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EFFICACY AND OUTCOME BELIEFS OF GENERAL AND SPECIAL EDUCATION
TEACHERS WORKING WITH CULTURALLY LINGUISTICALLY DIVERSE
STUDENTS WITH DISABILITIES

Jennifer L. Hastings

132 Pages

The purpose of this study was to understand general and special education teacher perceptions about collective teacher efficacy (CTE), culturally responsive teaching self-efficacy (CRTSE), and culturally responsive instruction outcome expectancy (CRIOE) and the educational success of culturally linguistically diverse students (CLD) with disabilities. Forty-four teachers (16 general educators and 28 special educators) from six Midwestern school districts completed a survey consisting of CTE, CRTSE, and CRIOE. The findings from this study suggest general and special education teacher participants did not perceive themselves or their colleagues as culturally responsive. Yet, general and special education teachers agreed that CRT positively affects student outcomes and believe training can help create a barrier-free environment to facilitate learning for CLD students with disabilities. Participants demonstrated low confidence in CRT practices, mainly using student culture to increase engagement in learning and working with families. Implications for teacher practice include a professional development framework utilizing research-based activities that build CRT efficacy supported by coaching.

KEYWORDS: teacher efficacy, collective teacher efficacy, culturally responsive teaching, outcome expectancy, culturally linguistically diverse students with disabilities

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TEACHERS WORKING WITH CULTURALLY LINGUISTICALLY DIVERSE
STUDENTS WITH DISABILITIES

JENNIFER L. HASTINGS

A Dissertation Submitted in Partial
Fulfillment of the Requirements
for the Degree of

DOCTOR OF EDUCATION

Department of Special Education
ILLINOIS STATE UNIVERSITY

2023

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STUDENTS WITH DISABILITIES

JENNIFER L. HASTINGS

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J. L. H.

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CHAPTER I: INTRODUCTION

Culturally responsive instruction (CRI) is a research-based approach that incorporates teaching and learning to account for prior knowledge, experiences, culture, native language, and cognitive development (Gay, 2002a; Hoover et al., 2008). The cultural differences between student and teacher populations necessitate school and classroom structures that create connectedness between adults and students, celebrating inclusivity and fostering student agency (Hammond, 2020). Teacher expectations have been shown to impact the school progress of students from culturally and linguistically diverse (CLD) backgrounds. Thus, CRI is intended to help teachers build meaningful connections between what students learn in school and their lived experiences (Gay, 2000, 2002a). However, differences in viewpoints, beliefs, and cultural indoctrination between teachers and students have resulted in disproportionality and inequitable discipline practices. CLD students with disabilities are more likely to encounter unjust teacher attitudes and actions (Gay, 2002a).

Among students who receive special education services, disproportionality has been an ongoing concern (Farkas et al., 2020; Morgan et al., 2018; Skiba et al., 2008). From the 2019–20 national special education eligibility data, the groups most affected by disproportionality were American Indian/Alaska Native students identified as having a specific learning disability (SLD), followed by Black students and students of two or more races identified as either SLD or emotional disability (ED; NCES, 2021a). In addition, compared to their White peers, Black and Latino students with disabilities are more likely to receive inordinate amounts of discipline for less severe and more subjective behavioral infractions, which excludes them from learning opportunities in the classroom (George, 2015; Hilberth & Slate, 2014; McElderry & Cheng, 2014; Nance, 2016).

While there is growing literature on CRI, developing culturally responsive special education programs and services is in its early stages. While teachers have participated in culturally responsive professional development (PD), many have not received training on delivering CRI to students with disabilities. As a Director of Special Education in a mid-sized school district located in the Midwest, I have witnessed and experienced cultural mismatch, a phenomenon when most teachers come from a cultural background different from their students. I found that many general and special education teachers are unprepared for the disparity in life experiences between them and their students, resulting in family mistrust and student disengagement. As a result, I want to examine regional teachers' beliefs and understanding of CRI so I can develop and provide PD that will better prepare teachers to meet the needs of CLD students with disabilities.

CLD Students with Disabilities

CLD students are individuals who come from a home environment, cultural values, and backgrounds that differ from the mainstream culture (Hammond, 2020). An average of 10% of students in US public schools are English language learners (ELL), according to the National Center for Education Statistics (NCES, 2021a). ELL describes students who are learning English in addition to their native language and are served by language assistance programs, including ESL, high-intensity language training, and bilingual education. (NCES, 2021a). Among ELL students in the US, Spanish is the most common language spoken at home (75%), followed by Arabic (2.7%) and Chinese (2%). Culture describes a group's system of meaning and knowledge passed through generations (Matsumoto, 2007). The behavior of group members results from shared beliefs, cultural influences, and social roles. However, members maintain their personalities and identities based on their personal experiences.

Diversity includes disability, race, ethnicity, cultural identification, gender, socioeconomic situation, immigrant status, sexual orientation, and language. Individual qualities shape people's identities and group membership, while group membership shapes people's ways of knowing and doing (Cole, 2010). The United States Census Bureau (USCB, 2021) distinguishes race and ethnicity separately. *White* refers to a person with origins in Europe, the Middle East, or North Africa. *Black* describes a person with origins in any of Africa's racial groups. *Native American* or *Alaskan Native* depicts a person who has ancestors from North and South America's original peoples who maintain tribal membership. *Asian* people descend from one of the indigenous peoples of the Far East, Southeast Asia, or the Indian subcontinent. *Native Hawaiian* or *Other Pacific Islander* represents a person with ancestors from any Pacific Islands. Furthermore, USCB (2021) recognizes ethnicity as two distinct categories, Hispanic or Latine and Not Hispanic or Latine, whereas Hispanic people may report as any race.

Students with disabilities in the United States are ensured special education and related services per the Individuals with Disabilities Education Improvement Act (2004). This law makes a free appropriate public education available to those eligible. In addition, children aged three through nine may qualify for service if they experience a developmental delay subject to the conditions described in Section 300.111(b) (Assistance to States for the Education of Children with Disabilities and Preschool Grants for Children with Disabilities, 2006). A student may qualify for special education and related service under one of 13 categories: (1) autism, (2) deaf-blindness, (3) deafness, (4) ED, (5) hearing impairment (HI; including deafness), (6) intellectual disability (ID), (7) multiple disabilities, (8) other health impairment (OHI), (9) orthopedic impairment, (10) speech or language impairment (S/L), (11) SLD, (12), traumatic brain injury (TBI), and (13) visual impairment (VI; including blindness; IDEIA, 2019).

Importance of CRI in Special Education

With appropriate supports, all students are capable of self-directed learning and making progress (Hammond, 2020). However, CLD students are often misunderstood as underachieving because teachers lack the skills to develop culturally responsive curricula and instruction. Consequently, CLD students are being overrepresented in special education, where they are frequently diagnosed with SLD or ED (Ko et al., 2021a). Likewise, students are underrepresented, particularly Asian Americans, who are considered obedient and hardworking, in which disability may go undetected (Ko et al., 2021a). In addition, disproportionate discipline reduces time spent in the classroom accessing the curriculum, resulting in adverse effects such as susceptibility to dropping out of school, time spent in the prison system, and employability (Wun, 2016). Furthermore, cultural mismatch between student and teacher populations disrupts systems of equality (Fuller, 2021).

Cultural Mismatch

Cultural mismatch manifests when learning styles and shared beliefs contrast between home and school environments (Fuller, 2021). Cultural mismatch has two tenets: (a) the promotion of mainstream, independent cultural norms, and the exclusion of interdependent cultural norms among underrepresented groups; and (b) unconsciously fueled inequality by creating barriers to the performance of underrepresented groups (Stephens & Townsend, 2015). Deficit thinking and learning beliefs about languages, literacies, and cultural ways of communities of color have been seen as deficiencies to overcome when learning the legitimized dominant language, literacy, and cultural practices of mainstream culture (Paris, 2012). Native Americans have historically been subjected to deficit thinking since the late 1800s when they were taught in school their own languages and culture were inferior to White culture (Red Road,

2022). Decades later in the 20th century, federal “Indian schools” strived to strip the native languages and cultures from impoverished Indigenous American students because home cultures and communities of these non-White students are perceived as bankrupt of value in schools and society (Labvo, 1972; Lomawaima & McCarty, 2006). Perceptions about languages, literacies, and cultures shifted when these are viewed as equal, but different assets from the legitimated forms of school.

Dominant School Culture

Teacher biases influence perceptions regarding income level, gender roles, perceived learning ability, and ethnicity (Campbell, 2015; Dever et al., 2016). Researchers have focused on the cultural mismatch between teacher expectations and student behavior to explain racial disparities concerning the disproportionality of CLD students with disabilities referred to special education for ED (Skiba et al., 2011). Dever et al. (2016) have found referrals to special education are based on teacher perception rather than data. Using a norm-referenced self-report instrument to assess behavioral and emotional risk, Dever et al. (2016) compared those identified as at-risk by the instrument to those presently receiving special education services within a nationally representative sample of 4,946 children. The results indicated demographics, including gender, race, and socioeconomic status, were more predictive of special education status than self-report of risk. These findings suggest that a data-driven approach to inform referral for special education may contribute to efforts to reduce the disproportionate placement of Black, Latino, and Indigenous students in special education.

Dominant School Ideologies

Stereotype theories are assumptions that stereotypes are evaluative judgments of a given group made quickly and easily (McGarty et al., 2002). As a result of stereotyping, teacher

judgments of students are based partly on a preconceived template of the ability and attainment of CLD students with disabilities (Campbell, 2015). As White teachers develop, they “reflect their society’s notions of who is privileged, qualified and appropriate and who or what is not” (Norman et al., 2001, p. 1103). This notion upholds the perception that White culture is superior to non-White culture. Therefore, it is essential to help teachers break down whiteness ideology by teaching them about their whiteness and how whiteness exertions create a violent environment in which people of color must racially survive (Matias & Mackey, 2016). The absence of understanding of cultural norms has many teachers treating anything different from White culture as deviant and unacceptable. Unfortunately, CLD students with disabilities experience teacher judgments early in preschool (Matias & Mackey, 2016). As a result, students often retreat through disengagement or opposition to protect themselves (Campbell, 2015; Gershenson et al., 2016; Norman et al., 2001).

Disproportionality

Disproportionality is defined as the overrepresentation or underrepresentation of a specific student group compared to the proportion in the larger population (Dever et al., 2016; Shifrer et al., 2011). For more than 50 years since Dunn’s (1968) seminal research, Black students have been and continue to be disproportionately represented in ID, SLD, and ED. For Native American students, SLD is the most common cause of overrepresentation (Harry & Klingner, 2014; Skiba et al., 2008; Sullivan, 2011). For most non-White racial/ethnic groups, SLD and S/L impairments have been the two most common types of disabilities, accounting for at least 43% of students receiving IDEA services. The patterns among Latino students have been inconsistent. National data suggest Latino students are underrepresented in special education (Dever et al., 2016). On the other hand, overrepresentation is more common in states with a

higher proportion of Latine students (Ahram et al., 2011; Ford, 2012; Skiba et al., 2008). Among Hispanic, Native American/Alaska Native, and Pacific Islander students ages 3–21, SLD and S/L impairments accounted for 50% or more of those who received IDEA services in 2019–20.

Although these two disabilities accounted for 43% of Asian students receiving IDEA services, the most common disability label for Asian students has been autism (25%; NCES, 2021a). The percentage of students from other racial/ethnic backgrounds receiving IDEA services under the category of autism ranged from 7 to 12%.

Eligibility criteria for ID, ED, and SLD rely on a school-based multidisciplinary team's measures and clinical decision-making across states and school districts. According to researchers, there are significant issues with the referral processes for disability testing and diagnosis. First, there is the issue of inconsistent classification of non-White students based on irrelevant factors such as school characteristics and linguistic immigration history (Farkas et al., 2020; Shifrer, 2018). Second, psychometric tests unfairly discount color and language differences, constituting testing bias (Abedi, 2004; Skiba et al., 2008; Valencia & Suzuki, 2000). This is the result of (1) disagreement as to whether item level examination is significant enough to evaluate bias and (2) findings that were conducted on outdated tests (Skiba et al., 2008). Abedi (2004) demonstrated tests normed for native English speakers have lower reliability and validity for ELLs, unintentionally serving as proficiency tests. Third, deficit-oriented models of classification (Artiles et al., 2010, Morgan et al., 2018; Shifrer et al., 2011) result in a higher likelihood of diagnosing CLD students with a disability.

The effectiveness of the special education system has been questioned (Harry & Klingner, 2014; Wagner et al., 2006). Harry and Klingner (2014) argued that the consequences of being removed from general education outweigh the benefits of receiving additional services.

Wagner et al. (2006) analyzed educational outcomes for students with IEPs and found special education placement indicates lower achievement across subject areas. Those qualified for special education services for emotional or behavioral problems often fail academically. Barriers to success include reduced time in general education and a lack of adequate training for teachers to motivate students with ED, modify work, and manage behavior. There is also a drastic reduction of support and services for students with disabilities once they enter high school (Wagner et al., 2006). The data shows that graduation rates are lower for students with disabilities who are Asian, American Indian/Alaska Native, Black, Hispanic, Pacific Islander, or Two or more races than for White students with disabilities. At the end of 2019–2020, approximately 79% of White students with disabilities and 75% of Asian, American Indian/Alaska Native, Hispanic, and students with disabilities of Two or more races left high school with a regular diploma. Comparatively, 72% of Black and Pacific Islander students with disabilities left high school with a standard certificate (NCES, 2020).

Discipline Disparities

Per the United States Government Accountability Office (US-GAO, 2018), Black students, boys, and students with disabilities were disproportionately disciplined in K-12 public schools. These disparities were widespread and persisted across different disciplinary actions, school poverty levels, or types of public schools attended. For example, Black students accounted for 15.5% of all public school students but represented about 39% of students suspended. Inordinate amounts of discipline reduce student engagement. Data show that CLD students with disabilities who frequently experience harsh discipline practices face a downward trajectory in their lives via the ever-growing School to Prison Pipeline (Wun, 2016). Low SES has been found to be a risk factor for school suspension, including CLD students with disabilities

(Brantlinger, 1991; US-GAO, 2018; Wu et al., 1982). Yet, when the relationship of SES has been explored directly, race contributes significantly to disproportionate disciplinary outcomes independent of SES (Skiba & Rausch, 2004; Skiba et al., 2011; Wallace et al., 2008).

Unfortunately, teachers often do not understand the relationship between culture and classroom behavior and are insufficiently prepared to engage in the practices associated with culturally responsive teaching (Gay, 2000). The lack of understanding and preparation may influence teachers' decision-making when resolving a cultural conflict. Developing an understanding of the cultural context of classroom behavior may potentially mitigate cultural conflicts in the classroom (Gay, 2000). However, research suggests that individuals are reluctant to take action if they believe their chances of success are slim (Bandura, 1997). Therefore, it is critical to educate teachers about cultural mismatch and foster the confidence required to respond to students in a way that acknowledges culture while supporting them as learners.

CRI in the Midwest

Disproportionality and cultural mismatch are deeply concerning issues to me. My school district resides next to another urban school district, which is about twice the size of my school district; both districts are located in twin cities. The teacher and student demographics in the twin cities mirror national data. Most teachers are White (82% and 75% respectively); female (74.4%; 79.9%); and middle class (with an average salary of \$57,776; \$54,295; Illinois State Board of Education [ISBE], 2021a, 2021b). In comparison, CLD students with disabilities account for 17% in my school district and 14% in the other district. In my district, CLD students with disabilities consist of 36% Black, 12% Hispanic, 10% two or more races, and 1% Asian (ISBE, 2021b). In the other district, CLD students with disabilities include 49% Black, 11% Hispanic:

8% of two or more races, and 4% Asian (ISBE, 2021a). The data show a mismatch in which teachers serve students who do not look like them or share similar cultural and life experiences.

Since School year 2017–18, both school districts have diligently worked to establish a platform for equity, including developing the Board of Education Policy, mission statements, and task forces. In addition, both districts have participated in bias training, including microaggression awareness, restorative justice practices, and cultural sensitivity training. Each school district achieved momentum until the COVID-19 pandemic, when learning took place remotely for 15 months. Once students returned to in-person learning, acclimation to in-person learning was prioritized. However, teachers are asked to contend with multiple new initiatives, including Measures of Academic Progress (January & Ardoin, 2015), Standards-Referenced Learning (Wormeli, 2018), and transition from Balanced Literacy to Structured Literacy (Burkins & Yates, 2021). As a result, PD on equity stalled. Some teachers have shared with me during personal conversations that they feel burned out on diversity training. They also feel they are being asked to do more while their energy reserves are low.

Position of the Researcher

When I was a teacher, I belonged to the predominately White, female, and middle-class teaching force (NCES, 2021b). While I never personally contended with racial or cultural bias, I spent most of my career serving Black, Brown, and Indigenous students who did. About ten years into my career, I adopted the work of Payne (2005), who theorized that CLD students experienced inequity because they were poor. Through the quest for deeper understanding, I have realized CLD students with disabilities are treated differently due to a lack of teacher understanding of student culture. As a special education director, I want to know how special and general education teachers perceive their abilities to teach CLD students with disabilities and

understand the relationship between teacher efficacy and student outcomes. This is essential to making informed decisions about the next steps for PD and coaching to improve teacher practices, which will positively impact student outcomes.

Statement of the Problem

In short, the demographics of the U.S. population have shifted, and student enrollment data reflect the changes. For example, CLD students with disabilities now outnumber White students; they are predominately male and represent a lower socioeconomic status (USDE, 2020). At the same time, much of the teacher population has been and remains White, female, and middle class (NCES, 2021b). Disconnection persists due to limited teacher understanding of ethnicity and recognition of student culture (Gay, 2000).

When White cultural norms are promoted over the cultural behaviors and practices of students of other racial, ethnic, and cultural backgrounds, a cultural mismatch occurs. Teachers response to students who deviate from the norm and take actions based on biases toward students of color (Campbell, 2015; Gershenson et al., 2016; Godsil, 2015). As a result, students are misperceived as disrespectful or disruptive, and removed from the learning environment (McKenna, 2013). These results can have long-term sustaining effects that impact graduation rates, employability, and future success (USDE, 2020).

Professional literature has urged that special education practices be responsive to students' culture and language, as well as their disability (Council for Exceptional Children, 2015; Jones-Good & Grant, 2016; Scott et al., 2014). Practices must also reflect the principles of culturally and linguistically responsive practice (Gay, 2000; Ladson-Billings, 1995; Paris, 2015). CRI is particularly important due to the disproportionate identification of Black, Hispanic, Indigenous, and Asian students in special education. The adequacy of special education teacher

preparation is a pressing matter; to develop and implement interventions and services to meet the educational needs of CLD students with disabilities where cultural considerations count as much as a disability. To achieve this, individual and collective self-efficacy of special education teachers must be cultivated, which may improve outcomes for CLD students with disabilities. Chapter Two will review the literature on CRI and pedagogy (Gay, 2000; Ladson- Billings, 1995; Paris, 2015). Teacher self-efficacy (TSE) will be defined and described through the lens of CRI and classroom management, pertaining to CLD students with disabilities (Chu, 2016; Chu & Garcia, 2014; Chu & Garcia, 2018).

As reported by the NCES (2021a) students with disabilities have been spending increasing amounts of time in the general education environment. While percentages of time vary by disability label or category, it was determined in the fall of 2021 that 64.8% of all students with disabilities spent most of their time in the general education classroom. Given the increasing presence of students with disabilities learning alongside their peers without disabilities coupled with cultural and linguistic diversity, classroom management has become more sophisticated than ever for both special and general education teachers. Lessons must be designed with culture in mind while differentiating for ability and simultaneously managing behavior. Given these dynamics, both special and general education teachers are targeted participants for this study.

Research Questions

It is necessary to understand teacher perceptions about cultural responsiveness and outcome expectancies in their work with diverse students who have disabilities to determine what they know and identify what they need to learn. As a result, this study will help the researcher determine teachers' confidence in themselves and their colleagues to be culturally

responsive. Furthermore, findings will inform the researcher of specific PD needs to support all teachers working with diverse students who experience exceptionalities. Therefore, this study seeks to answer the following questions.

- RQ1: How do teachers perceive their colleagues' beliefs and abilities to implement culturally responsive teaching strategies to support CLD students with disabilities?
- RQ2: How confident are teachers in their abilities to implement culturally responsive teaching strategies to support CLD students with disabilities?
- RQ3: To what extent do teachers believe implementing culturally responsive teaching strategies will positively affect learning for CLD students with disabilities?
- RQ4: What are the differences between general and special education teacher responses on the CRIOE scale?

