

Developing Critically Conscious Pre-Service Teachers:  
A Social Justice Approach to Educate Culturally and Linguistically Diverse Students

by

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## ABSTRACT

One of the major issues confronting education in Arizona and across the United States has been the consistent low performance of culturally and linguistically diverse (CLD) students in comparison to their peers as evidenced by the disparity of the achievement gap at every level in the educational pipeline. A contributing factor has been the lack of teacher preparation focused on teaching CLD students. Preparation focused on a culturally responsive curriculum about dispositions and pedagogical knowledge and skills as well as field experience placement with CLD students have been previously identified areas to consider when training preservice teachers (PSTs). Therefore, this study examined how a Culturally Responsive and Linguistic Teaching (CRLT) Framework would raise preservice teacher's critical consciousness about teaching CLD students. The CRLT Framework focused on two specific areas; (a) a culturally responsive curriculum and (b) a team-based service-learning experience. The CRP curriculum included lessons designed to increase PSTs understanding about how their sociolinguist views influenced their pedagogical knowledge about teaching CLD students. In addition, the team-based service-learning approach, as a community of practice, provided experiences for PSTs to apply theory to practice. A mixed method analysis was employed to collect and analyze the quantitative data (surveys) and qualitative data (interviews and photovoice). Results from this study suggested increases in PSTs' knowledge, self-efficacy, and perceptions of usefulness of CRP in their future practices. The team-based, service-learning component, which was based on a community of practice framework, enhanced the learning experience by allowing students to move from theory to practice and served as an important contributing factor to the overall results. Given the findings of this research

study, it appeared that an introductory course focused on a culturally responsive and linguistic teaching influenced PSTs' dispositions, knowledge, and skills. Thus, providing an introductory course, earlier rather than later, has the potential to change the trajectory of preparing PSTs so they were more prepared to teach CLD students as they continued through their program of study. Results showed effective work with CLD students was about so much more than 'just good teaching.'

## DEDICATION

To those inspired to teach our children—you may be one person, but for one child you might make all the difference—follow your passions and pursue your dreams because your journey is just beginning!

## ACKNOWLEDGMENTS

To those who know my triumphs and challenges throughout this journey, the completion of this dissertation took longer than anticipated. Along the way, I received such encouragement and support from my doctoral committee, colleagues, friends, and family members which in turn, inspired me to finish.

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As with every doctoral story, the student always comes to a crossroads. And, as I stood in the center, I was not sure of which way to turn. Luckily, for me, I had both Dr. Margarita Jimenez-Silva and Dr. Jennifer Strickland who guided me in directions I would never have gone on my own. To Dr. Margarita Jimenez-Silva, I personally thank you for encouraging me to embark on this journey. I am indebted to you as you guided me through various stages of my research by immersing me in the most current literature and research which made my work a reality. I thank you, Dr. Jennifer Strickland, for being my mentor and friend, as you have provided me learning opportunities and experiences that have forever changed the trajectory of my career. Because of you, I will forever be changed in how I view the world of teaching and learning.

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## CHAPTER 1

### INTRODUCTION AND PURPOSE OF THE STUDY

My lesson opened with the decision of *Méndez v. Westminster School District* (1947) to desegregate schools in California and Sylvia Méndez attending her first day at an all-white elementary school.

She had on her black shoes. They were shiny new. Her hair was perfectly braided in two long *trenzas*. What a handsome building thought Sylvia as they pulled into the parking lot. The trees lined the street in front of the school. The playground had monkey bars and a red swing. The spacious clean hallways were crowded with students. She was looking for her locker when a white boy yelled, ‘Go back to the Mexican school! You do not belong here!’

At the end of the day, she told her mom, Felicitas what had happened. And, her mother replied, ‘No sabes que por eso luchamos? Don’t you know that is why we fought ... for you to attend a good school and have equal educational opportunities.’ (Tonatiuh, 2014).

As I read the book, *Separate is Never Equal*, I was not surprised to find many of the preservice teachers in my class had never even known of its existence. Most learned about school segregation through their U.S. history course during the Civil Rights Movement and *Brown v. Board of Education* (1954). As the lesson continued, many parallels of racism and segregation emerged from the past to the present. As conversations progressed, personal experiences were shared, knowledge was gained and sociocultural perspectives were challenged. If preservice teachers were to learn how to become culturally sustaining and linguistically responsive teachers then, it must have been modeled, practiced, and discussed in a learning environment that valued all learners.

