variables on disability risk. *Exceptional Children, 79*(4), 475-494. https://doi.org/10.1177/001440291307900406

Sullivan, A. L., & Osher, D. (2019). IDEA's double bind: a synthesis of disproportionality policy interpretations. *Exceptional Children, 85*(4), 395-412. https://doi.org/10.1177/0014402918818047

Turnbull, H. R., Turnbull, A. P., & Cooper, D. H. (2018). The supreme court, Endrew, and appropriate education of students with disabilities. *Exceptional Children, 84*(2), 124-140. https://doi.org/10.177/0014402917734150

United States Department of Education. (2017). *Questions and answers (Q & A) on U.S. supreme court case decision Endrew F. v. Douglas County School District Re-1*. Retrieved from https://www.ed.gov

United States Office of Special Education Programs (OSEP). (2017). *Significant disproportionality (equity in IDEA): Essential questions and answers.* Retrieved from https://www2.ed.gov/policy/speced/guid/idea/memosdcltrs/significant-disproportionality-qa-03-08-17.pdf

United States Office of Special Education and Rehabilitation Services. (2020). *U.S. Department of Education: Office of Special Education and Rehabilitation Services*. https://www2.ed.gov/about/offices/list/osers/osep/index.html

United States Constitution. (1787). U.S. Const. art I §2. https://www.senate.gov/civics/constitution_item/constitution.htm#a1_sec2

Voulgarides, C. K. (2018). *Does compliance matter in special education?: IDEA and the hidden inequities of practice.* Teachers College Press.

Wright, P. W., & Wright, P. D. (2007). History of special education law. In *Wrights' Law: Special Education Law* (2nd ed., pp. 11-16). Hartfield, VA: Harbor House Law Press, Inc. https://www.wrightslaw.com/law/art/history.spec.ed.law.htm

Yell, M. L., & Yell. (2010). Individuals with disabilities education act (IDEA). In T.C. Hunt, J. C. Carper, & T. J. Lasley (Eds.), *Encyclopedia of educational reform and dissent.* Sage Publications. Credo Reference:

http://du.idm.oclc.org/login?url=https://search.credoreference.com/content/entry/sageerd/individuals_with_disabilities_education_act_idea/0?institutional=1676

Young, M. D., & Diem, S. (2017). *Critical approaches to educational policy analysis: Moving beyond tradition*. Switzerland: Springer International Publishing. https://doi.org/10.1007/978-3-319-39643-9

Zascavage, V., & Zascavage. (2010). Elementary and secondary education act. In T.C. Hunt, J.C. Carper, & T.J. Lasley (Eds.), *Encyclopedia of educational reform and dissent.* Sage Publications. Credo Reference: http://du.idm,oclc.org/login?url=https://search.credoreference.com/content/entry/sageerd/elementary_and_secondary_education_act/0?institutionald=1676

Zirkel, P. A., & Thomas, L. B. (2010). State laws for RtI: An updated snapshot. *Teaching Exceptional Children, 42*(3), 56-63. https://doi.org/10.1177/004005991004200306