Definitions

Achievement gap: The difference in the performance between each Elementary and Secondary Education Act (ESEA) subgroup within a participating LEA or school and the statewide average performance of the Local Educational Agency's (LEA) or State's highest achieving subgroups in reading/language arts and mathematics as measured by the assessments required under the ESEA (U.S.DOE, 2018). Ansell (2011) clarifies the achievement gap in education refers to the disparity in academic performance between groups of students in grades, standardized-test scores, course selection, dropout rates, and college-completion rates, among other success measures. Most often it is used to describe performance gaps between Black and Hispanic students and non-Hispanic White peers.

Asian: People who descend from one of the indigenous peoples of the Far East, Southeast Asia, or the Indian subcontinent (USCB, 2021).

Black: Describes a person with origins in any of Africa's racial groups (USCB, 2021).

Brown: Refers to people of Alaska Native, American Indian, Asian, or Pacific Islander descent. Can also include those who identify as Hispanic.

Culturally linguistically diverse (CLD) students: Individuals who come from a home environment where a language other than English is spoken and whose cultural values and background may differ from the mainstream culture.

Collective teacher efficacy: A way of conceptualizing the normative environment of a school and its influence on both personal and organizational behavior. Teachers' beliefs about the faculty's capability to successfully educate students constitute a norm that influences the actions and achievements of schools (Goddard et al, 2000).

Culture: A group's system of meaning and knowledge passed through generations (Matsumoto, 2007). The behavior of group members results from shared beliefs, cultural influences, and social roles. However, members maintain their personalities and identities based on their personal experiences.

Culturally responsive pedagogy: Schools acknowledge the home and community cultures of students and through sensitivity to cultural nuances, integrate these cultural experiences values, and understandings into the teaching and learning environment (Ladson-Billings, 1995, 2014).

Culturally relevant teaching: A conceptual theory developed by Ladson-Billings (2009), culturally relevant teaching is constructivist pedagogy centered on the use of instruction that empowers students intellectually, socially, emotionally, and politically using cultural referents to

build knowledge, skills, and attitudes. Teachers who are culturally responsive believe all students can succeed, establishing relationships with students which produces rapport that enables teachers to foster connections between students' cultural identity and instructional content.

Culturally responsive teaching: Derived from the work of Ladson-Billings (1995), culturally responsive teaching (CRT) is a way of thinking and working those respects, affirms, and values culture. Culturally Responsive Teaching (CRT) terminology is used in this study as derived per the work of Geneva Gay (2010) and operationalized by 18 pillars as articulated in the second edition of her seminal text (Gay, 2010).

Deficit thinking: A manner of thinking about something that places responsibility on the victim. The act of blaming a student, a student's family, or a student's culture for academic or behavioral challenges that arise at school is known as deficit thinking in schools (Patton-Davis & Museus, 2019). For example, school personnel may believe that a student is acting out because he or she is a "bad kid" by nature or because their parents "didn't raise them well."

Diversity: The practice of including the many communities, identities, races, ethnicities, backgrounds, abilities, cultures, and beliefs of the American people, including underserved communities (Exec. Order No.14035, 2021). Among these dimensions are age, gender, mental/physical abilities and characteristics, race, ethnic heritage, sexual orientation, communications style, organizational role and level, first language, religion, income, work experience, military experience, geographic location, education, work style, and family status (USA Hello, 2019). Effective management of diversity means including people with differences in the design and implementation of programs, and valuing their contributions.

Equity: Consistent and systematic fair, just, and impartial treatment of all individuals, including individuals who belong to underserved communities that have been denied such treatment (Exec. Order No.14035, 2021).

Hispanic or Latine: Ethnicity expressed as Hispanic or Latine and Not Hispanic or Latine, whereas Hispanic people may report as any race (USCB, 2021).

Inclusion: The recognition, appreciation, and use of the talents and skills of employees of all backgrounds (Exec. Order No.14035, 2021).

Native American or Alaskan Native depicts a person who has ancestors from North and South America's original peoples who maintain tribal membership (USCB, 2021).

Native Hawaiian or Other Pacific Islander represents a person with ancestors from any Pacific Islands (USCB, 2021).

Student growth: States use various measures to determine an individual student's academic progress. Growth measures vary from advanced statistical methods to more straightforward calculations. Each measure follows a set of rules-based processes that mirror the language states' use. Though the terminology is the same, "growth" means something different in each state (Data Quality Campaign, 2019).

Students with disabilities: Not all disabled students in our schools are in special education. For the purpose of this study, the term students with disabilities is used to represent students in special education.

Teacher self-efficacy (TSE): Bandura (1977) theorized self-efficacy is one's beliefs about their abilities to profoundly affect those abilities, purporting ability is not a fixed property because of the huge variability in individual performance. Bandura (1993) later tailored self-efficacy theory to suit teachers, recognized as teacher self-efficacy (TSE), the judgment of his or

her abilities to bring about desired outcomes of student engagement and learning, pinnacle to a teacher's ability to be an effective instructor and behavior manager.

White: Refers to a person with origins in Europe, the Middle East, or North Africa.
(USCB, 2021).

CHAPTER II: LITERATURE REVIEW

Researchers have found teachers are not well prepared to provide culturally responsive instruction (Bradshaw et. al, 2018; Hammond, 2020; Jones-Good & Grant, 2016). Teachers continue to select instructional strategies based on student's disabilities with little consideration for cultural and linguistic differences (Ko et al., 2021b). Special education teachers have reported their teacher education programs were not effective in preparing them to successfully teach CLD students with disabilities (Chu, 2011). They also believe PD training has only been slightly effective in preparing them to work with this population. Researchers have theorized CRI is essential to improving learning outcomes for CLD students with disabilities in both general and special education (Gay, 2002a). Regarding CLD students with disabilities, the successful execution of these practices is dependent upon special educators' self-confidence to do so. The literature is limited on evidence of the impacts of CRI, collective teacher efficacy (CTE), and culturally responsive instruction self-efficacy (CRISE) in special education. The work of Chu and Garcia (2014; 2018) has extended the findings of Bandura's (1977) collective efficacy work, Gibson and Dembo (1984), Goddard et al. (2000), Siwatu (2007), Tschannen-Moran and Hoy's (2001) teacher self-efficacy studies, and Ladson Billings (1995) and Gay's (2002a; 2010) culturally responsive practice. As a result, Chu and Garcia (2014; 2018) developed instrumentation to assess the interface between CRI and teacher efficacy for special education teachers who work with CLD students with disabilities. They also significantly contributed to the understanding of special education teachers' perceptions of CRISE and CRIOE based on the perceived effectiveness of teacher education and PD in preparation to work with CLD students with disabilities. Equally important, they provided direction for future studies to continue the

advancement of this work. These accomplishments derived from the conceptual frameworks for cultural responsiveness.

Conceptual Frameworks for Cultural Responsiveness

Effective teachers of ethnically diverse learners in special education rely upon instruction that includes early intervention, measurable objectives, screening, progress monitoring, and structured classrooms that incorporate increased levels of engagement and corrective feedback (Cartledge & Kourea, 2008). Teacher reflection and knowledge construction are critical considerations in CRI. Ladson-Billings and Gomez (2001) asserted, due to increased demands, many teachers fail to participate in reflective practice, viewing it as a luxury rather than a necessity in improving practice. Nonetheless, reflective teaching should be emphasized, as it is an ongoing process based on the interaction of personal reflection and theoretical notion. Culturally responsive teachers acknowledge the influence of their personal experiences on practice. Ladson Billings' (1995) conceptualizations of *culturally relevant pedagogy* (CRP) and Gay's (2000) *culturally responsive teaching* (CRT) have had the most influence on teacher preparation, focused specifically on culturally responsive strategies for teaching content and managing discipline. Research in the new millennium has shifted thoughts about deficit to exploration of difference through the lens of explicit and implicit bias, suggesting students would lose their heritage along with community cultural and linguistic practices if they were to succeed in American schools (Paris, 2012; Staats, 2016). Circling back to Ladson Billings (1995), Paris (2012) extended CRP, refining its praxis-oriented stance to promote maintenance of the languages and cultures of Black, Latinx, Indigenous American, Asian American, Pacific Islander American, and other longstanding and newcomer communities in classrooms through *culturally sustaining pedagogy* (CSP). The conceptual models of Ladson Billings (1995), Gay (2000), and

Paris (2012) have demonstrated that leadership practices and school contexts must shift in response to the dynamics of demographics to accommodate the needs of students.

Culturally Relevant Pedagogy

Gloria Ladson Billings (1995) has been credited for challenging the intersection of culture and teaching through varied perspectives in the landmark article “Towards a Theory of Culturally Relevant Pedagogy.” Through her own seminal research specific to Black students, following eight teachers, Ladson Billings (1995) drew a connection between student failure and the causal link of speech and language interaction patterns of teachers and students identified as “other” by virtue of race, ethnicity, language, and social class. Ladson Billings also made a coherent theoretical statement of research and teaching that had been building throughout the 1970s and 1980s based on the social language and literacy work of scholars, including Labov (1972), Cazden and Leggett (1981), Smitherman (1977), Heath (1983), and among many others (Paris, 2012). Her work reached a critical point by the mid-1990s when she innovated *culturally relevant pedagogy*, the practice of addressing student achievement while helping students accept their cultural identity and develop critical perspectives that challenged inequities perpetuated by schools. Ladson Billings (1995) found culturally relevant teachers shared common perspectives about themselves and others, the structure of social relations, and conceptions of personal knowledge. Examples of shared beliefs include the viewpoint that all students are capable of academic success, a community of learners could be fused through connectedness, and students must be taught to view knowledge through a critical lens. This work served as a springboard for change in teacher preparation, drawing on the wisdom of practitioners who demonstrated excellence in cultural relativism.

Regarding teachers' self-efficacy with CRP, researchers have reported preservice (Cruz et al., 2020; Siwatu 2011) and in-service teachers (Cruz et al., 2020) felt more confident in building personal relationships and trust with students, but less confident in areas that involved specific cultural knowledge, such as being able to validate students in their native language and teaching students about their culture's contributions to curricular topics. Cruz et al. (2020) noted years of experience positively correlated with increased self-efficacy. Chu and Garcia (2014) found statistically significant differences in special education teachers' perceptions of self-efficacy as well as outcome expectancy by the perceived effectiveness of their teacher preparation in addressing diversity (Chu & Garcia, 2014). To use CRP effectively, teachers must be able to access training and gain meaningful experience implementing this type of pedagogy. In addition to developing knowledge and skills in technical aspects of CRP, teachers must also develop their own critical consciousness through participation in preparation programs and professional development that use guided practice, authentic examples, and realistic situations to cultivate this form of reflection (Gay & Kirkland, 2003). Failure to develop critical consciousness can lead to the perpetuation of deficit beliefs about students and their families (Nelson & Guerra, 2014). Barriers exist in building this capacity among teachers, including inadequate teacher preparation (i.e., content knowledge and supported implementation; Au & Blake, 2003; Gay 2002a), teachers' resistance to interrogating race and privilege (Gay & Kirkland, 2003), and relatedly, lack of confidence among teachers in their ability to implement CRT practices (Siwatu, 2007).

Culturally Responsive Teaching

Geneva Gay (2000) unveiled the pedagogical concept *culturally responsive teaching* to preservice teachers. She promoted community building through the establishment of a classroom

that fosters inquiry, discourse, personal involvement, and novelty through rituals from unorthodox ice breakers to “transparent teaching” or “praxis” which is combining knowledge acquisition with ideological declarations, illustrative actions, and critical analysis. She established the necessity of routine, endorsing the instructional mantra “know, think, feel, do, and reflect,” intermittently within an instructional exchange. Gay (2000) endorsed cooperative learning, where tasks are embedded in class projects that every student could accomplish with differentiated assignments, while practicing independence. Activities such as roleplay and simulation challenged preservice teachers to translate theory into practice to become pedagogically responsive to cultural diversity in the classroom. Gay (2000) got teachers to be reflective by deconstructing conventional assumptions and paradigms for teaching students of color, replacing them with viable alternatives. Gay’s (2000) work provided specific approaches to training preservice teachers which gave them the same transformative experience they should provide for CLD students with disabilities. Gay (2000) taught teachers to think critically and create meaningful experiences, ultimately making the learning fit the learner, rather than forcing the learner to fit the learning.

Important facets of CRT include presuming competence, high expectations with support, and strengths-based perceptions of learners. These facets are assessed through measures of outcome expectancy belief. Siwatu (2007) created a measure that examines outcome expectancy to gauge the extent one is culturally responsive. Preservice teachers have demonstrated efficaciousness in their ability to help students feel like important members of the classroom and develop positive, personal relationships (Siwatu, 2007). Preservice teachers’ culturally responsive teaching outcome expectations have been highest for the possibility that a positive teacher–student relationship can be established by building a sense of trust with their students.

However, they feel less efficacious when communicating with English Language Learners (Siwatu, 2007). Outcome expectancy has been lowest for encouraging students to use their native language to maintain cultural identity (Siwatu, 2007; Cruz et al., 2020).

Culturally Sustaining Pedagogy

Educators often think of culture as something associated with a student's ethnic heritage. Django Paris (2012) conceptualized culturally sustaining pedagogy to protect multilingualism and multiculturalism by maintaining the heritage of dynamic languages and cultures (Paris, 2015). Paris (2015) explained, educators and scholars could support CLD students with disabilities as part of a collective movement toward educational justice in a changing world. He described cultural pluralism as the practice of smaller groups within a larger society, maintaining their unique cultural identities, values, and practices while being accepted by the wider dominant culture. Paris (2011) asserted that small groups need to maintain within-group cultural practices like Spanish, African American Language (AAL), Navajo, or Samoan in tandem with Dominant American English to thrive. Paris (2009) proposed that understanding the linguistic applications of language within the concept of pluralism is necessary to teach both within and across differences in multiethnic schools. Paris and Alim (2014) identified the following as the most important principals of CSP: (1) focus on the plural, evolving nature of youth identity and their cultural practices and (2) a commitment to supporting youth with a confrontation of the status quo, maintaining a clear critique of the ways youth culture also reproduces systemic inequalities. They sanctioned school as a place to sustain the cultural practices of communities of color, rather than eradicating them.

These conceptual frameworks have brought to light the necessity of addressing both culture and disability when programming for CLD students with disabilities. For educators to

successfully implement the principles of the frameworks, they must have the confidence to do so. Special educators are trained to customize learning based on the needs of their students. Accounting for culture is within their skill set but teacher education and professional developers must understand how to cultivate teacher confidence with CRT. In turn, students will benefit from positive outcomes such as equitable access to academic opportunities, fair discipline practices, attainment of graduation, and increased quality of life.

Teacher Efficacy

A teacher's ability to foster the academic and emotional development of their students is dependent upon their beliefs and confidence about their abilities (Bandura, 1993; Klassen et al., 2011). TSE has been the focus of international research and public policy directed at attracting and retaining teachers in the workforce (McLennan et al., 2017). It has also been essential to the retention of novice teachers who generally have a lower sense of TSE compared to experienced career teachers (Tschannen-Moran & Hoy, 2001). Self-efficacy study originated in the field of psychology, derived from two social-psychological frameworks: Rotter's (1966) internal versus external control and Bandura's (1977) social cognitive theory. Rotter (1966) theorized perceptions of individuals differ regarding factors influencing outcomes. Bandura (1977) believed people's beliefs about their abilities profoundly affect those abilities, thus ability is not a fixed property because of the huge variability in individual performance. He defined the "confidence" or self-efficacy as a person's belief in his or her ability to succeed given an event or situation.

TSE studies have found teachers who exhibit a strong sense of self-efficacy set high achievable goals, create an orderly and serious environment, and accept greater responsibility for the learning outcomes of students (Guskey 1981; Hoy & Woolfolk, 1993). Furthermore, self-

efficacious teachers approach difficult tasks as challenges to be mastered rather than risks to be avoided, persevering with the most challenging students (Gibson & Dembo, 1984; Guskey, 1981). In contrast, teachers with lower self-efficacy doubt their capabilities and turn away from difficult tasks, feeling threatened (Gibson & Dembo, 1984; Guskey, 1981; Hoy & Woolfolk, 1993). When faced with challenges, teachers dwell on personal failings and obstacles, quick to slack in effort or retreat from challenge (Bandura, 1977; Gibson & Dembo, 1984). When teachers lack confidence in their abilities, they are slow to recover from setbacks, and susceptible to feeling powerless. A teacher may have faith in their ability to reach difficult children but lack confidence in their personal teaching ability.

Teacher Self-Efficacy

Teacher Self-Efficacy (TSE) is a teacher's confidence in their ability to promote students learning (Hoy & Spero, 2005). Gibson and Dembo (1984) stated highly self-efficacious teachers "persist longer, provide a greater academic focus in the classroom, and exhibit different types of feedback than teachers who have lower expectations concerning their ability to influence student learning" (p. 570). Positive outcomes for students include increased academic achievement (Wilson et al., 2018), increased effort (Miller et al., 2017), and a more nurturing classroom environment with fewer behavioral conflicts (Banks, 2012). Equally important, teachers' efficacy beliefs lead to an increase in personal psychological wellness in terms of job satisfaction (Tschannen-Moran & Hoy, 2001), commitment to the craft (Hoy & Spero, 2005), and reduced levels of stress or burnout (Brouwers & Tomic, 2000). Teachers with a strong sense of efficacy exhibit greater levels of planning and organization, are more willing to execute new strategies, and implement different methods to meet student needs (Allinder, 1994; Ghaith & Yaghi, 1997). When circumstances become challenging, efficacy beliefs propel teachers to power through

adversity. It enables them to be less critical of students' errors and persist with those who struggle (Gibson & Dembo, 1984; Banks, 2012). Teachers with a higher sense of efficacy also exhibit greater enthusiasm for teaching (Siwatu et al., 2015), have greater commitment to teaching (Coladarci, 1992; Evans & Tribble, 1986), and are more likely to stay in teaching (Glickman & Tamashiro, 1982).

Collective Teacher Efficacy

One of the great challenges for those who study schools is the determination of how school organizations contribute to the academic success of students (Goddard, et al., 2000). Bandura (1993, 1997) argued that the collective efficacy of teachers within a school is a compelling construct that varies among schools. Collective teacher efficacy (CTE) is teacher perception that the efforts of the faculty have a positive effect on students (Goddard, 2001; Goddard & Goddard, 2001; Goddard et al., 2000). This is based on Bandura's (1977, 1986, 1997) social cognitive theory which addresses a group's shared beliefs in its own collective ability to organize and execute courses of action to achieve certain levels of attainment (Goddard, 2001; Goddard et al., 2000). Within any organization, perceived collective efficacy represents the shared beliefs of group members concerning "the performance capability of a social system as a whole" (Bandura, 1997, p. 469).

Two key actions have been identified in the formation of CTE. The first is *analysis of the teaching task* which is a teacher's assessment of barriers or limitations that must be overcome and identification of available resources to achieve the task (Goddard et al., 2000). The second is *assessment of teaching competence* which is essentially weighing the instructional task with the competency of the faculty to teach the tasks (Goddard et al. 2000). Per Bandura (1997), CTE refers to an individual teacher's perceptions of their colleagues' ability to cope successfully with

events that challenge the group. Although individual and collective efficacies are two different constructs, research in a cross-cultural context tends to agree that both constructs have a reciprocal influence (Chan, 2008; Schechter & Tschannen-Moran, 2006).

Teacher Efficacy and Teaching Practices

Self-efficacious teachers are known for creating connectedness and implementing new techniques with ease. Kilday et al., (2016) used an exploratory factor analysis of in-service K-12 teachers to prove a positive and significant correlation between self-efficacy and teacher connectedness, examining student-oriented teaching along with existing measures of motivation and engagement. Ghaith and Yaghi (1997) found self-efficacious teachers were willing to step outside their comfort zones to try new approaches, connecting a high sense of personal teaching efficacy with innovation. Furthermore, the implementation of differentiated instruction (DI), matching learning tasks with the needs of individual learners, was positively correlated with teacher self-efficacy and teacher autonomy (DeNeve et al., 2015). Moreover, efficacious teachers participate in PD to improve practice. Geijesel et al. (2009) found teachers view reflective practice as an integral part of professional learning. Bandura (1993) and Goddard et al. (2000) described teacher efficacy as a direct link to professional learning activities, demonstrating more teachers than not are fueled by efficacy to professionally evolve, internalizing school goals as their personal goals (Geijesel et al., 2009).

Implementation of Instructional Practices

Researchers have found teacher collaboration is a positive practice which increases efficacy and improves implementation of instructional practices (Dunn et al., 2013).

Collaboration is a learned skill requiring trust, established in an environment where teachers feel safe to share and mutually respected for their opinions, ideas, and perspectives (Foltos, 2018).