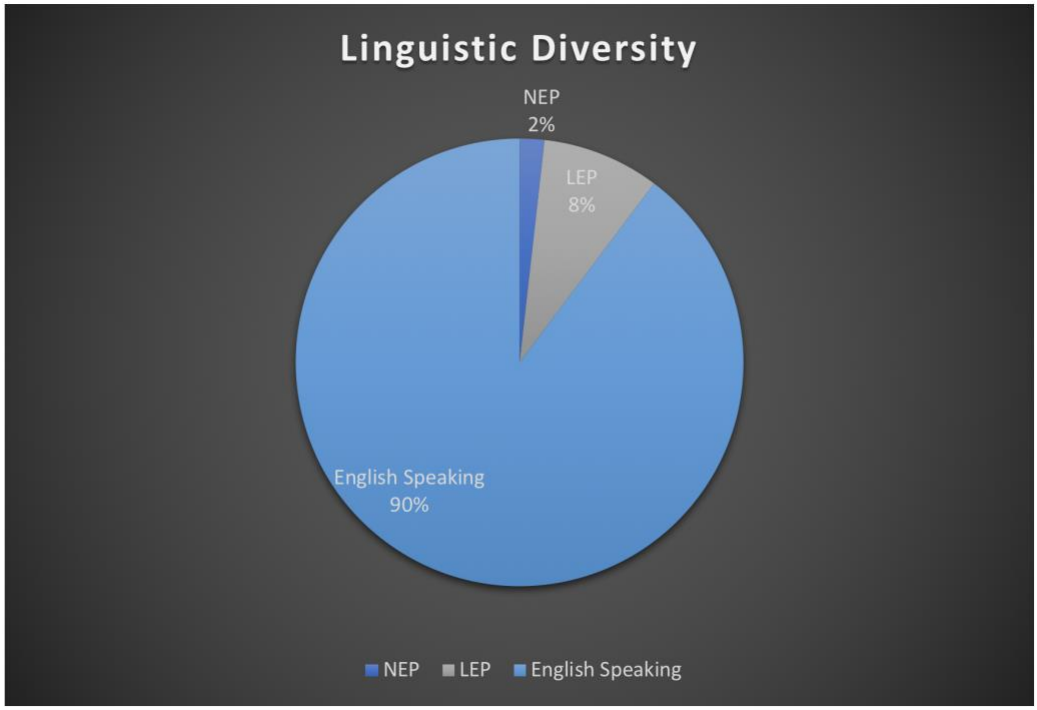
Appendix A

Table A1 ***Student Enrolment in Colorado by Cultural or Linguistic Identity***

	Latinx	White	Black	Asian	Pacific Islander	Native American	Two or More Races	NEP	LEP
Student Enrollment	309,972	483,051	41,554	29,209	2,433	6,210	40,794	16,311	77,396
% by CLD	33.9%	52.9%	4.6%	3.2%	0.3%	0.7%	4.5%	1.8%	8.5%

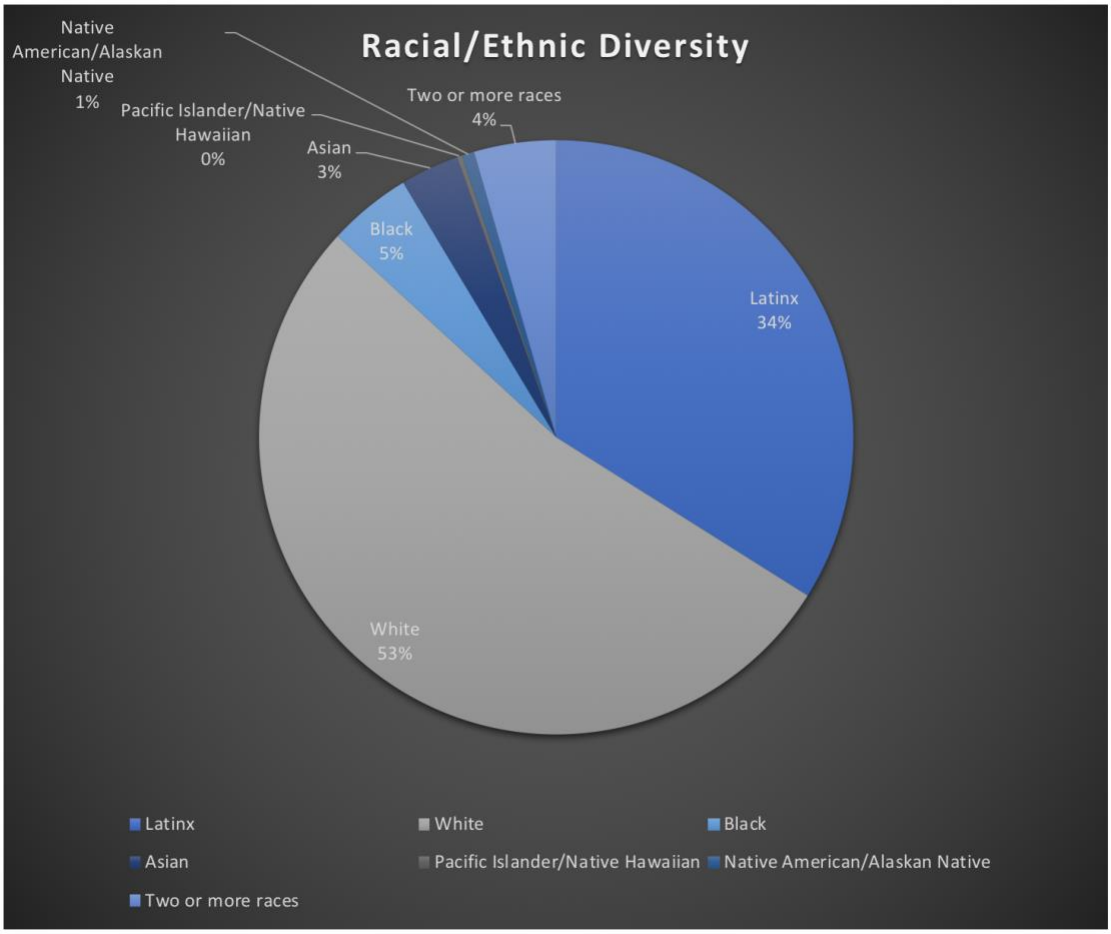
Note: Colorado Department of Education (2020)