Whether teachers collaborate on a learning activity or debrief benchmarking data, successful collaborators maintain focus on student learning, not themselves, to remain centered on student needs and learning outcomes. Dunn et al. (2013) demonstrated a positive correlation between data-driven decision-making and collaboration, suggesting efficacious teachers use data more often to make instructional decisions because of reviewing data with colleagues. When linked to collaboration, professional learning, a long-term constructive process containing both individual and collaborative components, also increases teacher confidence. Beatty (2000) observed efficacy increased when multidisciplinary secondary school teachers improved perceptions of themselves and their work because of collaborating. When teachers feel efficacious with instruction, they are likely to also have better classroom management.

Classroom Management

Self-efficacious teachers are better able to manage behavior, control instructional time, and maximize learning opportunities. Ashton and Webb (1986) found teachers of high efficacy had a lower frequency of student misbehavior because of being relaxed, friendly, and more trusting of students. Woolfolk et al. (1990) observed when teachers trusted students, they were better able to relinquish control and share responsibility for solving problems. Regarding the management of instructional time, teachers with higher self-efficacy are likely to develop challenging lessons, utilizing a variety of techniques to support student learning. Miller et al. (2017) state, “When students observe teachers’ confidence with difficult subjects such as science and mathematics, this provides them with a vicarious experience and could, in turn, impact their own self-efficacy, and likely will impact their engagement and achievement in these courses” (p. 266). Self-efficacious teachers are more tolerant and less likely to exclude students with academic obstacles like SLD, OHI, or ED (Zee & Koomen, 2016). They are self-assured with

delivering interventions, less likely to refer students for special education services and more likely to accept interventions suggested by consultants (DeForest & Hughes, 1992; Soodak & Podell, 1993). Self-efficacious teachers are also adept with classroom organization and the establishment of an orderly environment, while skillfully managing instructional time and sustaining student attention.

It is essential to cultivate confidence in teachers as the population of CLD students with disabilities steadily increases. Researchers have made a case for the importance of assimilating culture with accommodation for a disability. For example, Cartledge & Kourea (2008) explained that children who differ from mainstream culture risk misperception and unfair judgment for acting in unaccepted ways because they misinterpret the school culture. In addition, teachers often have low expectations and negative attitudes towards CLD students with disabilities, expecting problematic behaviors and minimal progress (Gay 2000, 2002). Furthermore, teachers' preparedness to implement appropriate methods and models of instruction requires improvement, particularly in the absence of multilingual certification (O'Neal et al., 2008).

Teacher Self-Efficacy with CRT

Many teachers lack efficacy with the development and execution of equitable learning experiences for CLD students with disabilities (Garcia & Ortiz, 2013). Cultural mismatch and a lack of understanding of students from nondominant sociocultural and linguistic communities (Gay, 2010) and students with disabilities (Chu & Garcia, 2018) have a negative impact on student outcomes. When teachers are not adequately prepared to provide culturally responsive instruction (Muller et al., 2006), they are more likely to implement instructional strategies exclusively based on students' disability-related needs, neglecting students' sociocultural and linguistic backgrounds (Garcia & Ortiz, 2013). Thus, special education services must be

designed to address both disabilities related educational needs and sociocultural and linguistic characteristics (Garcia & Ortiz, 2013; Gay, 2002b). Equally concerning, a lack of self-efficacy may inhibit teachers from trying different ways to respond to students with disabilities (Chu, 2011; Chu & Garcia, 2014). Chu and Garcia (2014) found special education teachers who spoke more than one language and those who taught in resource rooms and self-contained settings had higher Culturally Responsive Teaching Outcome Expectancy (CRTOE). CRTOE is the teacher's expectations of what they believe they can achieve in their work with students (Siwatu, 2007). For the purpose of this study, CRTOE will be acknowledged as Culturally Responsive Instruction Outcome Expectancy (CRIOE) unless specifically referring to Siwatu's work. Speaking more than one language may have indirectly increased teachers' confidence in their ability to serve ELLs, whereas teachers in resource and self-contained settings had increased CROIE due to greater responsibility for the instruction of CLD students with disabilities in these settings. Teachers often lack awareness of implicit biases and the growing diversity of student culture; therefore, they do not think of culturally different students needing specialized instruction which utilizes tenets of their culture. On the other hand, some teachers may recognize cultural differences amongst their students and want to practice CRP, but they do not know where to start (Siwatu, 2007). As ethnic disproportions between teachers and students continue to grow, teachers must have opportunities to engage in CRP PD to grow efficacy and strengthen practice.

Key Constructs of Teacher Efficacy

There are several key constructs of teacher efficacy. First and foremost is CRT, the importance of including students' cultural references in all aspects of learning (Ladson-Billings, 1995) accounting for student culture as much as their disability (Chu & Garcia, 2014). Second is

CTE, teachers' shared beliefs that shape the normative environment of schools (Goddard et al., 2000). Third, Culturally Responsive Teaching Self-Efficacy (CRTSE), teachers' perceptions of their ability to execute specific teaching practices associated with CRT and CRTOE (Siwatu, 2007). While these constructs are interdependent on one another, an important factor in the determination of a teacher's sense of efficacy is, not surprisingly, experience.

CRT in Special Education

CRT accounts for the prior knowledge, experiences, and personal stories of students in teaching and learning (Gay, 2010). Teachers must consider students' cultural backgrounds, language, learning styles, values, and knowledge acquired from home and community (Chu & Garcia, 2014; Gay, 2002b; Ladson Billings, 1995). Outcome expectations concern the likely consequences of engaging in the specified behavior (Bandura, 1977, 1986, 1993; Pajares, 1996). More specifically, Bandura (1977) defined outcome expectancy beliefs as "a person's estimate that a given behavior will lead to certain outcomes" (p. 193). Teachers with high self-efficacy are more likely to believe they can use students' cultural backgrounds to make learning meaningful, while teachers with low self-efficacy feel less confident about their ability to help students feel like valued members of the class (Siwatu, 2007; Tschannen-Moran & Hoy, 2001).

Although researchers (Siwatu, 2007; Gay 2000) suggest the interface between teacher efficacy and CRT, measures have predominantly involved general education participants and pre-service teachers (Chu, 2011; Chu & Garcia, 2014). Chu and Garcia (2014) are the first to develop instruments that assess the interface between CRT and teacher efficacy for special education teachers who work with CLD students with disabilities. They investigated the influence of contextual variables (i.e., personal characteristics, teaching assignments, and professional preparation) on special education teachers' CRT self-efficacy (CRTSE) and CRIOE

when serving exceptional learners from CLD backgrounds. Results of an online survey of 344 participants from three urban school districts in the Southwest, revealed a statistically significant difference in respondents' perceptions of CRTSE and CRIOE based on their perceived effectiveness of their teacher education programs as well as PD in preparing them to work with CLD students. CRT efficacy beliefs were influenced by mediating factors, such as teachers' language status and educational settings. However, we do not know what kind of exposure and practical experiences teachers had in teaching training and PD. Therefore, this study seeks to explore how teachers may increase their efficacy beliefs through PD to broaden their knowledge of effective teaching methods.

CTE of General and Special Educators

Collective efficacy addresses a group's shared beliefs in its ability to organize and execute courses of action necessary to produce given levels of attainment (Goddard, 2001; Goddard et al., 2000). Goddard et al. (2000) ascertained that when collective efficacy is high, teachers believe they can reach their students and overcome negative external influences, thus persist more, increase planning, take responsibility for student achievement, and stay positive despite setbacks. Goddard and Goddard (2001) explored the multilevel relationship between teacher and collective efficacy beliefs by sampling elementary teachers in a large Midwestern school district. In their analysis, perceived collective efficacy emerged as the strongest predictor of variation among schools in teachers' sense of efficacy. Later, Goddard et al. (2000) later hypothesized that the influence of collective efficacy beliefs in organizations was affected by teacher perceptions that schools set realistic goals, were organized, had a serious disposition, and cast high expectations for academic success.

CTE forms because of (1) teacher analysis of the teaching task and (2) teacher assessment of the competence of the faculty to teach the tasks (Goddard et al., 2000). In other words, CTE refers to an individual teacher's perceptions of his or her own faculty's ability to cope with events that challenge the group. Although personal and collective efficacies are two different constructs, research in a cross-cultural context tends to agree that both constructs influence one another in a familiar way (Schechter & Tschannen-Moran, 2006). Collective efficacy is dependent upon an individual member's ability to regulate, reflect, and utilize collective knowledge of human agency, recognizing that it is through individuals that an organization acts (Goddard et al., 2000). While CLD students with disabilities experience lower academic success rates and school completion rates (Chu, 2011; Sanford et al., 2011), research on CTE and academic performance for this subgroup remains scant.

Research has pointed to the importance of collective efficacy in co-teaching, a collaboration of general and special education teachers working together to support all students in an inclusive classroom (Friend & Cook, 2017; Mullaney, 2017). It is particularly advantageous for CLD students with disabilities who can learn alongside their non-disabled peers. However, co-teaching can manifest frustration among teachers who need more support and resources (Friend & Cook, 2017). Mullaney (2017) interviewed six general education and five special education elementary teachers in an urban school district in northern New Jersey. Results revealed that cultivating collective efficacy among co-teachers required opportunities for meaningful collaborative practices to discuss roles and responsibilities, time to co-plan, and professional learning. Additionally, mutual trust and respect are essential components of collective efficacy.

CRIOE of Special Educators

Collective teacher efficacy and CRT self-efficacy interface regarding student achievement for CLD students with disabilities. Given multiple tenets of teaching from planning and preparation to environment, instruction, and professionalism, many factors influence how these efficacies work together. For instance, Knoblauch and Hoy (2008) found upon investigation of student teachers' sense of efficacy regarding rural versus suburban and urban settings, student teachers in urban settings exhibited significantly lower perceived collective efficacy. However, Caprara et al. (2003) determined teachers with a strong sense of CTE, believed through effective teaching they could respond to students' needs in diverse settings and gain support of parents to work collaboratively to overcome negative influences and disadvantages. International research has documented students taught by teachers with high efficacy make more progress than students taught by teachers with low efficacy (Caprara et al., 2003; Darling-Hammond & Lieberman, 2012).

Teachers with high levels of CTE have practices consistent with CRT goals. Specifically, teachers persist longer when faced with difficulties and consider student culture when creating meaningful learning environments (Tschannen-Moran & Hoy, 2001). Teachers also employ different instructional strategies (Goddard et al., 2000; Tschannen-Moran & Hoy, 2001) and experiment with a variety of materials and approaches when designing quality instruction (Goddard et al. 2000). Teachers prioritize respect and rapport while, exercising the belief all students can learn (Gibson & Dembo, 1984; Goddard et al., 2000). They persist with difficult behaviors using relationship rapport to teach coping skills and effective strategies for managing emotions (Ross et al., 2004) and demonstrate responsiveness to individual student needs by communicating in a supportive manner (Knoblauch & Hoy, 2008).

Concerning professional preparation, Chu and Garcia (2014) found CRTSE scores were positively and significantly associated with (a) certifications in bilingual education/ESL, (b) attending the program mainly designed to work with diverse populations (vs. not addressed in the program), (c) attending 6 to 10 PD sessions (vs. 1–2 sessions), (d) attending more than 10 PD sessions (vs. 1–2 sessions), and attending PD training sessions that were focused entirely on working with CLD students (compared with not attending this type of session). Chu and Garcia (2014) believe more research is needed to explore the hypothesis that speaking more than one language may indirectly increase teachers' confidence in their ability to serve ELLs and their families because personal linguistic experiences may contribute to increased understanding of second language acquisition and empathy for ELLs facing educational challenges. This research is particularly warranted, given the association of empathy and cultural understanding with intercultural communication competence (Gudykunst & Kim, 2003).

While the research on CTE, CRTSE, and CRIOE as it pertains to special education teachers working with CLD students with disabilities is scarce, Chu and Garcia (2014; 2018) have made significant strides while they pioneered this work. Their studies raise questions about (1) how teachers may increase their efficacy beliefs during teacher-education programming and PD regarding the broadening their knowledge about effective teaching methods; (2) how to increase collective efficacy by drawing upon shared knowledge and individual efficacy; and (3) the collective impact of these variables on educational outcomes of CLD students with disabilities. Equally important, Chu and Garcia's (2014; 2018) studies only represent in-service special education teachers from three urban school districts in the Southwest. There is a need for additional research to establish the suitability of the current instrument for use with special education teachers in other regions of the US.

Purpose of Study

The number of CLD students with disabilities continues to rise, shifting the instructional landscape. This change requires teachers to leverage educational theory with a professional capacity to teach inclusively (Carbonneau et al., 2022). However, there is a long-standing concern about the preparation of teachers who work with CLD students with disabilities (Cartledge & Kourea, 2008; Paneque & Barbetta, 2006). Despite the best efforts of educators, there are ongoing issues in the educational system that have historical, social, political, and economic repercussions (Ladson-Billings, 2014). Given continuous patterns of disproportionate representation of CLD students with disabilities, it is essential to understand the relationship between teacher efficacy pertaining to cultural responsiveness and the educational success of special education students who are culturally and linguistically diverse (Chu, 2016).

According to research, compelling and successful teaching methods are both related to teaching efficacy (Zee & Koomen, 2016). However, in this field, research has primarily concentrated on implementing culturally relevant teaching strategies, and there has not been much work done with CLD students with disabilities (Chu & Garcia, 2014; 2018). Therefore, Chu and Garcia (2014) pinpointed why further research is needed. First, evidence suggests that teaching effectiveness may vary depending on the situation, such as the subject matter or the presence of CLD students in the classroom (Goddard & Goddard, 2001). Second, most research on teaching effectiveness focuses on general education instructors without considering instructors who work with CLD students with disabilities (Chu & Garcia, 2014). Chu and Garcia (2014; 2018) have been the first to investigate the relationship between TSE, CTE, and CRT of special educators. However, students from diverse cultural and linguistic backgrounds navigate many academic and social situations between home, school, and the community, utilizing a

variety of specific discourses. In order to ensure equal opportunities for learning and academic advancement, it is critical to assess the self-efficacy of both general and special education teachers.

CHAPTER III: METHODOLOGY

This regional study was conducted using a descriptive research design. Data was gathered from an online survey. Participants were recruited from six public school districts in the Midwest. This chapter presents the method used to address research questions by describing a) participants, b) recruitment, c) procedures, d) instrumentation, and e) data analysis.

Participants

Participants were included in the study if they: (a) were in-service special education or general education teachers with licensure, (b) taught for one month or more, and (c) worked with CLD students who had disabilities including pre-kindergarten through twelfth grade or students ages 18 to 22. Participants were excluded from the study if they: (a) were a substitute teacher working for a teacher on leave from their assignment, (b) served as a teacher assistant or one-on-one attendant, or (c) were a related service provider such as a certified occupational therapist assistant, occupational therapist, physical therapist, school psychologist, social worker, or speech-language pathologist.

Recruitment

After receiving approval from the University Internal Review Board (IRB), initial recruitment emails were sent to district leadership in two public school districts in the Midwest (Appendix A). Approximately 1,000 teachers were expected to meet inclusion criteria. It was anticipated that a minimum of 20% of the total teacher pool would consent to participate in the study. District administrators were asked to forward the participant consent form (Appendix B) to all general and special education teachers. Teacher participation was voluntary and optional even after the district consented to participate. Two weeks following the initial email, district administrators were asked to send a follow-up email reminding participants who had yet to

respond that they had an additional week to complete the survey. The researchers monitored the response rate and asked district administrators to send one extra weekly reminder following the second notice.

However, due to a low response rate of 16% (47 of 300 surveys), a modification was granted by the IRB to expand the participant pool to include four additional regional school districts. The six participating districts represented counties with populations ranging from 73,095 to 205,943. More than 45% of the students meet “low income” status per the state’s terminology for students who qualify for free or reduced-price lunches. While figures specific to CLD students with IEPs are not available on state report cards, a comparison of the districts demonstrates that Black students account for 23.7%, 30%, 46%, and 49% of the student bodies across these specific districts. In contrast, Hispanic students represented 28%, 33%, 46%, and 29% of the district population. Asian students represented 0%, 0%, 0.6%, and 1%. American Indian students reflect 0%, 0%, 0.2%, and 0.2%. Pacific Islander students had the lowest representation at 0%, 0%, 0.2%, and 13%. Finally, students of Two or more races total 10%, 12%, 14%, and 20%. Percentages of students with IEPs in the respective districts totaled 17%, 18%, 19%, and 20% of the student population.

Procedures

Following district approval, eligible general and special education teachers were invited to participate in the study via an email they received from their district administrator. The recruitment email (Appendix B) described the study, explained inclusion and exclusion criteria, and invited participants to respond to the questionnaire. To access the survey, participants clicked on a link powered by the platform Qualtrics. Once participants opened the survey, they were presented with three to four eligibility screening statements to which they could respond

“yes” or “no”: (1) Are you actively practicing as either a general or special education teacher? (2) Have you taught for one month or more? (3) Do you teach CLD students with disabilities between pre-kindergarten and twelfth grade or students ages 18 to 22? (4) Are you currently serving in any of the following roles: long-term substitute teacher, teacher assistant or one-on-one attendant, or a related service provider? Using Skip Logic within the survey builder, participants who did not meet the criteria were sent to the end of the survey, where they exited the questionnaire.

Once the teachers clicked on the link embedded within the recruitment email to access the survey, those teachers who answered “yes” to the first three questions were eligible to participate and then taken to the informed consent page. If a participant answered “yes” to the fourth question, they immediately exited the study. Prospective participants were notified of the potential risks and benefits of participation in the study, their rights as study participants, and that their participation was voluntary. Participants provided electronic informed consent by clicking the “I agree” button embedded on the page before proceeding to the survey.

Survey Instrument

The survey instrument comprised 62 items—the first part captured demographic information about the participants. The second part contained several scales: Collective Teacher Efficacy, Culturally Responsive Teaching Efficacy, and Culturally Responsive Instruction Outcome Expectancy, totaling 44 items about teacher beliefs and practice. A copy of the general education teacher questionnaire is in Appendix D, whereas the special education teacher questionnaire is in Appendix E.

Due to sparse research on the teaching efficacy of special education teachers and even less on those who serve CLD students with disabilities (Chu & Garcia, 2018; 2021), this study

seeks to understand better teacher confidence, particularly of those serving in urban areas where diminished access to effective instruction has contributed to the marginalization of diverse students. Compounded by the differences between general and special education teachers in their teaching roles, responsibilities, settings, and preparation (Chu & Garcia, 2014), this study prioritizes exploring teacher perspectives across all three instructional behaviors: CTE, CRTSE, and CRIOE. General and special education teachers are included in this study because teacher attrition is challenging at this time (NCES, 2022), contributing to differences in achievement, making it imperative to adequately prepare all teachers to meet students' diverse learning needs. In addition, research on individual and collective efficacy is also critical, mainly because students with disabilities are increasingly serviced in inclusive settings, specifically the general education classroom. Furthermore, there may be differences between the teachers' perceptions and their abilities (Chu & Garcia, 2018; 2021).

Participant Characteristics

Three categories of demographic information were collected (Appendix C). First, participants were asked to provide information about their (a) gender, (b) race, (c) ethnicity, (d) spoken languages, (e) experience with diversity during their personal pre-K-12 school career, and (f) experience with diversity in their own postsecondary enrollment. Second, participants were asked to share information about their current teaching assignment. Third, participants were asked to disclose information about their teacher preparation and PD experiences focused on CLD students with disabilities, specifically concerning diversity-specific content about teaching CLD students with disabilities.

Collective Teacher Efficacy (CTE) Scale

The Collective Teacher Efficacy (CTE; Chu, 2016) scale consisted of 12 items used to identify special and general education teachers' perspectives about staff competence and ability to follow through on school norms, collaborate, instruct with proficiency, manage behavior, and access materials. Findings from this scale were intended to inform school administrators about the organizational agency of their team (Chu, 2016). Chu (2016) originally developed this scale for use with special education teachers. For general education teachers, modifications of the scale were necessary because all items were not specific to a teacher's licensure and appropriate to practice for all teachers. Examples of items include, "Teachers in my school believe every child here can learn, including students with disabilities from CLD backgrounds" and "Teachers in my school are not skilled in culturally and linguistically responsive teaching methods" (Chu, 2016, p. 44). Chu (2016) found teachers with higher ratings had higher perceptions of their own abilities to provide adequate service for CLD students with disabilities.