Figure A1 ***Linguistic Diversity in Colorado***



Source: Colorado Department of Education (2020).

Figure A2 ***Racial/Ethnic Diversity in Colorado***



Source: Colorado Department of Education (2020).

Appendix B

Table B1 ***Students with Dis/abilities Count in LRE by Cultural or Linguistic Identity in Colorado***

	Latinx	White	Black	Asian	Pacific Islander	Native American	Two or More Races	NEP	LEP
Alternate Setting	752	1,498	209	58	2	29	128	129	2,547
<40%	1,961	2,073	516	149	14	48	253	935	4,085
40%-79%	5,780	6,343	917	290	27	188	608	2,36	11,417
≥ 80%	27,576	36,075	3,698	1,113	122	697	3,117	12,511	59,887
Total Count	36,069	45,995	5,340	1,610	165	962	4,106	16,311	77,936

Source: Colorado Department of Education (2020).

Appendix C

Colorado's Definition of Significant Disproportionality

Colorado's definition of significant disproportionality SY2018-19 & SY2019-20

	SY2018-19 Risk Ratio Threshold	SY2019-20 Risk Ratio Threshold		Category		Reasonable Progress	
In an AU, when children of a particular race are	4.65	2.25	times as likely to be identified as students with	disabilities	compared to their other-race peers for 3 consecutive years while meeting the minimum cell size and n-size of 10, that AU will be identified as having a significant disproportionality UNLESS the AU reduces its risk ratio for 2 consecutive years by	0.17	over a 2-year period.
	2.45	2.45		speech language impairment		0.20	
	2.92	2.92		intellectual disability		0.26	
	3.4	2.95		specific learning disability		0.26	
	3.04	3.04		other health impairment		0.28	
	3.29	3.29		autism		0.31	
	4.85	3.71		serious emotional disability		0.37	
	2.12	2.12	times as likely to be placed in	Gen Ed classroom <40%		0.16	
	3.35	3.35		Separate Setting		0.32	
	2.31	2.31	times as likely to receive	Out-of-school suspension/expulsion for ≤ 10 days		0.18	
	3.86	3.86		Out-of-school suspension/expulsion for >10 days		0.38	
	2.58	2.58		In-School Suspension ≤ 10 days		0.22	
	3	3		In-School Suspension > 10 days		0.26	
	4.05	2.99		Removed in any way		0.27	

Example: In SY2018-19, when children of a particular race in an AU are 3.4 times as likely to be identified as students with specific learning disability compared to their other-race peers for 3 previous consecutive years (SY2015-16, SY2016-17, & SY2017-18) while meeting the minimum cell-size and n-size of 10, that AU will be identified as having a significant disproportionality unless the AU reduces its risk ratio for 2 consecutive years (SY2015-16 to SY2016-17 & SY2016-17 to SY2017-18) by 0.26 over a 2-year period.

Colorado's definition of significant disproportionality SY2020-21 and on

	Risk Ratio Threshold		Category		Reasonable Progress	
In an AU, when children of a particular race are	2.08	times as likely to be identified as students with	disabilities	compared to their other-race peers for 3 consecutive years while meeting the minimum cell size and n-size of 10, that AU will be identified as having a significant disproportionality UNLESS the AU reduces its risk ratio for 2 consecutive years by	0.35	over a 2-year period.
	2.25		speech language impairment		0.41	
	2.66		intellectual disability		0.53	
	2.68		specific learning disability		0.55	
	2.77		other health impairment		0.56	
	2.98		autism spectrum disorder		0.63	
	3		serious emotional disability		0.74	
	1.97	times as likely to be placed in	GenEd <40%		0.32	
	3		Separate Setting		0.64	
	2.12	times as likely to receive	Out-of-school suspension/expulsion for ≤ 10 days		0.36	
	3		Out-of-school suspension/expulsion for >10 days		0.76	
	2.36		In-School Suspension ≤ 10 days		0.44	
	3		In-School Suspension > 10 days		0.52	
	2.71		Removed in any way		0.54	

Appendix D

Table D1 ***Median Odds Ratio and Risk Difference of Students Reported as Asian/Asian American Identified with a Dis/ability***

Special Education Category	OR Definition 1	OR Definition 2	Risk Difference	Difference
Autism	1.2891	—	—	—
Developmental Delay	—	0.6669	—	—
Intellectual Dis/ability	0.8169	0.7346	0.10344	Lower
Multiple Dis/abilities	1.0650	0.9529	0.1121	Lower
Other Health Impairment	—	0.3993	—	—
Serious Emotional Dis/ability	—	0.2680	—	—
Specific Learning Dis/ability	—	0.2497	—	—
Speech/Language Impairment	—	0.7799	—	—

Note: OR listed in each category was the median OR reported for the 112 reporting AUs. OR Definition 1 reflects students placed in the less than 40% and alternate school setting LRE. OR Definition 2 reflects students placed in the 40% and greater school setting LRE. Difference is determined through Lower, Same, or Higher as the comparison of the OR between LRE Definition 1 and LRE Definition 2. Lower indicated that placement in LRE Definition 2 was at a lower risk than placement in LRE Definition 1. Same indicated that placement in LRE Definition 2 and LRE Definition 1 was the same. Higher indicated that placement in LRE Definition 2 was at a higher risk than placement in LRE Definition 1. *Source:* Colorado Department of Education (2021).

Table D2 ***Median Odds Ratio and Risk Difference of Students Reported as Black/African American Identified with a Dis/ability***

Special Education Category	OR Definition 1	OR Definition 2	Risk Difference	Difference
Autism	1.7674	0.79927	0.9681	Lower
Developmental Delay	2.7270	1.1254	1.6016	Lower
Intellectual Dis/ability	3.0713	1.8235	1.8235	Lower
Multiple Dis/abilities	1.5707	1.1511	0.4196	Lower
Other Health Impairment	2.5971	1.2818	1.3153	Lower
Serious Emotional Dis/ability	2.7201	1.3130	1.4071	Lower
Specific Learning Dis/ability	1.8831	1.3485	0.5346	Lower
Speech/Language Impairment	—	0.8953	—	—

Note. OR listed in each category was the median OR reported for the 112 reporting AUs. OR Definition 1 reflects students placed in the less than 40% and alternate school setting LRE. OR Definition 2 reflects students placed in the 40% and greater school setting LRE. Difference is determined through Lower, Same, or Higher as the comparison of the OR between LRE Definition 1 and LRE Definition 2. Lower indicated that placement in LRE Definition 2 was at a lower risk than placement in LRE Definition 1. Same indicated that placement in LRE Definition 2 and LRE Definition 1 was the same. Higher indicated that placement in LRE Definition 2 was at a higher risk than placement in LRE Definition 1.
Source: Colorado Department of Education (2021).