Chu (2016) developed this measure following Goddard et al.'s (2000) two dimensions of efficacy: "assessment of task analysis and analysis of teaching competence" (p. 485). In other words, teachers analyze a task and determine what they need to implement instruction, considering barriers to success and resource constraints (Goddard et al., 2000). Student motivation is an example of a barrier, whereas a limitation is the availability of instructional materials. Examples of scale items include, "Teachers in this school do not have the skills to deal with disciplinary problems of students with disabilities from CLD backgrounds" and "Teachers in my school need more training to be able to create a barrier-free environment that facilitates learning for students with disabilities from CLD backgrounds" (Chu, 2016, p. 44). Goddard et al. (2000) described teaching competence as a teacher's leverage of what is to be taught against the

confidence they have in their colleagues. Meaning, teachers weigh their colleagues' skill set and expertise with a positive disposition that all students can be successful (Goddard et al., 2000). An example of a scale item is, "Teachers in my school work together to produce meaningful learning for students with disabilities from CLD backgrounds" (Chu, 2016, p. 44).

Participants are asked to rate each item on a 5-point Likert scale ranging from (1) *strongly disagree* to (5) *strongly agree*. Several items (5, 7, 9, 10, and 12) measure negative responses. As a result, negative items were reversely scored so positive dispositions exhibited higher mean scores (Chu, 2016). Higher scores reflect a higher level of collective efficacy. Chu (2016) found in-service special education teachers who taught PreK through grade 12 believed teachers at their schools needed more training on how to remove obstacles impeding the success of students with disabilities from CLD backgrounds. The rate of reliability of Cronbach's alpha for this scale was ($\alpha = .83$) which was considered adequate (Chu, 2016).

The Chu and Garcia (2018) study treated specific means and standard deviations for the participants' responses as a dimension. The first dimension was group competence which included Items 1, 2, 4, 5, 6, 10, and 12. Each variable was run as a descriptive statistical analysis in SPSS to obtain means and standard deviations. Next, researchers estimated how participants viewed their colleagues' confidence in teaching skills, methods, and experience working with CLD students with disabilities. Finally, item-specific means and standard deviations for the participants' responses in the dimension of task analysis of Items 3, 7, 8, and 9 indicated the respondents' perceptions of the availability of instructional materials, students' abilities and motivations, and access to home and community resources to support students' learning (Chu & Garcia, 2018).

Culturally Responsive Teaching Self-Efficacy (CRTSE) Scale

Chu and Garcia's (2014) CRTSE scale, a 20-item questionnaire explored participants' perceived confidence in their ability to perform teaching tasks that integrate instruction with the cultural and linguistic experiences of students. Using a 5-point Likert-type scale, participants responded to items within a range of (1) *definitely no* to (5) *definitely yes*. Items on this scale explored teacher perspectives on teaching tasks, including instruction, behavior management, relationship rapport, the learning environment, and interventions. Chu and Garcia (2014) found that special education teachers who taught in restrictive environments, such as the resource room or self-contained classroom, reported higher CRTSE ratings than those who taught in the inclusive general education environment. Because they may have more responsibility for instructing their CLD students with disabilities in these settings, Chu and Garcia (2014) hypothesized that this group of teachers might be more likely to believe that their use of culturally responsive instruction positively impacts student learning (outcome expectancy). In other words, education in these environments may be linked to fewer outside influences thought to affect students' achievements, raising expectations for those outcomes (Chu & Garcia, 2014). Teachers with higher CRTSE ratings were also more likely to teach students with mild to moderate disabilities than those with severe or profound (Chu & Garcia, 2014). In a subsequent study, the scale's reliability was described as good as per Cronbach's alpha measurement ($\alpha = .95$; Chu, 2016).

The CRTSE was adapted after Siwatu's (2007) original 40-item questionnaire to measure the CRT knowledge and skills of preservice teachers. Chu and Garcia (2014) adapted this scale, resulting in a 20-item questionnaire to assess in-service special education teachers' efficacy in teaching CLD students with disabilities. Siwatu's (2007) scale was developed based on the idea

that culturally responsive pedagogy is an approach that: (a) capitalizes on students' cultural knowledge, experiences, and preferences; (b) considers students' culture in the development of classroom environments; (c) uses a various assessment strategy for measuring student growth; and (d) provides students with what they need to know to function in mainstream culture while maintaining cultural identity and language.

I made one modification to the CRTSE Scale (Chu & Garcia, 2014) to accommodate the participant pool that includes both special and general education teachers. Concerning Item 4, which states, "Develop appropriate Individual Education Plans for my students with disabilities who are from CLD backgrounds" (Chu & Garcia, 2014, p. 225). This statement will remain intact for special education teachers. For general education teachers who do not write IEPs, the statement is revised to say, "Implement appropriate modifications to lesson plans for my CLD students with IEPs."

Culturally Responsive Instruction Outcome Expectancy (CRIOE) Scale

The Culturally Responsive Instruction Outcome Expectancy (CRIOE) questionnaire (Chu & Garcia, 2014) a 12-item scale, explored participants' perceptions about integrating CRT practices with instruction. Participants responded to items using a 5-point, Likert-type scale ranging from (1) *very uncertain* to (5) *very certain*. Examples of items include, "Using prior knowledge and culturally relevant examples motivates students' learning" and "Matching instruction to students' learning preferences promotes students' academic performance" (Chu, 2016, p. 46). Chu (2016) found in-service special education teachers were not certain about the connection between cultural identity and positive student outcomes, suggesting deficit thinking such as student failure was connected to the home environment, might have influenced teacher

perception. The reliability of the scale was determined to be good per the measurement of Cronbach's alpha ($\alpha = .92$; Chu, 2016).

Chu and Garcia (2014) adapted Siwatu's (2007) Culturally Responsive Teaching Outcome Expectancy (CRTOE) Efficacy Scale. Initially, the 26-item questionnaire measured preservice teachers' beliefs about outcomes associated with a culturally responsive approach to teaching across: (a) curriculum and instruction, (b) classroom management, (c) student assessment, and (d) cultural enrichment (Siwatu, 2007). Chu and Garcia (2014) retained two constructs of the scale: (a) "CRTSE was defined as teachers' perceptions of their ability to execute specific teaching practices associated with culturally responsive pedagogy" (p. 220), and (b) "CRTOE was defined as teachers' perceptions that engaging in CRT practices will lead to positive classroom and student outcomes" (p. 220). Specific language about CLD students with disabilities was added. For example, "Assessing student learning using a variety of assessment procedures will provide a better picture of what they have learned" (Siwatu, 2007, p. 1094) was modified to state, "A variety of assessment strategies should be used to gain a complete picture of what students with disabilities from diverse backgrounds have learned" (Chu & Garcia, 2014, p. 223). Additionally, "Encouraging students to use their native language will help to maintain students' cultural identity" (Siwatu, 2007, p. 1094) was edited to, "Encouraging the use of native language for students with special needs will help to maintain students' cultural identity" (Chu & Garcia, 2014, p. 223). The elimination of six items inquiring about the same topic, such as academic achievement or assessment, results in a significant decrease of items on the Chu and Garcia (2014) scale.

For this study, which includes both general education and special education teachers, one modification was made to Item 2. This item originally stated, "Students with disabilities from

diverse backgrounds will be successful when special education instruction is adapted and modified for their cultural and linguistic characteristics” (Chu & Garcia, 2014, p. 226). Item 2 now states, “Students with disabilities from diverse backgrounds will be successful when instruction is adapted and modified for their cultural and linguistic characteristics.” Regardless of whether the teacher is a special educator or a general educator, both are responsible for implementing accommodations for IEP learners to meet their academic and functional needs.

Data Analysis

Data Screening and Preparation

Prior to analysis, there were four considerations for data screening and preparation. First were cutoff criteria for inclusion of data. For data to be included in the results, participants need to complete 90% of scale items. Participants not meeting this minimum were eliminated from analysis. Next, all items requiring reverse coding were recoded. Third, data was screened for missing data and outliers.

Descriptive Statistics

Statistical Packages for the Social Sciences (SPSS version 27) was used to conduct descriptive analyses. First, demographic data was summarized. Next, the frequencies, means, and standard deviations of participant ratings of items on the three scales (CTE, CRTSE, and CRIOE) were calculated in addition to total scale scores. The total scale scores were calculated to determine the response averages for all participants. The total scale scores were then used to compare the overall responses of the two teacher groups. Items not normally distributed or reflective of patterns due of extreme responses (e.g., responding “strongly disagree” or “strongly agree” to all items), were flagged for further inspection and possible omission from analysis. The process for addressing each research question is outlined below.

Research Question One (RQ1)

To answer RQ1, *how do teachers perceive their colleagues' beliefs and abilities to implement culturally responsive teaching strategies to support CLD students with disabilities*, the following approach were used to interpret data.

CTE. Participants shared their perceptions of colleagues' orientation to school, and community issues by rating each item on a 5-point, Likert-type scale ranging from (1) strongly disagree to (5) strongly agree (Chu & Garcia, 2018). Means and standard deviations were used to understand how teachers perceived group competence and task analysis. Higher ratings reflected higher levels of collective efficacy (Chu & Garcia, 2018).

Research Question Two (RQ2)

Regarding RQ2, *how confident are teachers in their abilities to implement culturally responsive teaching strategies to support CLD students with disabilities*, data were interpreted as follows.

CRTSE. Participants conveyed their experiences with implementing CRT strategies for CLD students with disabilities on the CRTSE scale using a 5-point scale, in which responses range from (1) *definitely no* to (5) *definitely yes*. Means and standard deviations were used to identify the teachers' perceived abilities to perform teaching tasks from creating a caring environment to using a variety of teaching methods to meet CLD students' needs. Higher mean scores indicated a higher level of confidence teachers perceived regarding the teaching task. The interpretation of the scores enabled the researcher to identify the perceptions of respondents' CRTSE regarding their ability to teach students from CLD backgrounds with disabilities, addressing RQ2.

Research Question Three (RQ3)

Regarding RQ3, *to what extent do teachers believe implementing culturally responsive teaching strategies will positively affect learning for CLD students with disabilities*, data were interpreted as follows:

CRIOE. Participant responses on the CRIOE scale demonstrated teacher beliefs about the positive effects CRT has on student outcomes, using a 5-point scale ranging from (1) *very uncertain* to (5) *absolutely uncertain*. Concerning teacher perceptions regarding student outcomes for CLD students with disabilities, CRT practices, including instructional strategies, communication styles, and assessment, higher mean scores were associated with higher levels of outcome expectancy. The interpretation of these scores using means and standard deviations, enabled the researcher to describe respondents' outcome expectancies, addressing RQ3.

Research Question Four (RQ4)

To answer RQ4, *what are the differences between general and special education teacher responses on the CRIOE scale*, the following steps were taken:

The analysis plan was to use a *t*-test to evaluate whether there was a statistical difference between the means of general and special education teacher responses. The *t*-test is applicable when the sample is small, typically under 30. Considering that the subgroups, general education teachers totaled ($n = 16$) and special education teachers ($n = 28$), the *t*-test would be advantageous for making conclusions about the larger population. In preparation for the *t*-test, it was necessary to run a Shapiro-Wilk test to determine whether the sample was likely to originate from a normal distribution (Shapiro & Wilk, 1965). Verifying the normality of distribution is a requirement prior to running a *t*-test. Given the four assumptions, the potential outcomes could be (1) Normality: data have a normal distribution, (2) Homogeneity of variances: data from

multiple groups have the same variance, (3) Linearity: data have a linear relationship, or (4) Independence: data are independent. The null hypothesis (H0) states that the variable is a normal distribution, and the alternative hypothesis (H1) states that the variable is not normal. After running the Shapiro-Wilk, data was determined not to have a normal distribution, therefore a *t*-test was no longer appropriate, and a nonparametric alternative test was in order.

Consequently, the Mann-Whitney *U* test, a nonparametric alternative to the independent sample *t*-test, was used to draw different conclusions about the data (Mann & Whitney, 1947). Analysis of the ranges led to a determination as to whether the two populations differ via differences in medians between groups. The null hypothesis (H0) states that the distribution of each item is the same across categories of teachers. The alternative hypothesis (H1) states that the distribution of each item is not the same. Conclusions would hinge on the shape of the data distributions which would either be identical or different. The distribution shapes did differ, so mean ranges were examined because medians were not appropriate, given that they have greater statistical power when the distributions are identical. Results were described via mean ranges.

CHAPTER IV: RESULTS

This chapter presents results from the study using a descriptive research design. First, the researcher will briefly describe the regional school districts participating in the study. Next, participants' personal, professional, and instructional qualities will be summarized. Then the frequencies, means, and standard deviations of participant ratings of items on the three scales (CTE, CRTSE, and CRIOE) will be presented. Finally, the research questions will be answered.

The following four research questions guided this study:

- RQ1: How do teachers perceive their colleagues' beliefs and abilities to implement culturally responsive teaching strategies to support CLD students with disabilities?
- RQ2: How confident are teachers in their abilities to implement culturally responsive teaching strategies to support CLD students with disabilities?
- RQ3: To what extent do teachers believe implementing culturally responsive teaching strategies will positively affect learning for CLD students with disabilities?
- RQ4: What are the differences between general and special education teacher responses on the CRIOE scale?

Presentation of Participants

This section will provide a narrative describing the participating school districts and teachers who took part in the study.

Participant Districts

Administrators from participating school districts forwarded the questionnaire to in-service general and special education teachers serving pre-K through 12th grade and those teaching students ages 18 to 22. Initially, the study targeted twin school districts, including

District 1 (761 teachers, 10,120 student enrollments, 16% IEPs) and District 2 (341 teachers, 4,208 student enrollments, 16% IEPs). However, due to the low response rate, and per IRB approval, four additional districts joined the pool, including District 3 (489 teachers, 8,147 student enrollments, 19% IEPs), District 4 (332 teachers, 4,765 student enrollments, 18% IEPs), District 5 (136 teachers, 1, 678 enrollments, 20% IEPs), and District 6 (61 teachers, 801 enrollments, 17% IEPs). As a result, there were a total of 2,120 potential respondents.

Participant Demographics

Table 1 displays the participants' demographic and occupational traits. Approximately 2,100 teachers received the survey and 224 responded. There were 87 participants who did not meet the eligibility criteria and six did not agree to participate in the study. As a result, the response rate was 10.7%. The remaining 131 eligible participants attempted the survey, however 16 responded only to participant characteristics, while 71 responded to participant characteristics and two of the three scales. These 87 participants were removed from the pool, leaving 44 participants who met the eligibility requirements and completed 90% of the survey. The survey completion rate was 33.6% of the reduced number of participants. Overall, the participant pool included general education teachers ($n = 16$) and special education teachers ($n = 28$).

In a comparison of general education to special education teachers, participants were primarily female (GE: 68.7%, SE: 89.2%) female and White (GE: 87.5%, SE: 85.7%) with less than one year to more than 15 years of teaching experience. The majority of the participants held a bachelor's (GE: 31.2%, SE: 35.7%) or a master's degree, (GE: 56.2%, SE: 57.1%). Concerning experience, the majority of teachers had less than 15 years (GE: 69%, SE: 75%), while the rest had more than 15 years (GE: 31%, SE: 25%). The participants reported certifications in general education (GE: 93.7%, SE: 0%), special education (GE: 0%, SE: 41%), and both general and

special education (GE: 6.2%, SE: 35.7%). Those who were dually certified completed the questionnaire that matched their current teaching assignment. For instance, if a teacher taught general education to high school students, they finished the general education teacher questionnaire. If a teacher taught self-contained special education students, then they completed the special education teacher questionnaire. Teachers reported they taught in inclusive classrooms (GE: 100%, SE: 21.4%), mostly in pre-K through fifth grade (GE: 50%, SE: 50%) or high school (GE: 50%, SE: 32.1%).

Table 1

Participants' Personal, Professional, and Instructional Characteristics (N = 44)

Characteristics	Gen Ed (n = 16)		Special Ed (n = 28)	
	n	(%) ^a	n	(%) ^a
Gender				
Male	5	(31.2)	3	(10.7)
Female	11	(68.7)	25	(89.2)
Gender nonconforming	0	(0.0)	0	(0.0)
Prefer not to say	0	(0.0)	0	(0.0)
Teachers' racial background				
American Indian or Alaskan Native	0	(0.0)	0	(0.0)
Asian	0	(0.0)	2	(7.14)
Black or African American	2	(12.5)	2	(7.14)
Native Hawaiian or Pacific Islander	0	(0.0)	0	(0.0)
White	14	(87.5)	24	(85.7)
Two or more races	0	(0.0)	0	(0.0)
Ethnic background				
Hispanic	1	(6.2)	0	(0.0)
Not Hispanic	15	(93.7)	28	(100.0)
Language(s) spoken ^b				
English	16	(100.0)	28	(100.0)
French	0	(0.0)	1	(3.5)
Spanish	2	(12.5)	2	(7.1)
Other	0	(0.0)	2	(7.1)
Description of K-12 schools attended as a child				
Attended predominately White K-12 schools	11	(68.7)	18	(64.2)
Attended predominately non-White K-12 schools	1	(6.2)	3	(10.7)
Balanced representation of White and non-White	4	(25.0)	7	(25.0)
Description of college attended for bachelor's degree				
Attended a predominately White college	11	(68.7)	18	(64.2)

Table 1 Continues

Table 1 Continued

Attended a predominately non-White college	1	(6.2)	2	(7.1)
Uncertain	4	(25.0)	8	(28.5)
Highest level of education attained				
Bachelor's	5	(31.2)	10	(35.7)
Master's	9	(56.2)	16	(57.1)
Post Master's certificate program	0	(0.0)	2	(7.14)
Doctorate	2	(12.5)	0	(0.0)
Type of certification				
General education	15	(93.7)	0	(0.0)
Special education	0	(0.0)	18	(64.2)
General and special education	1	(6.2)	10	(35.7)
Years of Experience				
< 1 year	1	(6.2)	2	(7.1)
1-5 years	4	(25.0)	8	(28.5)
6-10 Years	6	(37.5)	9	(32.1)
11-15 years	0	(0.0)	2	(7.1)
>15 years	5	(31.2)	7	(25.0)
Classroom setting taught in				
General education with speech only or resource	12	(75.0)	0	(0.0)
Co-taught	4	(25.0)	6	(21.4)
Resource room	0	(0.0)	14	(50.0)
Self-contained	0	(0.0)	6	(21.4)
Missing responses	0	(0.0)	2	(7.14)
Grade level or age range of students				
PreK-5 th grade	8	(50.0)	14	(50.0)
6-8 th grade	0	(0.0)	4	(14.2)
9-12 th grade	8	(50.0)	9	(32.1)
18-22 years old	0	(0.0)	1	(3.5)
Description of students served				
Most students are White	0	(0.0)	0	(0.0)
Most students are non-White	11	(68.7)	21	(75.0)
Half are White, the other half are non-White	5	(31.2)	7	(25.0)
Types of disabilities categories represented among CLD students with disabilities ^b				
Autism	11	(68.7)	19	(67.8)
Deaf blindness	0	(0.0)	2	(7.14)
Deafness	0	(0.0)	3	(10.7)
Developmental delay	11	(68.7)	20	(71.4)
Emotional disturbance	5	(31.2)	12	(42.8)
Hearing impairment	0	(0.0)	4	(14.2)
Intellectual disability	7	(43.7)	12	(42.8)
Multiple disabilities	2	(12.5)	8	(28.5)
Other health impairment	9	(56.2)	16	(57.1)

Table 1 Continues

Table 1 Continued				
Orthopedic impairment	1	(6.25)	3	(10.7)
Speech or language impairment	6	(37.5)	13	(46.4)
Specific learning disabilities	10	(62.5)	19	(67.8)
Traumatic brain injury	0	(0.0)	2	(7.14)
Visual impairment (including blindness)	0	(0.0)	3	(10.7)
Amount of coursework that addressed diversity in pre-service preparation				
Diversity-related topics were addressed	6	(37.5)	20	(71.4)
Diversity-related topics were not addressed	10	(62.5)	8	(28.5)
Attended PD sessions related to teaching CLD students with disabilities within the past five years				
Yes	12	(75.0)	21	(75.0)
No	4	(25.0)	7	(25.0)
How have you accessed PD?				
Through the school district	12	(75.0)	21	(75.0)
Through post baccalaureate programs	0	(0.0)	0	(7.14)
Through outside entities I pursued on my own	2	(12.5)	2	(8.6)
Missing responses	2	(12.5)	5	(17.8)
If participant answered “yes” to the previous question, topics addressed in PD sessions related to CLD students with disabilities included ^b				
Assessment	8	(50.0)	10	(35.7)
Behavior management	8	(50.0)	10	(35.7)
Classroom environment	12	(75.0)	15	(53.5)
Home and school connection	5	(31.2)	13	(46.4)
Student and teacher rapport	6	(37.5)	9	(32.1)
Teaching strategies accounting for consideration of disability, culture, and language	9	(56.2)	16	(57.1)

^a Percentages derived from column totals. ^b Participants could choose multiple responses.