Table D3 ***Median Odds Ratio and Risk Difference of Students Reported as Hispanic/Latinx Identified with a Dis/ability***

Special Education Category	OR Definition 1	OR Definition 2	Risk Difference	Difference
Autism	0.7806	0.6776	0.1030	Lower
Developmental Delay	1.0872	1.3377	-0.2505	Higher
Intellectual Dis/ability	1.2498	1.5338	-0.284	Higher
Multiple Dis/abilities	1.2598	1.1572	0.1026	Lower
Other Health Impairment	0.6838	0.7372	-0.0534	Higher
Serious Emotional Dis/ability	0.7667	0.7199	0.0468	Lower
Specific Learning Dis/ability	1.3099	1.7118	-0.4019	Higher
Speech/Language Impairment	0.8869	1.1075	-0.2206	Higher

Note. OR listed in each category was the median OR reported for the 112 reporting AUs. OR Definition 1 reflects students placed in the less than 40% and alternate school setting LRE. OR Definition 2 reflects students placed in the 40% and greater school setting LRE. Difference is determined through Lower, Same, or Higher as the comparison of the OR between LRE Definition 1 and LRE Definition 2. Lower indicated that placement in LRE Definition 2 was at a lower risk than placement in LRE Definition 1. Same indicated that placement in LRE Definition 2 and LRE Definition 1 was the same. Higher indicated that placement in LRE Definition 2 was at a higher risk than placement in LRE Definition 1. *Source:* Colorado Department of Education (2021).

Table D4 ***Median Odds Ratio and Risk Difference of Students Reported as Native American/Alaskan Native Identified with a Dis/ability***

Special Education Category	OR Definition 1	OR Definition 2	Risk Difference	Difference
Autism	1.5299	0.9218	0.6081	Lower
Developmental Delay	—	2.0659	—	—
Intellectual Dis/ability	—	—	—	—
Multiple Dis/abilities	1.3221	1.5869	-0.2648	Higher
Other Health Impairment	—	1.3330	—	—
Serious Emotional Dis/ability	—	1.3622	—	—
Specific Learning Dis/ability	—	1.7455	—	—
Speech/Language Impairment	—	1.2299	—	—

Note. OR listed in each category was the median OR reported for the 112 reporting AUs. OR Definition 1 reflects students placed in the less than 40% and alternate school setting LRE. OR Definition 2 reflects students placed in the 40% and greater school setting LRE. Difference is determined through Lower, Same, or Higher as the comparison of the OR between LRE Definition 1 and LRE Definition 2. Lower indicated that placement in LRE Definition 2 was at a lower risk than placement in LRE Definition 1. Same indicated that placement in LRE Definition 2 and LRE Definition 1 was the same. Higher indicated that placement in LRE Definition 2 was at a higher risk than placement in LRE Definition 1.
Source: Colorado Department of Education (2021).

Table D5 ***Median Odds Ratio and Risk Difference of Students Reported as Pacific Islander/Hawaiian Native Identified with a Dis/ability***

Special Education Category	OR Definition 1	OR Definition 2	Risk Difference	Difference
Autism	—	—	—	—
Developmental Delay	—	—	—	—
Intellectual Dis/ability	—	—	—	—
Multiple Dis/abilities	—	—	—	—
Other Health Impairment	—	—	—	—
Serious Emotional Dis/ability	—	—	—	—
Specific Learning Dis/ability	—	0.6475	—	—
Speech/Language Impairment	—	0.7103	—	—

Note. OR listed in each category was the median OR reported for the 112 reporting AUs. OR Definition 1 reflects students placed in the less than 40% and alternate school setting LRE. OR Definition 2 reflects students placed in the 40% and greater school setting LRE. Difference is determined through Lower, Same, or Higher as the comparison of the OR between LRE Definition 1 and LRE Definition 2. Lower indicated that placement in LRE Definition 2 was at a lower risk than placement in LRE Definition 1. Same indicated that placement in LRE Definition 2 and LRE Definition 1 was the same. Higher indicated that placement in LRE Definition 2 was at a higher risk than placement in LRE Definition 1.
Source: Colorado Department of Education (2021).

Table D6 ***Median Odds Ratio and Risk Difference of Students Reported as Two or More Races Identified with a Dis/ability***

Special Education Category	OR Definition 1	OR Definition 2	Risk Difference	Difference
Autism	0.9820	1.3224	-0.3404	Higher
Developmental Delay	—	1.0957	—	—
Intellectual Dis/ability	0.8923	0.7746	0.1177	Lower
Multiple Dis/abilities	1.0043	0.8807	0.1236	Lower
Other Health Impairment	1.7658	1.1519	0.6139	Lower
Serious Emotional Dis/ability	1.6074	1.3554	0.2520	Lower
Specific Learning Dis/ability	0.7199	0.8378	-0.1179	Higher
Speech/Language Impairment	—	1.0152	—	—

Note. OR listed in each category was the median OR reported for the 112 reporting AUs. OR Definition 1 reflects students placed in the less than 40% and alternate school setting LRE. OR Definition 2 reflects students placed in the 40% and greater school setting LRE. Difference is determined through Lower, Same, or Higher as the comparison of the OR between LRE Definition 1 and LRE Definition 2. Lower indicated that placement in LRE Definition 2 was at a lower risk than placement in LRE Definition 1. Same indicated that placement in LRE Definition 2 and LRE Definition 1 was the same. Higher indicated that placement in LRE Definition 2 was at a higher risk than placement in LRE Definition 1.
Source: Colorado Department of Education (2021).

Table D7 ***Median Odds Ratio and Risk Difference of Students Reported as White with a Dis/ability***

Special Education Category	OR Definition 1	OR Definition 2	Risk Difference	Difference
Autism	0.9686	1.4372	-0.4686	Higher
Developmental Delay	0.6818	0.7554	-0.0736	Higher
Intellectual Dis/ability	0.4842	0.6172	-0.1330	Higher
Multiple Dis/abilities	0.7429	0.9392	-0.1963	Higher
Other Health Impairment	0.9603	1.2435	-0.2832	Higher
Serious Emotional Dis/ability	1.0367	1.3625	-0.3258	Higher
Specific Learning Dis/ability	0.7463	0.6438	0.1025	Lower
Speech/Language Impairment	1.0060	0.9107	0.0953	Lower

Note. OR listed in each category was the median OR reported for the 112 reporting AUs. OR Definition 1 reflects students placed in the less than 40% and alternate school setting LRE. OR Definition 2 reflects students placed in the 40% and greater school setting LRE. Difference is determined through Lower, Same, or Higher as the comparison of the OR between LRE Definition 1 and LRE Definition 2. Lower indicated that placement in LRE Definition 2 was at a lower risk than placement in LRE Definition 1. Same indicated that placement in LRE Definition 2 and LRE Definition 1 was the same. Higher indicated that placement in LRE Definition 2 was at a higher risk than placement in LRE Definition 1. *Source:* Colorado Department of Education (2021).

Table D8 ***Median Odds ratio and Risk Difference of Students Reported as English Learner Identified with a Dis/ability***

Special Education Category	OR Definition 1	OR Definition 2	Risk Difference	Difference
Autism	1.0587	0.9898	0.0689	Lower
Developmental Delay	2.1325	2.2781	-0.1456	Higher
Intellectual Dis/ability	3.0713	1.8235	1.246	Lower
Multiple Dis/abilities	2.1685	1.7504	0.4181	Lower
Other Health Impairment	0.8273	0.7347	0.0926	Lower
Serious Emotional Dis/ability	0.5226	—	—	—
Specific Learning Dis/ability	1.2592	2.2183	-0.9591	Higher
Speech/Language Impairment	0.6985	1.6694	-0.9709	Higher