Data Screening and Preparation

Before analysis, there were considerations for data screening and preparation, including data recording, missing data, outliers, the randomness of data, and assumptions of normality. The cutoff criteria for the inclusion of data required participants to complete 90% of scale items.

After determining whether teachers met the requirements to participate, there were 109 participants. However, only 65 completed the CTE and the CRTSE, whereas 44 completed the CTE, CRTSE, and CRIOE. Therefore, the researcher eliminated incomplete responses from the

data set. The reduced participant pool was deemed necessary for consistency with data reporting and simplification of determining meaning from the results. Given the 44 remaining completed responses, 16 were general education teachers and 28 were special education teachers.

Results

The researcher used Statistical Packages for the Social Sciences (SPSS version 27) software to calculate participant ratings' means and standard deviations. Abnormal distributions or reflective patterns due to extreme responses (e.g., responding "strongly disagree" or "strongly agree" with everything) are not detected. The results for general and special education teachers are independent of one another. Data for the two teacher groups are presented side-by-side in each corresponding table. Total score calculations represent the sum of all scale-items within each scale, which compute to an average that describes overall teacher perceptions.

Collective Teacher Efficacy

RQ1

Regarding teacher perception of colleagues' beliefs and abilities to implement CRT strategies to support CLD students with disabilities, participants shared their perceptions using a 5-point scale in which responses ranged from (1) strongly disagree to (5) strongly agree, with a 3 being neutral. The item-specific means and standard deviations for general and special education teachers are independent of one another but presented side-by-side in Table 2. Items 5, 7, 9, and 10 were reverse-scored due to negative wording (Chu & Garcia, 2018). Mean scale scores represent teacher perception of colleagues' beliefs and abilities to implement CRT strategies.

General Education Teachers. General education participants' original mean scores ranged from 2.19 to 4.13. Item means were mainly between 3.06 and 3.81 on the 5-point scale, and standard deviations ranged from 0.72 to 1.12. Since items 5, 7, 9, and 10 are negatively

worded (e.g., *Teachers in my school believe their CLD students with disabilities are not motivated to learn*), lower scores reflect more positive perceptions. As a result, responses were reverse-scored and included in Table 2 to compare all scale items. Most participants gave neutral or lower (disagree, strongly disagree) ratings on the following items: (1, 2 [4 was evenly split], 6, 8, 9, and 11) while rating these items higher (agree, strongly agree): 3, 5, 7, 10, and 12.

The item with the highest mean was Item 3, *teachers in my school believe every child here can learn, including CLD students with disabilities* ($M = 4.13$, $SD = 0.72$), meaning teachers have confidence that their colleagues perceive all students can learn. The second highest mean was Item 9 (with a reverse score of $M = 3.81$, $SD = 0.58$) in which the majority disagreed or strongly disagreed that their colleagues believe their CLD students with disabilities are not motivated to learn. The items with the lowest means were Item 6; *teachers in my school are confident they can increase levels of parental involvement, including parents of CLD students with disabilities* ($M = 3.06$, $SD = 1.12$), and Item 8; *teachers in my school believe that their student's home life provides many learning advantages, including CLD students with disabilities* ($M = 3.06$, $SD = 1.06$). Results demonstrate that 100% of general education teachers do not have complete confidence concerning their colleagues' abilities to manage discipline per response to Item 10, *teachers in my school do not have the skills to deal with disciplinary problems of CLD students with disabilities* (e.g., $M = 3.31$, $SD = 0.50$: 10 responded "neutral"; 4 "agree"; and 2 "strongly agree"). Results also show that teachers believe their colleagues need more training to be culturally and linguistically responsive (Item 12, $M = 3.81$, $SD = 0.98$; 9 responded "agree" and 3 "strongly agree"). The sum of the mean score for this scale is 36.13, and the mean item score is 3.01. In other words, the teacher's responses were neutral overall. The total score across all items on the scale is ($M = 40.13$, $SD = 3.96$).

Special Education Teachers. Participants' original scores ranged from 2.32 to 3.96. Item means mainly were between 3.11 and 3.79 on the 5-point scale, and standard deviations ranged from 0.74 to 1.13. Due to the negative wording in Items 5, 7, 9, and 10 (e.g., *Teachers in my school do not have the skills to deal with disciplinary problems of CLD students with disabilities*), low scores reflect higher ratings. The responses were reverse-scored and included in Table 2. Most participants gave neutral or lower ("disagree" or "strongly disagree") ratings on the following items: (2, 5, 6, 8, 9, and 10). Participants rated the following items higher ("agree" or "strongly agree"): 1, 3, 4, 7, 11, and 12.

The items with the highest means were Item 3; *teachers in my school believe every child here can learn, including CLD students with disabilities* ($M = 3.96, SD = 1.00$), and Item 4, *teachers in my school work together to produce meaningful learning for CLD students with disabilities* ($M = 3.79, SD = 0.79$). The item with the lowest mean was Item 7; *teachers in my school believe that the lack of appropriate materials makes teaching CLD students with disabilities difficult* (with a reverse score of $M = 2.21, SD = 0.74$). It is noted that results demonstrate 92.9% of special education teachers perceive their colleagues believe their CLD students with disabilities are not motivated to learn (Item 9, with a reverse score of $M = 3.68, SD = 0.77$: 8 responded "neutral"; 15 "disagree"; and 3 "strongly disagree. Eighty-two percent of special education teachers have concerns about their colleagues' skills with culturally and linguistically teaching methods (Item 5 with a reverse score of $M = 3.50, SD = 0.84$: 5 responded "neutral"; 17 "disagree"; and 1 "strongly disagree). Seventy-five percent of special education teachers have concerns about their colleagues' abilities to manage disciplinary problems of CLD students with disabilities (Item 10 with a reverse score of $M = 3.21, SD = 1.10$: 6 responded "neutral"; 14 "disagree"; and 1 "strongly disagree"). In addition, results show that

the majority of special education teachers believe their colleagues need more training to be culturally and linguistically responsive (Item 12, $M = 3.79$, $SD = 0.88$: 15 responded "agree" and 5 answered "strongly agree"). The sum of the mean scores for this scale was 40.63. When divided by the total number of items, the mean item score is 3.39, which means the teacher's responses were neutral overall. The total score across all items on the scale was ($M = 39.43$, $SD = 3.10$).

Table 2

CTE Comparison of General and Special Education Teacher Responses (N = 44)

Items	General Ed. ^a (n = 16)		Special Ed. ^a (n = 28)	
	M	SD	M	SD
Teachers in my school				
1. are confident they can work with CLD students with disabilities.	3.27	0.96	3.46	0.99
2. are confident they can motivate every student, including CLD students with disabilities.	3.25	0.86	3.11	1.13
3. believe every child here can learn, including CLD students with disabilities.	4.13	0.72	3.96	1.00
4. work together to produce meaningful learning for CLD students with disabilities.	3.56	0.81	3.79	0.79
5. are not skilled in culturally and linguistically responsive teaching methods ^b .	2.88	0.51	2.50	0.84
6. are confident they can increase levels of parental involvement, including parents of CLD students with disabilities.	3.12		3.50	
7. believe the lack of appropriate materials makes teaching CLD students with disabilities difficult.	3.06	1.12	3.39	0.88
8. believe their students' home life provides many learning advantages, including CLD students with disabilities.	3.69	0.79	3.79	0.74
9. believe their CLD students with disabilities are not motivated to learn ^b .	2.31		2.21	
10. do not have the skills to deal with disciplinary problems of CLD students with disabilities ^b .	3.06	1.06	3.21	0.88
	2.19	0.58	2.32	0.77
	3.81		3.68	
	2.69	0.50	2.79	1.10
	3.31		3.21	

Table 2 Continues

Table 2 Continued

11. believe home and community environments support learning for CLD students with disabilities.	3.25	0.93	3.32	0.91
12. need training to create a barrier-free environment that facilitates learning for CLD students with disabilities.	3.81	0.98	3.79	0.88
Sum of Mean Score	36.13	9.82	40.63	10.91
Overall Mean Item Score	3.01	0.82	3.39	0.91
Total Scale Score	40.13	3.96	39.43	3.10

Note. ^aResponses are based on a 5-point Likert-type scale ranging from 1= strongly disagree; 2 = disagree; 3 = Neither disagree or agree; 4 = agree; and 5 = strongly agree. ^bThe second row represents reverse scoring.

Culturally Responsive Teaching Self Efficacy

RQ2

Concerning teacher confidence in the ability to implement CRT strategies to support CLD students with disabilities, participants conveyed their experiences using a 5-point scale, in which responses ranged from (1) definitely no to (5) definitely yes. The results for general and special education teachers are independent of one another but presented side-by-side in Table 3. Total scores describe overall teacher perceptions of personal confidence to implement CRT strategies.

General Education Teachers. Regarding general education teachers' confidence in CRT practices, mean scores ranged from 2.06 to 3.63, with standard deviations from 1.32 to 1.89. The highest rated item was Item 14; *I can create a caring, supportive, and warm learning environment for CLD students with disabilities* ($M = 3.63, SD = 1.75$). The second highest rated item was Item 9, *I can use various teaching methods to assist students with learning content* ($M = 3.13, SD = 1.86$), yet teacher responses either indicated “neither no or yes” or “definitely no.” The next range of scores fell between 3.0 and 2.5, correlating with “neither no or yes” and “no” (e.g., Items 1, 6, 7, 10, 12, 13, 15, 17, and 20). Examples of items teachers lack confidence in include Item 7, *I can critically examine the curriculum to determine whether it appropriately*

represents CLD groups ($M = 2.81, SD = 1.46$); Item 10, *I can communicate with students with disabilities who are ELLs* ($M = 2.69, SD = 1.40$); and Item 17, *I can identify the ways standardized tests may be biased against students from diverse backgrounds* ($M = 2.69, SD = 1.62$). Nine-item means were between 2.5 and 2.0, correlating with "no" (e.g., Items 2, 3, 4, 5, 8, 11, 16, 18, and 19). General education teachers reported they were less sure of how to build positive relationships with families (Item 18; $M = 2.25, SD = 1.77$), structure the environment and lessons to match the various backgrounds and needs of CLD students with disabilities (Item 3; $M = 2.25, SD = 1.44$), and implement appropriate modifications to lesson plans (Item 4; $M = 2.25, SD = 1.44$). General education teachers were least confident with Item 16, *I can structure parent-teacher conferences so parents of CLD students with disabilities feel comfortable participating* ($M = 2.06, SD = 1.39$). The sum of the mean scores for this scale is 51.16, and the mean item score is 2.56. This suggests the general education teachers in this sample did not demonstrate confidence with CRTSE across the scale. The total score across all items on the scale was ($M = 75.19, SD = 12.59$).

Special Education Teachers. For the special education teacher participants, mean scores ranged from 1.57 to 2.86, with standard deviations from 1.07 to 2.03. Twenty percent of special education teachers' highest means fell in the mid-range of 2.8 to 2.1, correlating with "no" (e.g., 14, 16, 18, and 19). The highest mean was associated with Item 14, *I can establish a caring, supportive, and warm learning environment for CLD students with disabilities* ($M = 2.86, SD = 2.03$) with a slight majority (53.6%) of special education respondents rating this item as "neither no or yes, "definitely no," or "no." The second highest mean was Item 19, *I can help students build strong relationships with one another* ($M = 2.75, SD = 2.00$).

Half of the mean scores fell between 2.0 “no” and 1.0 “definitely no” (1, 2, 3, 5, 6, 7, 8, 9, 10, and 11). Special education teachers rated Item 9, *I can implement various teaching methods to assist students with learning content* ($M = 1.64, SD = 1.45$). reported low confidence with Item 1, *modifying instructional activities and materials to meet the developmental needs and learning interests of their CLD students with disabilities* ($M = 1.61, SD = 1.42$) and Special education teachers demonstrated the lowest confidence with Item 2, designing appropriate instruction matched to English Language Learners’ language proficiency and special needs ($M = 1.57, SD = 1.14$). The sum of the mean scores for this scale is 41.36, and the mean item score is 2.07. This suggests the special educators in this sample did not demonstrate confidence with CRT. The total score across the scale was ($M = 77.93, SD = 8.28$).

Table 3

CRTSE Comparison of General and Special Education Teacher Responses (N = 44)

Items	General Ed. ^a		Special Ed. ^a	
	(n = 16)		(n = 28)	
I can...	M	SD	M	SD
1. modify instructional activities and materials to meet the developmental needs and learning interests of my CLD students with disabilities.	2.63	1.67	1.61	1.42
2. design appropriate instruction matched to ELLs’ language proficiency and special needs.	2.25	1.39	1.57	1.14
3. create a learning environment that reflects the various backgrounds of my CLD students with disabilities.	2.38	1.59	1.89	1.57
4. implement appropriate modifications to lesson plans or develop IEPs for my CLD students with disabilities.	2.25	1.44	2.04	1.67
5. use my students’ prior knowledge related to their CLD backgrounds to help make learning meaningful.	2.25	1.44	1.67	1.36
6. use various types of assessment that is matched to ELL language proficiency and special education needs.	2.63	1.46	1.96	1.07
7. critically examine the curriculum to determine whether it appropriately represents CLD groups.	2.81	1.56	1.93	1.22

Table 3 Continues

Table 3 Continued

8. identify the differences between student behavior and communication at home and at school.	2.44	1.37	2.00	1.39
9. use a variety of teaching methods to assist my students in learning the content.	3.13	1.86	1.64	1.45
10. communicate with students with disabilities who are ELL	2.69	1.40	1.86	1.46
11. identify cultural differences when communicating with parents regarding their child’s education progress.	2.38	1.54	1.86	1.35
12. implement interventions that minimize the effects of cultural mismatch between home and school.	2.50	1.32	2.04	1.27
13. distinguish linguistic/cultural difference from learning difficulties for students with disabilities.	2.63	1.41	2.07	1.25
14. create a caring, supportive, and warm learning environment for CLD students with disabilities.	3.63	1.75	2.86	2.03
15. support the native language of my students with disabilities who have limited English proficiency.	2.56	1.46	2.25	1.51
16. structure parent-teacher conferences or IEP meetings that are comfortable to allow the parents of CLD students with disabilities to participate.	2.06	1.39	2.57	1.81
17. identify the ways standardized tests may be biased against students from diverse backgrounds.	2.69	1.62	2.11	1.48
18. build positive relationships with CLD parents.	2.25	1.77	2.61	1.89
19. help students develop positive interactions with each other.	2.38	1.89	2.75	2.00
20. obtain information about students’ preferred learning styles	2.62	1.82	2.07	1.76
Sum of Mean Score	51.16	31.15	41.36	30.10
Overall Mean Item Score	2.56	1.56	2.07	1.51
Total Scale Score	75.19	12.59	77.93	8.28

Note. ^aResponses are based on a 5-point Likert-type scale ranging from 1= definitely no; 2 = no; 3 = neither no or yes; 4 = yes; and 5 = definitely yes.

Culturally Responsive Instruction Outcome Expectancy

RQ3

The CRIOE scale determined how teachers perceived CRT strategies as positively associated with higher learning outcomes for CLD students with disabilities (1) very uncertain to (5) very certain. Higher levels of outcome expectancy are linked to higher mean scores (Chu & Garcia, 2018). The results for general and special education teachers are independent of one

another but presented side-by-side in Table 4. Total scale scores represent teacher perception of colleagues' perceptions of the positive affect of CRT strategies on student outcomes.

General Education Teachers. Considering general education teachers' perspectives on the association between CRT strategies and higher learning outcomes for CLD students with disabilities, mean scores ranged from 3.81 to 4.37, with standard deviations between 0.58 and 0.85. Teachers demonstrated certainty for most items, which had a mean of 4.06 or higher (e.g., Items 2, 4, 6, 7, 9, 11, and 12). General education teachers were most confident with Item 6, *using prior knowledge and culturally relevant examples to motivate students' learning* ($M = 4.37$, $SD = 0.72$). Teachers felt certain that students' learning became meaningful when teachers were aware of the cultural and linguistic backgrounds or needs of their CLD students with disabilities (Item 4: $M = 4.31$, $SD = 0.70$). General education teachers believed students with disabilities from diverse backgrounds would be successful when instruction was adapted and modified for their cultural and linguistic characteristics (Item 2: $M = 4.25$, $SD = 0.68$), they understood different communication styles reduce misunderstandings (Item 5: $M = 4.25$, $SD = 0.68$), and self-esteem enhances when teachers value students' native languages and cultures (Item 11: $M = 4.25$, $SD = 0.68$).

Scores represented the lowest mean range between 3.50 and 3.99, meaning teachers were between "neither uncertain nor certain" and "certain." However, a review of the raw data shows that most teachers responded with "certain" or "definitely certain" for Items 1, 3, 8, and 12. For instance, the mean for Item 1, *utilizing a variety of teaching approaches to support learning processes*, was ($M = 3.94$, $SD = 0.85$; 8 responded certain, 6 definitely certain); Item 3, *a variety of assessment strategies to gain a complete picture of what students with disabilities from diverse backgrounds have learned* was ($M = 3.94$, $SD = 0.77$; 7 responded certain, 4 definitely certain);

Item 8, *understanding the discontinuity between students' home and culture and school culture minimizes the likelihood of discipline problems* ($M = 3.94$, $SD = 3.93$; 9 responded certain and 3 definitely certain); and Item 10, *encouraging the use of the native language for students with special needs to maintain students' cultural identity* was ($M = 3.94$, $SD = 0.77$; 7 responded certain, 4 definitely certain). The lowest mean was Item 12, *changing learning environments to be compatible with students' home cultures to increase students' motivation to learn* ($M = 3.81$, $SD = 0.75$; 7 responded certain and 3 definitely certain). The sum of the mean scores for this scale is 49.18. When divided by the total number of items, the mean item score is 4.10, which means the teachers were certain that CRT positively affects student outcomes. The total score across was ($M = 49.06$, $SD = 6.33$).

Special Education Teachers. Regarding special education teachers' perspectives on the association between CRT strategies and learning outcomes for CLD students with disabilities, the mean scores ranged from 3.93 to 4.54, with standard deviations between 0.51 and 0.77. The highest mean score for special education teachers was Item 6, *using prior knowledge and culturally relevant examples to motivate students' learning* ($M = 4.54$, $SD = 0.51$). Teachers agreed on Item 1 that *utilizing various teaching approaches is helpful for students' learning processes* ($M = 4.50$, $SD = 0.51$). Special education teachers recognized that Item 3, *various assessment strategies help them understand what students with disabilities from diverse backgrounds have learned* ($M = 4.46$, $SD = 0.58$). Teachers also agreed on Item 11, *students' self-esteem increases through their acceptance of native languages and cultures* ($M = 4.46$, $SD = 0.51$). Teachers demonstrated certainty for nearly every item, with a mean range of 4.14 to 4.54. The exception was Item 8 ($M = 3.93$, $SD = 0.77$), which is very close to "certain."

The lowest mean was associated with Item 8, *understanding the discontinuity between students' home and school culture to minimize the likelihood of discipline problems* ($M = 3.93$, $SD = 0.77$). A review of the raw data shows that 68% of teachers responded either certain ($n = 12$) or definitely certain ($n = 7$) to this item. Special education teachers recognize that understanding differences between home and school cultures would likely reduce discipline problems. The sum of the mean scores for this scale is 51.95. When divided by the total number of items, the mean item score is 4.33, which means the teachers were certain that CRT positively affects student outcomes. The total score across the scale was ($M = 49.06$, $SD = 6.33$).

Table 4

<i>CRIOE Comparison of General and Special Education Teacher Responses (N = 44)</i>				
Items	General Ed. ^a (n = 16)		Special Ed. ^a (n = 28)	
	M	SD	M	SD
1. Utilizing a variety of teaching approaches is helpful for students' learning processes.	3.94	0.85	4.50	0.51
2. Students with disabilities from diverse backgrounds will be successful when instruction is adapted and modified for their cultural and linguistic characteristics.	4.25	0.68	4.32	0.67
3. A variety of assessment strategies should be used to gain a complete picture of what students with disabilities from diverse backgrounds have learned.	3.94	0.77	4.46	0.58
4. Students' learning becomes meaningful when teachers are aware of the cultural and linguistic backgrounds/needs of their students with disabilities.	4.31	0.70	4.43	0.50
5. Understanding different communication styles reduces misunderstandings between teachers, students, and their families.	4.25	0.68	4.39	0.63
6. Using prior knowledge and culturally relevant examples motivates students' learning.	4.37	0.72	4.54	0.51
7. Establishing positive home-school relations increases involvement of parents of CLD students with disabilities.	4.12	0.72	4.25	0.70

Table 4 Continues

Table 4 Continued

8. Understanding the discontinuity between students' home culture and school culture minimizes the likelihood of discipline problems.	3.94	0.68	3.93	0.77
9. Matching instruction to students' learning preferences promotes students' academic performance.	4.06	0.58	4.32	0.55
10. Encouraging the use of the native language for students with special needs will help to maintain students' cultural identity.	3.94	0.77	4.21	0.69
11. Students' self-esteem can be enhanced when their native languages and cultures are valued by teachers.	4.25	0.68	4.46	0.51
12. Changing learning environments to be compatible with students' home cultures increases students' motivation to learn.	3.81	0.75	4.14	0.76
Sum of Mean Score	49.18	8.58	51.95	7.38
Overall Mean Item Score	4.10	0.72	4.33	0.62
Total Scale Score	49.06	6.33	51.89	5.78

Note. ^aResponses were based on a 5-point Likert-type scale ranging from 1 = very uncertain; 2 = certain; 3 = neither uncertain or certain; 4 = certain; and 5 (very certain).

Differences Between General and Special Education Teachers on CRIOE Scale

RQ4

To ascertain whether CRIOE data is a normal distribution, a Shapiro-Wilk test was conducted (Shapiro & Wilk, 1965). Data were tested based on two hypotheses: (1) Null hypothesis (H₀), The variable is normally distributed, and (2) The Alternative hypothesis (H₁); The variable is not normally distributed. The results indicate that the null hypothesis for general education teacher data ($p = .005-.006$) and special education teacher data ($p = 0.001$) is not accepted because all pairings were significant. After all, the p values were less than the chosen alpha level of .05. As a result, the data is not normally distributed. Therefore, a nonparametric test was necessary to determine the assumption of normality.

The Mann-Whitney U test evaluates whether general education teachers' responses differed from special education teachers' (Mann & Whitney, 1947). The results indicated that (1)

there was no significant difference between the general and special education teachers' CRIOE scores (general education teachers' mean rank = 20.18 and special education teachers' mean rank = 23.83) except for (2) Item 3; *a variety of assessment strategies should be used to gain a complete picture of what students with disabilities from diverse backgrounds have learned*; ($\alpha = .023, p < .05$); meaning special education teachers perceived the effects of CRT as greater on outcome expectancy than general education teachers.

On the whole, general and special education teachers were neutral concerning their colleagues' beliefs and abilities to implement CRT strategies to support CLD students with disabilities collectively. Both general and special education teachers demonstrated confidence with CRT. However, general and special education teachers perceived CRT to affect student outcomes positively. There were no significant differences between the perceptions of general and special education teachers regarding the positive effects of student outcomes, except for assessment strategies to measure the learning of CLD students with disabilities. Just over half of general and special education teachers reported exposure to PD on CLD students with disabilities, accounting for language, disability, and culture. Further, in teacher preparation, the raw data demonstrates 62.5% of general education teachers reported they did not have exposure to diversity related topics during their teacher training programs, whereas 28% of special education teachers reported they did not have exposure. Consequently, it is imperative to identify PD methods for cultivating CRT practices that have been proven effective in improving teacher practice and increasing student outcomes for CLD students with disabilities.

Table 5*Differences Between General and Special Education Teachers on Mann-Whitney U Test*

Items	Gen Ed Mean rank	SPED Mean rank	Sig. ^a Two-tail
1. Utilizing a variety of teaching approaches is helpful for students' learning processes.	19.88	24.00	.246
2. Students with disabilities from diverse backgrounds will be successful when instruction is adapted and modified for their cultural and linguistic characteristics.	18.91	24.55	.132
3. A variety of assessment strategies should be used to gain a complete picture of what students with disabilities from diverse backgrounds have learned.	17.19	25.54	.023*
4. Students' learning becomes meaningful when teachers are aware of the cultural and linguistic backgrounds/needs of their students with disabilities.	21.63	23.00	.698
5. Understanding different communication styles reduces misunderstandings between teachers, students, and their families.	20.94	23.39	.498
6. Using prior knowledge and culturally relevant examples motivates students' learning.	21.19	23.25	.561
7. Establishing positive home-school relations increases involvement of parents of CLD students with disabilities.	21.16	23.27	.567
8. Understanding the discontinuity between students' home culture and school culture minimizes the likelihood of discipline problems.	22.66	22.41	.947
9. Matching instruction to students' learning preferences promotes students' academic performance.	19.41	24.27	.154
10. Encouraging the use of the native language for students with special needs will help to maintain students' cultural identity	19.69	24.11	.234
11. Students' self-esteem can be enhanced when their native languages and cultures are valued by teachers.	20.31	23.75	.333
12. Changing learning environments to be compatible with students' home cultures increase students' motivation to learn.	19.19	24.39	.167

Note. ^aThe chosen significance level was $p = .05$, *Item was significant at the .05 level.

CHAPTER V: DISCUSSION

This study aims to understand teacher efficacy and outcome expectancies regarding cultural responsiveness and the educational success of CLD students with disabilities. Results lead to positive discoveries. Specifically, general education teachers exhibited confidence that their colleagues perceive all students can learn. They were also self-efficacious in their ability to create a caring, supportive, and warm learning environment for CLD students with disabilities. General educators also felt secure about their ability to be culturally responsive by using prior knowledge and culturally relevant examples to motivate student learning. Furthermore, general education teachers perceived student learning to be meaningful when they demonstrated awareness of the cultural and linguistic backgrounds of their CLD students with disabilities.

Similarly, special education teachers had positive dispositions about their work with CLD students with disabilities. They perceived their colleagues to believe every child can learn, including CLD students with disabilities and believed teachers work together to produce meaningful learning. Among the many culturally responsive teaching behaviors they responded to, special education teachers rated their ability to create a caring, supportive, and warm learning environment for CLD students with disabilities as the highest. Special education teachers also expressed value in using prior knowledge and culturally relevant examples to motivate student learning. However, general and special education teacher participants did not perceive themselves or their colleagues as culturally responsive. Yet, general and special education teachers agreed that CRT positively affects student outcomes and believe training will help create a barrier-free environment to facilitate learning for CLD students with disabilities.

Confidence in colleagues and oneself plays a significant role in determining student outcomes (Bandura, 1993). The general and special education teachers in this study believed in

the importance of CRT for students but had low self-efficacy in their abilities to implement it. Additionally, both groups could not respond with certainty (due to means hovering around neutrality) that their colleagues could or did implement it. Furthermore, only about half of the participants in this study indicated they had received PD related to teaching strategies that take into consideration disability, culture, and language, even though the majority of participants teach in schools in which White students are the racial minority. These findings represent a continued gap between teacher knowledge and understanding of students from nondominant sociocultural and linguistic communities and students with disabilities (Garcia & Ortiz, 2013; Chu & Garcia, 2018), despite research-based evidence demonstrating that PD in culturally responsive practices has positive outcomes for teachers and students (Babinski et al., 2018; Brown & Crippen, 2016; Cantrell et al., 2022; Garcia & Garcia, 2016; Penner-Williams, 2019). Teachers gain understanding, improved confidence, instructional proficiency, and knowledge, while students experience increased self-esteem and academic success (Cantrell et al., 2022). Greater PD efforts than “sit and get” trainings may be required to improve teachers’ CRT in order to ensure they learn how to implement CRT strategies with fidelity (Wood et al., 2016). High-quality PD related to CRT that includes in-service training and follow-up support through coaching has shown promise in promoting changed teacher behavior (Garbacz et al., 2015). This chapter discusses key findings and specific contributions to the field. It also presents limitations, implications, and recommendations for in-service teacher practice.

Key Findings

There were several significant findings as a result of this study. First, special education teachers' perceptions of colleagues were lower than those of general education teachers. Second, the only statistically significant difference between general and special education teachers

concerned perceptions of utilizing various assessment strategies for CLD students with disabilities. Third, general and special education teachers demonstrated low efficacy with facets of working with families such as integrating student cultures into instruction, honoring native languages, and making parents feel comfortable in school meetings. In addition, there are similarities and differences to consider between this study and others like it.

Special Education Teacher Perceptions of Colleagues

Donohoo (2018) examined the consequences of CTE specifically on teacher behavior and other teacher related factors. It was found that CTE was associated with a number of positive teacher behaviors including increased teacher leadership, strong focus on academic pursuits, greater job satisfaction, and positive attitudes towards students (Donohoo, 2018, p. 323).

In this study, special education teachers had a much more negative perception of their colleagues' collective efficacy. Specifically, they took issue with their colleagues' perceptions of student motivation, proficiency with teaching methods, and skillfulness with discipline. It is possible that some of the ratings could have been influenced by the setting the special education teachers serve in, as 21.4% reported that they teach in an inclusive setting, suggesting that the majority of special education teachers have limited awareness of their general education colleagues if they are not coteaching or spend the majority of their time in a self-contained setting. In a quantitative study involving 443 teachers, Flood and Angelle (2017) investigated the connections among trust, collective efficacy, and teacher leadership. Schools with high levels of CTE and trust were shown to establish the essential conditions and cultures for high levels of teacher leadership, which resulted in beneficial outcomes for their schools (Flood & Angelle, 2017). Given the finding about special education teachers' low perceptions of colleagues and the evidence of CTE benefits, PD that includes the cultivation of shared efficacy must be prioritized.

Teacher Perceptions of Assessment Strategies

The special education teachers in this study acknowledged the necessity of using various assessment strategies to understand what students with disabilities from diverse backgrounds have learned, perceiving the effects of CRT as greater on outcome expectancy than general education teachers. When asked about their perceptions of Item 3; a *variety of assessment strategies should be used to gain a complete picture of what students with disabilities from diverse backgrounds have learned*; review of the raw data reveals 31.3% of general education teachers responded “neither” while 68.8% responded “certain” or “definitely certain.” In comparison, 3.6% of special education teachers responded “neither” and 96.4% responded “certain” or “definitely certain.”

The differences in the perceptions concerning assessment strategies may be explained by the sharp discrepancies in general and special education PD and teacher preparation. For instance, 75% of general education teachers and 75% of special education teachers reported that they attended PD sessions related to teaching CLD students with disabilities within the past five years. However, only 50% of general education teachers and 35.7% of special education teachers reported that assessment was addressed in those PD sessions. Barrio et al., (2019) found that practicing teachers struggle with components of pre-referral models for special education evaluation. Specifically, teachers have difficulty with managing documentation through progress monitoring, selecting appropriate evidence-based practices for individual needs, and lack PD on using assessment to measure the progress of students with special needs (Castro-Villarreal et al., 2016; Isbell & Szabo, 2014).

What is more, 62.5% of general education teachers and 28.5% of special education teachers reported that diversity-related topics were not addressed in their pre-service preparation

programs. Knowing that teacher preparation is a key formation period for preservice general teachers' beliefs and knowledge, Barrio (2021) conducted a mixed methods study to examine general education preservice teachers' knowledge and skills of CRT and models of pre-referrals to special education. Results were contradictory, demonstrating that general education preservice teachers had high knowledge and skills, but their work indicated otherwise. Prior to this, Barrio and Combes (2015) found that pre-service teachers lacked knowledge or skills about the implementation of intervention strategies to support struggling learners as their general education courses and practicum experiences did not focus on this topic. Neal (2013) found similar results in a study focused only on practicum experiences. Results suggested that pre-service teachers felt unprepared to implement academic interventions in the classroom. In contrast, future special education teachers felt more prepared than general education teachers, with special education teachers spending more time in their coursework discussing interventions, but mostly in their special education courses. Hurlbut and Tunks (2016) found that pre-service teachers had the ability to transfer knowledge about interventions to practice in mathematics, in which preservice special education teachers fared better when compared to preservice general education teachers. Results indicated that the connection between mathematics method courses and their practicum experiences concerning interventions was lacking for preservice general education teachers.

Working With Families

General and special education teachers reported that they are not confident in building positive relationships with families. Paris (2015) has affirmed that low teacher confidence is associated with language barriers or a need for more understanding of family cultures. General and special education teachers alike agreed they have difficulty identifying the differences: (1) between student behavior/communication at home and student behavior/communication at

school; (2) cultural differences when communicating with parents regarding their child's education progress; (3) implementing interventions that minimize the effects of cultural mismatch between home and school; (4) structuring parent-teacher conferences or IEP meetings that are comfortable to allow the parents of CLD students with disabilities to participate; and (5) building positive relationships with culturally and linguistically diverse parents. These findings indicate that teachers would benefit from training to accommodate disability and culture. Showing teachers how to integrate student culture into lessons will improve the quality of instruction as well as their interactions with the families of their students.

In Comparison to Similar Studies

Most of the participants in this study were in-service general or special education teachers who were female (68.7%, 89.2%) and White (87.5%, 85.7%), which mirrors national data for the teacher work force (76%; 79%; NCES, 2021b). The demographic of the current study is somewhat similar to the in-service special education teachers (78.8 % female and 60% White) in Chu and Garcia's (2018) study on CTE, CRTSE, and CRIOE and the preservice general education teachers (72.7% female and 81.8% White) in Siwatu's (2007) study on CRTSE and CRTOE.

Findings in this study also suggest that both general and special education teacher participants lack confidence in CRTSE for CLD students with disabilities. This finding is similar to Chu and Garcia's (2018) participants who exhibited comparatively low ratings in supporting students' native language, identifying bias in standardized tests, and implementing interventions that minimize the effects of a cultural mismatch between home and school. Similarly, Siwatu's (2007) participants were least efficacious in their ability to communicate with ELLs. Teachers across all studies valued the encouragement of students using their native language to maintain

their cultural identity (Chu & Garcia, 2018, $M = 3.74$; $SD = 1.07$; and Siwatu, 2007, $M = 74.62$, $SD = 19.44$). Teachers also felt confident about their ability to create a supportive and warm learning environment (Chu & Garcia, 2018, $M = 4.62$; $SD = 0.58$). Preservice teachers felt most confident with establishing a positive teacher-student relationship by building a sense of trust with students ($M = 93.49$, $SD = 8.62$).

While both participants in the current study and in prior work reported a similar level of confidence, it should be noted that participant pools are different. The teachers in Chu and Garcia's (2018) study were in-service special education teachers ($N = 344$) who taught elementary ($n = 185$), middle ($n = 90$), and high school ($n = 69$). Of the 344 respondents, 119 (35%) indicated that they spoke a language other than English. The number of years of teaching experience ranged from less than 1 year to more than 15. Teachers (76%) reported they had attended PD trainings focused on CLD students, while (24%) reported that they had not. Whereas the participants in Siwatu's (2007) study were preservice teachers ($N = 275$) who were elementary ($n = 153$), middle ($n = 18$), and secondary ($n = 104$) education majors. The preservice teachers reported an average of 2.38 classes addressing diversity in the classroom and completed an average of 1.49 practicum requirements.

One finding from the current study was in stark contrast to the study by Chu and Garcia (2018). Both general and special education teachers reported low confidence with perceived ability to use a variety of teaching methods to assist students with learning content and help students develop positive interactions with each other. ($M = 2.61$, $SD = 1.89$). The participants in the Chu and Garcia (2018) study had high mean scores related to their perceived ability to use a variety of teaching methods to assist students in learning the content ($M = 4.51$; $SD = 0.64$), and to help students develop positive interactions with each other ($M = 4.51$; $SD = 0.61$). The

contrast in confidence between the two groups may be explained by differences in experience and training. For instance, the teachers in this study, particularly special education teachers, reported low years of experience and exposure to PD on CLD students with disabilities. In addition to the previously mentioned exposure to PD training focused on CLD students, 20% of the Chu and Garcia (2018) participants reported an endorsement in ESL and 3% were certified in bilingual education. Suggesting ESL training may bolster teacher confidence in supporting instruction and foster relationships between CLD students with disabilities, especially when the teacher's personal life experiences significantly differ from those of the students.

Unique Contributions

This study adds to the literature in two ways because it: (a) examined the efficacy beliefs of in-service general and special education teachers working with CLD students with disabilities and (b) provided evidence that school districts need to supply continuous PD supported with coaching in response to teacher request for training on how to meet the needs of CLD students with disabilities. There are studies about teacher self-efficacy and outcome expectancy focused on pre-service teachers (Siwatu, 2007; 2011), general education teachers (Gibson & Dembo, 1984; Tschannen-Moran & Hoy, 2001), and special education teachers (Coldarci & Breton, 1997; Reyes et al., 2022). There are also many studies about the CTE of general education teachers (Goddard, 2001; Goddard & Goddard, 2001; Goddard et al., 2000), with some attention to special education teachers (Chu & Garcia, 2014; 2018). However, research on general and special education teachers working with CLD students with disabilities has been scant.

This study focused on the perspectives of general and special education teachers representing all grade levels across various instructional settings within one region. These findings demonstrate that general and special education teachers embrace the differences of their

students but struggle with how to honor student cultures authentically and effectively within the classroom environment, integrate native languages with instruction, and communicate effectively with parents of this specific population of learners. This study determined that teachers do not feel confident about their skills related to CTE or CRT. However, general and special education teachers must work closely to plan and implement special education services in the general education setting (Chu & Garcia, 2018).

As a result, general and special education teachers must work together and be keenly aware of their colleagues' abilities. The researcher believes that teachers are not collaborating on instruction and supports for CLD students with disabilities, or they are afraid to judge the efficacy of their colleagues because they do not personally feel efficacious with CRT. As Donohoo (2018) has noted, instructors need access to training and valuable experience using this pedagogy in order to use CRP effectively. Teachers must participate in PD that uses guided practice, real-world scenarios, and authentic examples to cultivate this type of reflection to develop their critical consciousness, knowledge, and skills in the technical aspects of CRP.

Limitations

There were significant limitations in this study. First, the response rate was much lower than expected, resulting in a small sample size ($N = 44$). Consequently, the low statistical power of the small sample may make it difficult to determine if these results are true. Initially, this study reviewed teachers' perspectives in twin school districts. In order to increase the participant pool, four additional districts joined the study. While more participants attempted to engage with the questionnaire, many did not complete it. The researcher appeared at department meetings, appealed to individuals personally, gave time during the staff development day to take the survey, and sent reminder emails to increase the participant pool. Concerning the teachers who

did participate, the majority only completed the participant characteristics and two of the three scales. The researcher determined the survey was too long and required too much time to complete. During response monitoring, the researcher found that many teachers started the survey, but if they could not complete it in one sitting, they were unlikely to reopen the survey to finish it. In addition, more special education than general education teachers responded. Also, the survey was completed mainly by women; hence only a few men were represented. Furthermore, there needed to be more representation of teachers across grade levels. Lastly, some participants did not understand that CLD students with disabilities included all students of color, not just English Language Learners, even when defined in the survey's introduction. The researcher discovered this after prompting several teachers to complete a survey they did not understand that CLD students with disabilities included all students of color not just ELL students.

Finally, the most significant limitation of this survey study is internal validity because the results were interpreted based on the teachers' self-reports. Some may not have responded correctly to the questions because the items required them to evaluate themselves and their colleagues. Consequently, where teachers reported confidence with CRT practices, it could not be determined whether they were proficient in their work with CLD students with disabilities (Chu & Garcia, 2018). Per Sleeter (2012), self-report is not enough to measure CRT efficacy. Observation, interviews, test scores, and student reports are needed as well. When coaching teachers for equity, Aguilar (2020) finds the three most useful forms of data collection to be parent surveys, videos, and records of teacher-to-student interactions. The lack of support between colleagues and administrators may influence teacher efficacy regarding achieving successful learning outcomes for CLD students with disabilities (Goddard et al., 2000). Given the continuous patterns of disproportionate representation of CLD students in special education

and inadequate services, the researcher suggests a connection between over-identification and low TSE with CRT. Results showed that the perspectives of general and special educators were similar on specific items. However, the overall low scores on the CRTSE scale for general education teachers (2.06 to 3.13) and special education teachers (1.57 to 2.86) are problematic. Teachers may over-refer to special education because they are not confident with responding to a disabled student who is culturally and linguistically diverse.