Note. OR listed in each category was the median OR reported for the 112 reporting AUs. OR Definition 1 reflects students placed in the less than 40% and alternate school setting LRE. OR Definition 2 reflects students placed in the 40% and greater school setting LRE. Difference is determined through Lower, Same, or Higher as the comparison of the OR between LRE Definition 1 and LRE Definition 2. Lower indicated that placement in LRE Definition 2 was at a lower risk than placement in LRE Definition 1. Same indicated that placement in LRE Definition 2 and LRE Definition 1 was the same. Higher indicated that placement in LRE Definition 2 was at a higher risk than placement in LRE Definition 1. *Source:* Colorado Department of Education (2021).

Table D9 ***Median Odds Ratio and Risk Difference of Students Reported as English Speaking Identified with a Dis/ability***

Special Education Category	OR Definition 1	OR Definition 2	Risk Difference	Difference
Autism	0.9728	1.0103	-0.0375	Higher
Developmental Delay	0.4689	0.4390	0.0299	Lower
Intellectual Dis/ability	0.3891	0.4432	-0.0541	Higher
Multiple Dis/abilities	0.4612	0.5713	-0.1101	Higher
Other Health Impairment	1.2087	1.3610	-0.1523	Higher
Serious Emotional Dis/ability	1.9133	1.7537	0.1596	Lower
Specific Learning Dis/ability	0.7942	0.4513	0.3429	Lower
Speech/Language Impairment	1.4316	0.5995	0.8321	Lower

Note. OR listed in each category was the median OR reported for the 112 reporting AUs. OR Definition 1 reflects students placed in the less than 40% and alternate school setting LRE. OR Definition 2 reflects students placed in the 40% and greater school setting LRE. Difference was determined through Lower, Same, or Higher as the comparison of the OR between LRE Definition 1 and LRE Definition 2. Lower indicated that placement in LRE Definition 2 was lower risk than placement in LRE Definition 1. Same indicated that placement in LRE Definition 2 and LRE Definition 1 was the same. Higher indicated that placement in LRE Definition 2 was at a higher risk than placement in LRE Definition 1.
Source: Colorado Department of Education (2021).

Appendix E

Addressing Disproportionality within the Least Restrictive Environment for Culturally and Linguistically Diverse Students Identified with a Dis/ability

Executive Summary

The policies adopted by the Exceptional Children's Education Act (2016) enabled disproportionality within LEAs by overlooking undocumented classroom removal practices, underestimating the monitoring and reporting criteria, and overlooking non-dominant groups within the Colorado community.

Summary of the Problem

In 2016, Congress approved the amendment to IDEIA which focused on correcting the overrepresentation of ethnic/racial groups identified for special education services. States were required to define significant disproportionality and adjust state policies to comply with the amendment to IDEIA (2016).

Colorado stakeholders and policymakers selected options from a flexibility rule within IDEIA (2016). They needed to determine whether to monitor and report data collected from students' least restrictive environment (LRE) of 1) the minimal requirement, which was the alternate school settings and less than 40% (the most restrictive environments) or 2) adding the additional LRE of 40% and greater to the minimal requirements.

Colorado stakeholders instructed LEAs to collect data for significant disproportionality for racial/ethnic students through the most restrict environments of alternate school settings and less than 40% in the general classroom.

The consequence of this policy resulted in overrepresentation and underrepresentation of culturally and linguistically diverse students. Linguistically diverse students were not being monitored or reported.

Policy Solutions

Documenting Classroom Removal

Develop policy that addresses the documentation for removal of all culturally and linguistically diverse students from the general education environment.

Update Monitoring and Reporting Criteria

Update the monitoring and reporting criteria to capture the underrepresentation of students in all special education categories.

Update State-Level Policy

Update the state-level policy to address English Learners identified with an IEP in specific special education categories. Develop action plans to address significant disproportionality for English Learners with a dis/ability.

Read: An LRE Placement Loophole: A Critical Policy Analysis of LRE Placement in Defining Disproportionality of Culturally and Linguistically Diverse Students in Special Education

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