Implications for Practice

Because of the significant limitations of my study, it would be spurious to confidentially connect the results to implication and recommendations for practice. However, there is a sufficient amount of literature that this study was based on, as well as professional teaching standards to support the recommendations outlined below. There are also implications for research, namely the need for more studies like this that have robust sample sizes. Teachers and leaders have started to understand the distinctive backgrounds and experiences of culturally linguistically diverse students as racial, ethnic, and socioeconomic diversity within schools has increased. They do this through engaging in culturally responsive leadership and learning. To make learning equitable for all students, culturally responsive techniques draw on prior educational and personal experiences as well as cultural knowledge. School districts have been taking steps to implement systems change by critically examining policies and processes at the state, district, and building level to identify and remove barriers to equity. Districts have begun this work by conducting equity audits, a tool used to collect the data that informs the process of removing programmatic barriers that impede full participation, access, and opportunity for all students to receive an equitable and excellent education. With this process, school leadership can assess the extent to which equity is present in such areas as teacher quality, the overall

instructional setting, and student achievement and attainment (Sparks, 2015). Equity audits support proactive leaders with assessing and planning for school improvement that addresses the specific cultural, linguistic, socioeconomic, and racial dynamics present in the school community (Skrla et al., 2009).

Further, school districts are educating staff about how history, science, economics, and culture connect to social justice and community issues, and how inequality affects both society and educational opportunities. By offering students choice and encouraging them to create original projects that express their ideas and concerns about their communities through paintings, blogs, social media campaigns, and storytelling, teachers can help students become more aware of their lived experiences and empower them to recognize themselves in their work. Through these exercises, many viewpoints can be distinguished and understood, while valuing diversity and envisioning how various situations might affect our lives. Providing a space for self-reflection to explore cultural identities and moving away from a one-size-fits-all method of teaching and learning are essential to attaining systems change. Recently, states have adopted standards for culturally responsive teaching to support teacher engagement with self-reflection, developing relationships with students' families, and connecting curriculum with students' lives (Muniz, 2019).

CRT Professional Teaching Standards

Professional teaching standards have significantly influenced teacher training since the 1990s. Currently, all 50 states use professional teaching standards to specify the knowledge and skills that teachers in each state should possess. The newer, culturally responsive professional teaching standards present a strong focus on culturally responsive practices. The standards come from research-based practice for closing achievement gaps and improving student outcomes

across various indicators, from literacy and math achievement to attendance and postsecondary enrollment. The federal government has given states the directive to develop their own professional standards. However, there needs to be more variation in how culturally responsive competencies are addressed, accounting for a cultural lens, system bias, culturally mediated instruction, real-world issues, and high expectations (Muniz, 2019).

Research on CRT state standards found that while all states have incorporated certain aspects of CRT within their professional teaching standards, most states still need to provide a clear or comprehensive description of CRT (Muniz, 2019). For example, the state of Alabama has established the expectation for teachers to develop an awareness of cultural positioning and its influence on their practice by (a) demonstrating an understanding of how personal and cultural biases can affect teaching and learning, (b) becoming aware of the need to analyze personal beliefs, attitudes, and expectations about learners, and (c) reflecting on personal biases and their impact on learning (Muniz, 2019). In order to meet these requirements at the Beginning level, a teacher must read, attend workshops, and ask questions of people different from oneself to increase their understanding of diverse cultures and backgrounds. To advance to the Applying level, they must also implement instructional strategies free of bias, stereotypes, and generalizations while demonstrating an understanding of their personal or cultural biases.

While states are acknowledging the importance of cultural responsiveness by developing professional practice standards, these priorities need to be fully developed and differentiated. Presently systems bias, cultural lens, and real-world issues are the most underdeveloped competencies across the 50 states (Muniz, 2019). Family and community engagement, respect for differences, and high expectations are the most developed. For example, Alaska and Washington are leading states in this work for their stand-alone teaching standards that focus on

the knowledge and skills crucial to CRT. Both states have embedded standards into their programs and policies, intending to follow all teachers throughout their careers. School districts are encouraged to become familiar with the standards established by their state and determine how to fully implement them down to the classroom level. In tandem with this task, district leaders need to help their teachers become familiar with the CRT teaching standards for their state.

Professional Development

A key practical implication of this study is the need for effective and meaningful PD on CRT. Per the Every Student Succeeds Act (ESSA, 2015), states are responsible for providing teachers, instructional leadership teams, principals, and other school leaders with high-quality, individualized PD that is evidence-based and aimed at enhancing instruction, student engagement, and achievement. This responsibility includes assisting with training initiatives to show teachers, principals, and other school leaders how to effectively (1) use data to inform decisions about improving instruction; (2) engage parents, families, and community partners; and (3) promote the incorporation of CRT learning strategies with educational programming (ESSA, 2015). Among different PD approaches, coaching has been found to be an effective approach for changing teacher practice and improving student outcomes (Babinski et al., 2018; Cantrell et al., 2022; Penner-Williams et al., 2019; Vincent et al., 2011).

Coaching is a practice of a learning specialist leading a teacher through a sequence of planning and implementation strategies to improve instruction or behavior (Vogt & Rogalla, 2009). Teachers and coaches work together to identify needs, select strategies, and reflect on implementation. Coaching consists of three stages: pre-observation conference, classroom observation, and post-observation conference (Hui et al., 2020). Instructional coaching has

demonstrated numerous positive effects on school improvement by boosting student success (Cantrell et al., 2022), teacher skills (Brown & Crippen, 2016), and fidelity in the use of instructional practices (Kraft et al., 2016).

Coaching for Professional Development

According to research, teachers frequently fail to put new practices into place after completing PD because they (a) have a limited understanding of the content, (b) are unsure of how to apply the technique they learned, and (c) have received a limited amount of training, of which they perceive only some aspects as compelling (Klinger et al., 1999). Wood et al. (2016) demonstrated the effectiveness of incorporating multilevel training opportunities into coaching modes to enhance PD. Multilevel coaching is a model that provides differentiated levels of support to teachers based on their individual needs, including a combination of in-service and follow-up support in coaching has shown promise in promoting changed teacher behavior (Garbacz et al., 2015). In addition, high-quality PD, combined with examples, practice, and coaching, improve teachers' understanding, proficiency, and use of knowledge (Cantrell, 2018). There are different ways to provide coaching support to teachers. This model focuses on culturally proficient coaching (CPC), practice-based coaching (PBC), and student-centered coaching.

Culturally Proficient Coaching

CPC is a framework built on the tenets of cultural proficiency and cognitive coaching. Cultural Proficiency is an awareness of cultural connections that can be made between teachers, students, and their families that will help teachers become educationally responsive to diverse student groups (Lindsey et al., 2020). Cognitive coaching is an approach that acknowledges that beliefs and thoughts based on our assumptions precede all actions based on reality (Costa &

Garmston, 2015). Therefore, cultural proficiency is based on valuing, respecting, and honoring diverse backgrounds and ethnicities while looking intensely at one's beliefs.

Lindsey et al. (2020) included the Five Essential Elements of Cultural Proficiency in the framework to aid coaches in facilitating discussions with teachers about their values and behaviors and school leaders in determining organizational policies and practices. The Five Essential Elements include: (1) Accessing cultural knowledge; (2) Valuing diversity; (3) Managing the dynamics of difference; (4) Adapting to diversity; and (5) Institutionalizing cultural knowledge. Cognitive coaches use this information to identify barriers and detect problematic factors such as oppressive behaviors, entitlement, and privilege. In addition, cognitive coaches can diffuse tension in people and systems as they navigate their thought processes to foster cultural awareness using the Five States of Mind (Costa & Garmston, 2015). In short, coaches help school teams build (1) *efficacy*, the capacity to make a difference; (2) *flexibility*, the ability to develop multiple options for their life and responses to life; (3) *craftsmanship*, continual work on improvement; (4) *consciousness*, constantly learning more about self and how their work impacts others; and (5) *interdependence*, the benefit of contributing to collaborations and learning more about one another. The framework capitalizes on interactive resource features: (1) Action-planning worksheets; (2) Reflective questions; (3) Coaching maps and conversation vignettes; and (4) Real-life examples through a composite case story. Through enlightened coaching, teachers, counselors, staff developers, and administrators will gain inspiration and insights to break down cultural barriers.

Practice-Based Coaching

PBC is a coaching paradigm that is relationally focused and culturally sensitive. It first emerged in early childhood research as a practical coaching approach that is sufficiently

individualized and supportive, resulting in positive outcomes for early childhood teachers and young children (Snyder et al., 2015). The PBC cycle incorporates cooperative partnerships, shared objectives, action planning, focused observation, reflection, and feedback, all of which contribute to changes in educators' practices. There are three components: (1) A needs assessment helps the coach and teacher create a goal and set an action plan; (2) An observation is then conducted in order to gather information to determine what is needed to support or refine practice; and (3) The coach and teacher reflect on feedback and support strategies to problem solve and create new supports (Snyder et al., 2015).

Research demonstrates that PBC is culturally responsive when coaches use a cultural lens to guide teachers. Strategies include encouraging teachers to share personal stories about their cultural backgrounds in continuing conversations and analyzing the power differentials between the experiences and teachers' practice. Kranski and Steed (2022) conducted an experimental analysis of a workshop plus PBC to enhance four early childhood teachers' use of culturally responsive practices (Kranski & Steed, 2022). Teachers participated in a one-hour workshop and three to six coaching sessions. Findings suggested that teachers implemented particular culturally responsive practices at higher rates than others. Specifically, teachers increased their utilization of books in the classroom with positive images and stories of diverse characters. They also provided opportunities for children to talk about race and language. In addition, while teachers struggled with encouraging students to use their home language, integrating home languages into classroom displays, and including culturally relevant pretend food and cooking supplies in the play area, teachers made improvements and viewed the goals, process, and outcomes of the workshop and PBC positively.

Student-Centered Coaching

Diane Sweeney (2012), the constructor of the student-centered coaching model, believes effective PD requires the support of a school-based coach who has provided in-depth coaching sustained over time. Sweeney explained,

Coaching often centers exclusively on the actions the teacher takes—assuming that if we improve the teaching, student learning will improve as well. There is some logic to this approach, but unfortunately, an unintended outcome is that we have spent so much time thinking about what teachers *should* be doing that we have lost touch with the most important people in our schools, the students (p. 2).

The premise of Sweeney’s (2021) model is a six-stage cycle in which (1) Standards-based goals move student learning forward; (2) Learning targets are determined to divide the goal into actionable steps; (3) Pre-assessments determine the baseline of the student’s proficiency level; (4) Co-planning session occurs between the coach and teacher to design instruction; (5) Co-teaching instruction is delivered; and (6) Post-assessment data measures student progress toward the learning targets and inform the teacher’s decision about the next instructional step.

Sweeney directs coaches to accommodate linguistic and cultural characteristics by guiding teachers through a line of inquiry at the goal-setting stage with the following questions: (1) Do any students have language barriers we need to consider and what can we do to support them better? (2) When we think about instructional materials, are the students’ stories and cultures represented? (3) Will students see themselves in the reading, discussion, and tasks? and (4) How can we make these things more relevant (Steele, 2020)? Sleeter (2012) has pointed out that culturally responsive teaching often falls short of looking at the impact on student achievement and has asked researchers to provide evidence-based assessments of academic

impact of culturally relevant principle to highlight its positive impact. Brown et al. (2018) demonstrated in their research that teachers who engage in theory to practice PD on how to use student-centered coaching activities using cultural narratives reflecting students' backgrounds are able to sustain narratives of cultural examples throughout mathematics and science instruction. Evidence includes a lesson where students were asked to explain what they knew about why people's skins were dark. The students had to access their knowledge about melanin to learn the value of the darkness in their skin.

Dudley (2021) conducted a study in which teacher participants engaged in two four-to-six-week coaching cycles to address a challenge they faced in their classrooms. Working with an instructional coach, participants set goals, implemented strategies, and gathered student data to assess progress toward coaching goals. The findings of the study showed that the coaching cycles helped increase educator knowledge in areas related to instructional practices, developing relationships, and student support. The participants also saw changes in using culturally responsive classroom management practices related to their instruction and student support. This study contributes to the literature on how coaching meets the individual needs of educators and the diverse student populations they serve.

Personal Reflection on Practice

“Interpretive research begins and ends with the biography and self of the researcher” (Denzin, 1986, p. 12). Thinking about the connection between a researcher's perspective and their personal and professional experiences, my motivation to approach this study resulted from a quest to understand my position as a White female teacher-leader in a changing educational landscape. As a special education teacher in 2013, I noticed significant changes in our school population. At first, I attributed these changes to the increased level of poverty prevalent in my

school at the time. I bought into the narrative of Ruby Payne (2005), author of *A Framework for Understanding Poverty* who said:

Schools and businesses operate from middle-class norms and use the hidden rules of the middle class. These norms and hidden rules are not directly taught in schools and or businesses. For our students to be successful, we must understand their hidden rules and teach them the rules that will make them successful at school and at work (p. 3).

Under the mentorship of Professor Dr. April Mustian, I learned Payne's perspective was biased and inaccurate in depicting the lived experiences of many people of color. Dr. Mustian helped me understand the changes I noticed in my classroom were not about poverty but rather demographic shifts in our society, where the population of Black Indigenous People of Color (BIPOC) was increasing as the White middle class was decreasing. The more I read research about achievement differences between White children and CLD children, I realized that we were still grappling with racism in America. Consequently, a cultural mismatch ensued where the predominantly White, female, and middle-class teaching force, of which I was a member, was making decisions about students of color that were rooted in bias and influenced by stereotypes. I found myself thinking about how I was also contributing to the problem. I had to wrestle with deficit thinking and biases to shift my perspective and contemplate how to teach differently. As a researcher, I began to try out culturally responsive teaching strategies while thinking about culture and trying to understand the backgrounds and lived experiences of the families and students I worked with. I also realized that I needed to choose different instructional materials so students could see reflections of themselves in our lessons. Additionally, it was essential to teach them about the incredible contributions of BIPOC to the world.

As an administrator, I wanted to extend the work of Chu and Garcia (2014; 2018), and outcome expectancy research, specific to special educators, who deemed the need for educators to be well prepared to serve in increasingly multicultural, multilingual schools imperative and the need for education leaders to address the teacher preparation gap of knowledge and skills to meet the socio-cultural and linguistic needs of exceptional learners urgent (Chu & Garcia, 2014). However, as I transitioned into administration, working in diverse school districts with equity platforms, I detected notable gaps in practice. Therefore, I was inspired to examine the efficacy and outcome beliefs of teachers working with CLD students with disabilities. Now that I have conducted my research and identified a significant practical gap in preparing teachers with the knowledge and skills to implement CRT, I am presenting a new PD framework to the field that promotes the transformation of teacher practice for those serving CLD students with disabilities.

Recommendations for Teacher Practice

Cultivate a Community

Cultivating a community begins with helping teachers get to know one another deeply by encouraging them to share their lived experiences and discover their commonalities (Holliday, 2021). Goddard et al. (2000) described CTE as teachers' shared beliefs that shape the normative environment of schools. Consequently, it is essential to help teachers strengthen their relationships with one another in order to be healthy. In addition, school leaders should take the time during in-service training to allow teachers to check and connect because they cannot do this during the rapidly-paced school day.

The cultivation of community extends to the students. In order to support positive teacher and student relationships, school leaders should spend time raising teacher awareness of the lived experiences of members of the BIPOC community who have contended with systemic racism so

they can learn to recognize the ongoing effects that hinder the success of CLD students with disabilities. As Sleeter (2012) advocates, experiential knowledge, the revealing of experiences of students of color, helps teachers learn to distinguish between heard and routinely unheard voices. Likewise, Gutierrez (2002) argues that rather than basing pedagogy and curriculum on global and stereotypic race and language identities that others project onto the students, excellent teachers take the time to get to know their students, then shape their pedagogy around relationships with them.

Cultivating a community enables teachers to come together around shared values to combat and eradicate racist practices on a systemic level (Holliday, 2021). As a result of PD that cultivates community, teachers will gain emotional connectivity with their colleagues, which may inadvertently strengthen the CTE essential to this work. In addition, by acquiring students' stories, teachers will become motivated to learn more about their students' cultures. As Garcia et al. (2006) discovered that students value teachers who create safe, respectful, culturally sensitive, and responsive learning communities and connect with their families and communities. Gutierrez (2002) argues that learning to support students culturally in a way that does not reduce culture is complicated, but the results of this kind of teaching help students thrive.

Build Capacity

For teachers to build capacity with CRP, this framework includes training on social constructs, and the ideas created and accepted by people within society. Social constructs are multifaceted and include the examination of bias and microaggressions, the offending elements derived from stereotypical beliefs that choke the prosperity of CLD students with disabilities. During PD, teachers need time and space to explore race, equity, intersectionality, and White supremacy (Holliday, 2021). For teachers to extinguish inequitable dispositions, they must

understand how they fell prey to the constructs through the influence of history. Then teachers need education on CRP theory to gain buy-in to its positive effects on outcomes for CLD students with disabilities. Hudley and Mallinson (2017) explained theory aids educators in comprehending culturally responsive instruction and multicultural education to enhance learning experiences. Therefore, teachers need the opportunity to wrestle with the critical dimensions of culturally responsive pedagogy, in order to understand the importance of CRT practices. Mitchell (2010) said culturally responsive teachers are “students of their student communities” (p. 626), meaning that in order for teachers to prepare students to learn, they must do their own preparation by learning about student culture and integrating it into lessons. As a result of this work, teachers can support students with the development of their critical consciousness and opposition to societal injustice by connecting their cultural experiences and understandings with their academic achievements (Ladson-Billings, 2014).

Building capacity helps teachers gain an understanding of cultural perspectives and practices as a result of this work. They will increase their knowledge of pedagogy and practice, which may lead to increased student engagement, improved attendance, and reduce misbehavior. Improved teacher and student relationships as a result of teacher acknowledgment and interest in student culture increases students’ self-esteem. Furthermore, improved home and school relationships make parents feel like valued education team members. Teachers need quality training and support to build their capacity with CRP, because they cannot get there alone.

Refine Practice

Teachers are used to their set patterns of practice, that have been shaped by their preservice experiences and previous in-service trainings. But to refine practice so it becomes culturally responsive, research has shown that effective CRT PD is supported by coaching

(Garbacz et al., 2015; Cantrell et al., 2022). While there are several models specific to CRP, this framework favors student-centered coaching (Sweeney, 2012). As Sweeney (2012) has demonstrated, teaching practice is positively impacted when instructional goals are aligned to standards and learning targets are devised into actionable steps. Data drives the instruction, and teachers co-construct and present lessons with the support of their coach. Progress is measured with post-assessment data which informs the teacher of their next steps.

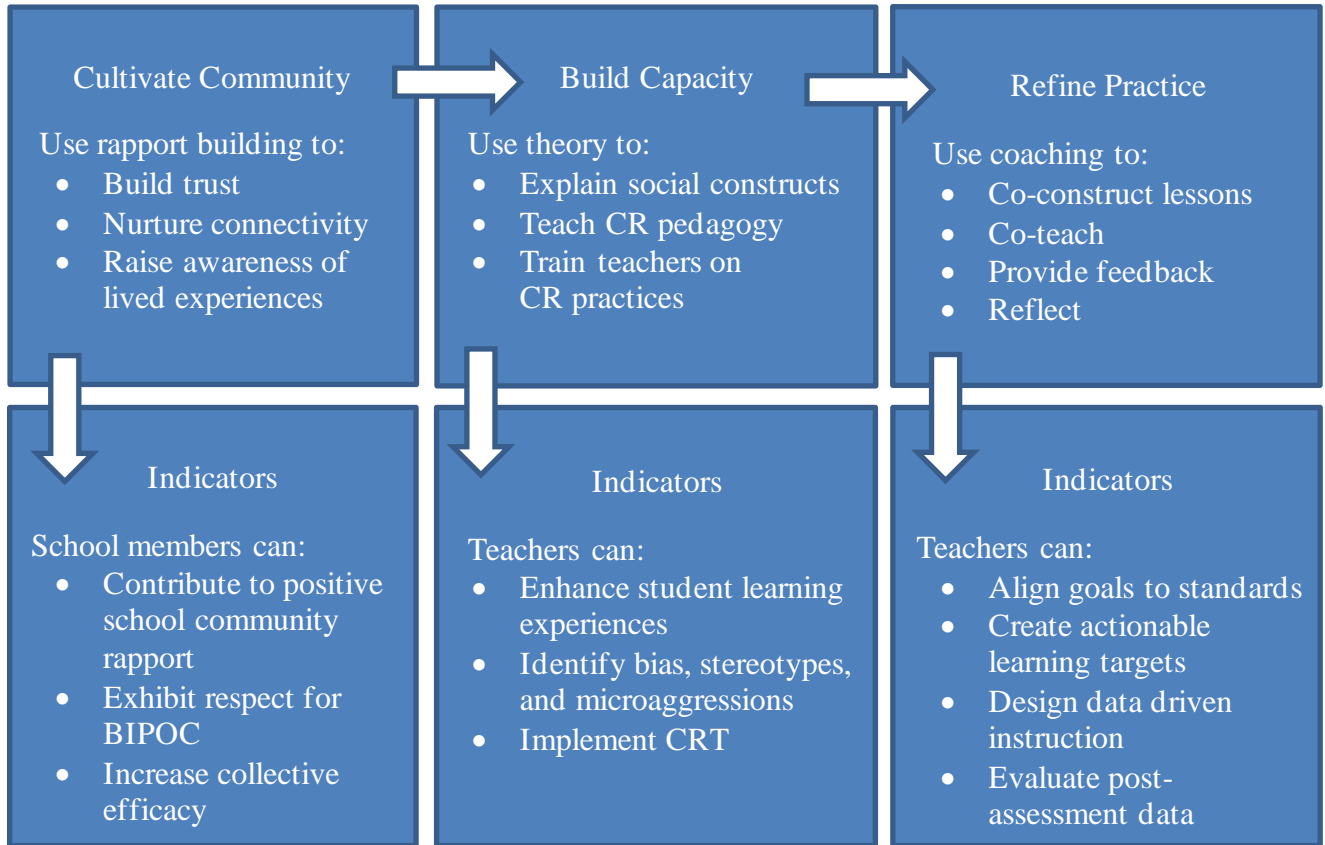
Equally important, teachers need guidance on how to account for disability and culture when designing lessons for CLD students with disabilities. This framework endorses active learning and collaboration, pairing teachers across specialties to co-construct lessons (Cantrell et al., 2022). For example, an ESL and special education teacher can work together to create a literacy lesson for an ELL student with an SLD. Using a text in the student's native language and English, the teachers work together to develop visual supports that aid vocabulary development and story comprehension. The teachers can solicit feedback from one another, a coach, or the student. The feedback should then be processed in a reflection conference to determine what went well and what could be changed to strengthen the learning experience for the student.

Learning how to refine practice to be culturally responsive, helps teachers gain know-how in creating equitable learning experiences for CLD students with disabilities while accommodating for learning differences and promoting cultural relevance. It is essential for students to develop cultural competence by knowing and experiencing their cultures and the cultures of their peers (Holliday, 2021). However, this practice must be guided by knowledgeable coaches who understand pedagogy, instructional strategies, and social constructs (Brown et al., 2018; Holliday, 2021). The benefits of this work yields renewed learning environments in our schools in which instruction is supported by research-based practices proven

to improve student learning. As schools continue to diversify, typical instruction needs to be disrupted to be refined in a manner that reflects distinct cultural and cognitive nuances (Brown et al., 2018).

Figure 1

A Professional Development Framework for Practice with CLD Students with Disabilities



Conclusion

Participants in this study conveyed perceptions of low efficacy with CRT methods. The education system’s ongoing historical, social, political, and economic issues have led to staffing shortages, a changing landscape, and discontent with career happiness (Ladson-Billings, 2014). Teacher training programs can only do so much concerning the cultivation of efficaciousness. Once teachers are in the hands of the school district, it is up to the administration to provide the

professional practice needed to cultivate excellence in schools. Ladson-Billings (1995), Gay (2000), and Paris (2012) have demonstrated that leadership practices and school contexts must shift in response to the dynamics of demographics to accommodate the needs of students. As the instructional landscape has shifted and the number of CLD students with disabilities has increased, general and special education teachers must develop culturally responsive competencies (Carbonneau et al., 2022). PD along with coaching are research-based strategies that have improved teaching practices (Babinski et al., 2018; Cantrell et al., 2022; Penner-Williams et al., 2019; Thompson & Byrnes, 2011; Vincent et al., 2011). Research has shown that teachers have greater confidence in one another and their work when they learn how to design quality instruction that accounts for culture and disability (Council for Exceptional Children, 2015; Jones-Good & Grant, 2016; Scott et al., 2014). In addition, teachers who prioritize respect while believing that all students can learn, persist with challenging behaviors using relationship rapport (Gibson & Dembo, 1984; Goddard et al., 2000), and overcome communication barriers with families are happier and navigate challenges more effectively (Brouwers & Tomic, 2000).

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APPENDIX A: PERMISSION TO CONDUCT RESEARCH STUDY



ILLINOIS STATE
UNIVERSITY

Department of Special Education ● Campus Box 5910 DeGarmo 533 ● Normal, Illinois 61790

Date
Administrator
Title
School District
Address

RE: Permission to Conduct Research Study

Dear (Administrator):

I am a special education doctoral candidate at Illinois State University. I am writing to request permission to recruit general and special education teachers from your school district to participate in my dissertation study. Through my study, I am examining two factors: (1) demonstration of teacher confidence in their abilities to teach Culturally Linguistically Diverse (CLD) students with disabilities and (2) teacher expectations for achievement and performance.

This study has been inspired by the national demographic shifts in student populations where White student enrollment has steadily decreased while enrollment of non-White students has consistently increased. Through an online survey, teachers will share their perspectives about their personal abilities and the abilities of their colleagues, to teach CLD students with disabilities. Examination of results will contribute to an understanding of how school districts can better support teachers working in an increasingly diverse environment.

The survey will take approximately 25 to 30 minutes to complete. Results will be pooled for the project. Individual results of this study will remain confidential and anonymous. Should this study be published, only pooled results will be documented. No costs will be incurred by either your district or the individual participants. Participants will be offered the chance to win one of two \$25 Amazon gift cards as incentive to participate. Please respond to this email to inform me of your decision to participate. I can be reached at jehastings@usd116.org.

Sincerely,
Jennifer L. Hastings
Doctoral Student
cc: Dr. Chung, Research Advisor
Dr. Zablocki, Research Advisor

APPENDIX B: TEACHER CONSENT TO PARTICIPATE IN RESEARCH STUDY



**ILLINOIS STATE
UNIVERSITY**

Department of Special Education • Campus Box 5910 DeGarmo 533 • Normal, Illinois 61790

Teacher Consent to Participate in Research Study

You are being asked to participate in a research study conducted by Jennifer Hastings, Doctoral Student at Illinois State University. The name of the Principal Investigator is Dr. Yun-Ching Chung from the Department of Special Education at Illinois State University. The purpose of this study is to understand the relationship between teacher efficacy pertaining to cultural responsiveness and the educational success of special education students who are culturally and linguistically diverse.

Why are you being asked?

You have been asked to participate because you are either an in-service general or special education teacher with licensure, have taught for a period of one month or more, and work with CLD students who have disabilities including pre-kindergarten through twelfth grade students or students ages 18 to 22. You are ineligible to take part in the study if you are a long-term substitute working towards licensure, substitute teacher working for a teacher on leave from their assignment, serve as a teacher assistant or one-on-one attendant or work as a related service provider such as a certified occupational therapist assistant, occupational therapist, physical therapist, school psychologist, social worker, speech language pathologist, or vision/hearing itinerant.

Your participation in this study is voluntary. You will not be penalized if you choose to skip parts of the study, not participate, or withdraw from the study at any time.

What would you do?

If you choose to participate in this study, you will be asked to provide information about your professional background. Then you will be asked to respond to three sets of questions. In the first section you will share your perspective on the ability of your school to meet the needs of diverse learners with disabilities. In the second section, you will reflect on your personal confidence to meet the needs of diverse learners with disabilities. In the final section, you will share your expectations of this group of learners. In total, your involvement in this study will last approximately 20 to 25 minutes.

Are any risks expected?

We do not anticipate any risks beyond those that would occur in everyday life. Risks will be minimized by: (1) recording data without identifiers, (2) collecting the minimum data necessary for the research, and (3) performing only procedures that are necessary to achieve the study objectives.

Will your information be protected?

We will use all reasonable efforts to keep any provided personal information confidential. Your survey answers will be sent to a link at Qualtrics.com where data will be stored in a password protected electronic format. Qualtrics does not collect identifying information such as your name, email address, or IP address. Therefore, your responses will remain anonymous. No one will be able to identify you or your answers, and no one will know whether you participated in the study.

The research will be published in a dissertation that will be made available online after it has been defended. We also hope to disseminate this study beyond the dissertation. Pseudonyms will be used when reporting information about the study. However, when required by law or university policy, identifying information (including your consent form) may be seen or copied by authorized individuals.

We need to make you aware that in certain research studies, it is our legal and ethical responsibility to report child abuse or child neglect to appropriate authorities. However, we are not seeking this type of information in our study, nor will you be asked questions about these issues.

Could your responses be used for other research?

Your information will not be used or distributed for future use, even if identifiers are removed.

Will you receive anything for participating?

By completing the survey, you will be offered an opportunity to enter your name into a drawing for one of four Amazon gift cards, valued at \$25.00 each. At the end of the survey, you will be routed to a second questionnaire in which you will provide your first and last name, location of the school you work in, phone number, and email address.

The IRS may consider these payments to be taxable compensation. Recipients of a research participant incentive payment may want to consult with their personal tax advisor for advice regarding the participant's situation. Any participant also has the opportunity to participate in the study without accepting the research incentive payment.

Any participant also has the opportunity to participate in the study without accepting the research incentive payment.

In order to receive compensation, at the end of the survey you will be taken to a separate page to enter your contact information. This information will be kept entirely separate from the survey and your responses. Once the compensation is distributed, we will delete your contact information.

Who will benefit from this study?

A benefit of this study includes an increase in our understanding of teacher confidence with implementation of culturally responsive practice as it pertains to culturally linguistically diverse students with disabilities. Another benefit is awareness of teacher beliefs and outcome expectancies concerning cultural responsiveness. These benefits take the form of increased

knowledge, understanding of skills needed to improve practice, and awareness of how to build better connections with students.

Whom do you contact if you have any questions?

If you have any questions about the research or wish to withdraw from the study, contact Jennifer Hastings at jehastings@usd116.org or Dr. Yun-Ching Chung at ychung@ilstu.edu.

If you have any questions about your rights as a participant, or if you feel you have been placed at risk, contact the Illinois State University Research Ethics & Compliance Office at (309) 438-5527 or IRB@ilstu.edu.

Documentation of Consent

Please read the statements below if you are 18 or older and willing to participate in this study. In order to give your consent to participate in this survey, please check the box stating, “Agree” then click on the arrow.

Electronic Consent: Please select the appropriate choice below. You may print a copy of this consent form for your records. Mark the “Agree” box that indicates.

- You have read the above information
- You voluntarily agree to participate
- You are 18 years of age or older

Agree Disagree

You can print this form for your records.

APPENDIX C: CHARACTERISTICS OF PARTICIPANTS

Table 1. Participant Personal and Professional Characteristics

1. What is your gender?
 - Male
 - Female
 - Gender-nonconforming
 - Prefer not to say
2. What is your racial background?
 - American Indian or Alaska Native
 - Asian
 - Asian
 - Black or African American
 - Native Hawaiian or Other Pacific Islander
 - White
 - Two or more races
 - Other
3. What is your ethnic background?
 - Hispanic
 - Not Hispanic
4. What language(s) do you speak? Check all that apply.
 - English
 - Spanish
 - French
 - Other
5. Which best describes the K-12 schools that you attended as a child?
 - I attended predominately White K-12 schools
 - I attended predominately non-White K-12 schools
 - Balanced representation of White and non-White
6. Which best describes the college you attended for a bachelor's degree?
 - I attended a predominately White college
 - I attended a predominately non-White college
 - Uncertain
7. What is the highest level of professional preparation you have attained?
 - Bachelor's
 - Master's
 - Post Master's Certificate program
 - Doctorate
8. What type of certification(s) do you hold?
 - Special education teaching certification
 - General education teaching certification
 - Both special and general education teaching certification

Table Continues

Table Continued

9. How many years of teaching experience do you have in all?
 - <1 year
 - 1-5 years
 - 6-10 years
 - 11-15 years
 - >15 years
10. What kind of classroom setting do you teach in?
 - General education classroom with speech only or resource IEP students
 - Co-taught general education classroom
 - Resource room
 - Self-contained classroom
11. What grade level or age range do you teach?
 - Pre-K-to 5th grade
 - 6th grade to 8th grade
 - 9th grade to 12th grade
 - Ages 18 to 22
12. Which best describes the students you serve?
 - Most students are White
 - Most students are BIPoC
 - Half are White and the other half are BIPoC
13. What types of disabilities categories are represented among the CLD students with disabilities that you teach? Check all that apply.
 - Autism
 - Deaf blindness
 - Deafness
 - Developmental delay
 - Emotional disturbance
 - Hearing impairment
 - Intellectual disability
 - Multiple disabilities
 - Other health impairment
 - Orthopedic impairment
 - Speech or language impairment
 - Specific learning disabilities
 - Traumatic brain injury
 - Visual impairment (including blindness)
14. Which best describes the amount of coursework that addressed diversity in your pre-service preparation experience when you acquired your bachelor's degree?
 - Diversity-related topics were addressed
 - Diversity-related topics were not addressed
15. Have you attended professional development (PD) sessions related to teaching CLD students with disabilities within the past three to five years?
 - Yes
 - No

Table Continues

Table Continued

16. How have you accessed PD?

Through the school district

Through post-baccalaureate programming

Through outside entities I pursued on my own.

17. If you answered yes to the previous question, what topics were addressed in the PD sessions you attended related to CLD students with disabilities? Check all that apply.

Assessment

Behavior management

Classroom environment

Home and school connection

Student and teacher rapport

Teaching strategies accounting for consideration of disability, culture, and language

APPENDIX D: GENERAL EDUCATION TEACHER QUESTIONNAIRE

Table 2. Collective Teaching Efficacy Scale

Items
Teachers in my school
1. are confident that they can work with CLD students with disabilities.
2. are confident they can motivate every student, including CLD students with disabilities.
3. believe every child here can learn, including CLD students with disabilities.
4. work together to produce meaningful learning for CLD students with disabilities.
5. are not skilled in culturally and linguistically responsive teaching methods.
6. are confident they can increase levels of parental involvement, including parents of CLD students with disabilities.
7. believe the lack of appropriate materials makes teaching CLD students with disabilities difficult.
8. believe that their students' home life provides many learning advantages, including CLD students with disabilities.
9. believe their CLD students with disabilities are not motivated to learn.
10. do not have the skills to deal with disciplinary problems of CLD students with disabilities.
11. believe home and community environments support learning for CLD students with disabilities.
12. need more training to be able to create a barrier-free environment that facilitates learning for CLD students with disabilities.

Note. Responses are based on a 5-point Likert scale ranging from (1) strongly disagree to (5) strongly agree.

Table 3. Culturally Responsive Teaching Self-Efficacy Scale

Items

I can...

1. modify instructional activities and materials to meet the developmental needs and learning interests of my CLD students with disabilities
2. design appropriate instruction matched to ELLs' language proficiency and special needs.
3. create a learning environment that reflects the various backgrounds of my CLD students with disabilities.
4. implement appropriate modifications to lesson plans for my CLD students with disabilities.
5. use my students' prior knowledge related to their CLD backgrounds to help make learning meaningful.
6. use various types of assessment that is matched to ELL language proficiency and special education needs.
7. critically examine the curriculum to determine whether it appropriately represents CLD groups.
8. identify the differences between student behavior and communication at home and at school.
9. use a variety of teaching methods to assist my students in learning the content.
10. communicate with students with disabilities who are ELL
11. identify cultural differences when communicating with parents regarding their child's education progress.
12. implement interventions that minimize the effects of cultural mismatch between home and school.
13. distinguish linguistic/cultural difference from learning difficulties for students with disabilities.
14. create a caring, supportive, and warm learning environment for CLD students with disabilities.
15. support the native language of my students with disabilities who have limited English proficiency.
16. structure parent-teacher conferences that are comfortable to allow the parents of CLD students with disabilities to participate.
17. identify the ways standardized tests may be biased against students from diverse backgrounds.
18. build positive relationships with CLD parents.
19. help students develop positive interactions with each other.
20. obtain information about students' preferred learning styles.

Note. Responses are based on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Table 4. Culturally Responsive Teacher Outcome Expectancy Scale

Items
1. Utilizing a variety of teaching approaches is helpful for students' learning processes.
2. Students with disabilities from diverse backgrounds will be successful when instruction is adapted and modified for their cultural and linguistic characteristics.
3. A variety of assessment strategies should be used to gain a complete picture of what students with disabilities from diverse backgrounds have learned.
4. Students' learning becomes meaningful when teachers are aware of the cultural and linguistic backgrounds/needs of their students with disabilities.
5. Understanding different communication styles reduces misunderstandings between teachers, students, and their families.
6. Using prior knowledge and culturally relevant examples motivates students' learning.
7. Establishing positive home-school relations increases involvement of parents of CLD students with disabilities.
8. Understanding the discontinuity between students' home culture and school culture minimizes the likelihood of discipline problems.
9. Matching instruction to students' learning preferences promotes students' academic performance.
10. Encouraging the use of the native language for students with special needs will help to maintain students' cultural identity.
11. Students' self-esteem can be enhanced when their native languages and cultures are valued by teachers.
12. Changing learning environments to be compatible with students' home cultures increases students' motivation to learn.

Note. Responses based on a 5-point Likert-type scale from 1 (definitely no) to 5 (definitely yes).

APPENDIX E: SPECIAL EDUCATION TEACHER QUESTIONNAIRE

Table 1. Collective Teaching Efficacy Scale

Items
Teachers in my school
1. are confident that they can work with CLD students with disabilities.
2. are confident they can motivate every student, including CLD students with disabilities.
3. believe every child here can learn, including CLD students with disabilities.
4. work together to produce meaningful learning for CLD students with disabilities.
5. are not skilled in culturally and linguistically responsive teaching methods.
6. are confident they can increase levels of parental involvement, including parents of CLD students with disabilities.
7. believe the lack of appropriate materials makes teaching CLD students with disabilities difficult.
8. believe that their students' home life provides many learning advantages, including CLD students with disabilities.
9. believe their CLD students with disabilities are not motivated to learn.
10. do not have the skills to deal with disciplinary problems of CLD students with disabilities.
11. believe home and community environments support learning for CLD students with disabilities.
12. need more training to be able to create a barrier-free environment that facilitates learning for CLD students with disabilities.

Note. Responses are based on a 5-point Likert scale ranging from (1) strongly disagree to (5) strongly agree.

Table 2. Culturally Responsive Teaching Self-Efficacy Scale

Items

I can...

1. modify instructional activities and materials to meet the developmental needs and learning interests of my CLD students with disabilities
2. design appropriate instruction matched to ELLs' language proficiency and special needs.
3. create a learning environment that reflects the various backgrounds of my CLD students with disabilities.
4. develop IEPs for my CLD students with disabilities.
5. use my students' prior knowledge related to their CLD backgrounds to help make learning meaningful.
6. use various types of assessment that is matched to ELL language proficiency and special education needs.
7. critically examine the curriculum to determine whether it appropriately represents CLD groups.
8. identify the differences between student behavior and communication at home and at school.
9. use a variety of teaching methods to assist my students in learning the content.
10. communicate with students with disabilities who are ELL
11. identify cultural differences when communicating with parents regarding their child's education progress.
12. implement interventions that minimize the effects of cultural mismatch between home and school.
13. distinguish linguistic/cultural difference from learning difficulties for students with disabilities.
14. create a caring, supportive, and warm learning environment for CLD students with disabilities.
15. support the native language of my students with disabilities who have limited English proficiency.
16. IEP meetings that are comfortable to allow the parents of CLD students with disabilities to participate.
17. identify the ways standardized tests may be biased against students from diverse backgrounds.
18. build positive relationships with CLD parents.
19. help students develop positive interactions with each other.
20. obtain information about students' preferred learning styles.

Note. Responses are based on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Table 3. Culturally Responsive Teacher Outcome Expectancy Scale

Items
1. Utilizing a variety of teaching approaches is helpful for students' learning processes.
2. Students with disabilities from diverse backgrounds will be successful when instruction is adapted and modified for their cultural and linguistic characteristics.
3. A variety of assessment strategies should be used to gain a complete picture of what students with disabilities from diverse backgrounds have learned.
4. Students' learning becomes meaningful when teachers are aware of the cultural and linguistic backgrounds/needs of their students with disabilities.
5. Understanding different communication styles reduces misunderstandings between teachers, students, and their families.
6. Using prior knowledge and culturally relevant examples motivates students' learning.
7. Establishing positive home-school relations increases involvement of parents of CLD students with disabilities.
8. Understanding the discontinuity between students' home culture and school culture minimizes the likelihood of discipline problems.
9. Matching instruction to students' learning preferences promotes students' academic performance.
10. Encouraging the use of the native language for students with special needs will help to maintain students' cultural identity.
11. Students' self-esteem can be enhanced when their native languages and cultures are valued by teachers.
12. Changing learning environments to be compatible with students' home cultures increases students' motivation to learn.

Note. Responses based on a 5-point Likert-type scale from 1 (very uncertain) to 5 (very certain).