Therefore, in the spirit of Sylvia Mendez, the goal of this dissertation was to examine the influence of culturally responsive pedagogy on preservice teachers in their ability to develop the capacities, i.e. knowledge, skills, and dispositions, needed to teach

CLD students through the combination of academic preparation and real-world experiences (Oakes & Saunders, 2008; Villegas & Lucas, 2002a, 2002b).

### **Larger Context**

Within the last decade, the face of P-12 education radically changed. Nationwide, culturally linguistically and diverse (CLD) students have continued to dramatically increase. The U.S. Department of Education defined “culturally and linguistically diverse” as students enrolled in an education program who were either non-English proficient (NEP) or limited-English proficient ([LEPs], Gonzalez, Pagan, Wendell, & Love, 2011). Another term, English Language Learners (ELLs), was used to identify students whose primary language was not English (Gonzalez, et al., 2011). In this study, it was important to note that CLD students were a larger group that encompassed ELLs. To fully understand the complexity of preparing preservice teachers to teach CLD students, we began with impact that ELLs had upon the larger group.

Over the last ten years, the K-12 classroom dramatically changed as the English Language Learner (ELL) population continued to climb across the nation. According to the National Center for Education Evaluation and Regional Assistance (2015), ELLs were reported as one of the most diverse and fastest growing populations in the public schools. Since 2003, the ELL population enrolled in public schools increased by more than 10% with five of the six ranked states located in the west (The National Center for Statistics, 2013).

In the 2014-2015 school year, 4.8 million ELLs received services, accounting for 9.6 % of all K-12 student enrollment (U.S. Department of Education, 2017). Students identified as ELLs participate in a variety of English language development (ELD)

programs such as bilingual education, English as a Second Language and high intensity Language Training. The goal of these services ensured that ELLs acquire the English proficiency needed to achieve the same high levels of academic achievement as their non-ELL peers. However, according to the Council of the Great City schools (2014), the quality of English language development instruction was adversely affected by inadequate teacher preparation, misaligned pedagogical practices, and insufficient materials and trainings to support ELL's language development. Although participation within ELD programs was associated with improved educational outcomes (Ross, Kena, Rathbun, KewalRamani, Zhang, Kristapovich, & Manning, 2012), the Council of Great City School's findings indicated that program quality and teacher preparation needed to be addressed to educate ELLs effectively (Council of the Great City Schools, 2014).

Due to poor program development and insufficient teacher training (Council of the Great City Schools, 2014), the achievement gap between ELL academic performance and non-ELLs continued to widen substantially (Darling-Hammond, 2010; Duncan-Andrade & Morrell, 2006; Noguera, 2008). The National Assessment of Educational Progress (NAEP) test scores in reading and mathematics illustrated this disparity between ELLs and their native English-speaking peers (National Report Cards, 2015). Since the 1970s, the National Assessment of Educational Progress (NAEP) documented the overall student performance and achievement in reading and mathematics. Although standardized test results did not compare every measure of student outcomes, they provided a consistent source of data over time to demonstrate the complexity of the achievement gap.

Over the last ten years, NCES (2014) documented how low performance of ELLs in reading and mathematics remained relatively unchanged. Recent test scores further documented the limited progress of ELLs as they continued to score significantly lower than their non-ELL peers. For example, the 2015 NAEP reading scores illustrated that ELLs had a lower average score than their non-ELL peers scoring a 38-point difference in 4th grade and a 45-point difference in 8th grade. Similarly, ELLs still scored on average lower than their non-ELL peers in mathematics. The results showed that they scored a 25-point difference in 4th grade with a drastic increase to a 48-point difference in 8th grade (National Report Cards, 2015).

As a result, English Language learners were tracked in lower achieving classes and special education (Noguera, 2008; 2009). According to the National Association for Gifted Children (2016), ELLs representation for gifted and talented education lagged behind their non-ELL peers. Only 2% of all K-12 ELLs were enrolled in gifted programs as compared to the 7.3% of non-ELL students (U.S. Department of Education, 2015). All of these factors, in turn, affected their graduation rates as well as their preparedness for college and career readiness (Darling-Hammond, 2010; Duncan-Andrade & Morrell, 2006; Noguera, 2008). According to the NCES (2015), the graduation rate of ELLs increased to a 63% completion rate, but this paled in comparison to their non-ELL peers who achieved an 82% rate. Overall, ELLs had the lowest graduation rate of all student subgroups in K-12 public school education (NCES, 2015).

### **Local Context**

ELLs represented 10% of all K-12 students across the nation with even higher percentages in five of the six western states (Kena, Musu-Gillette, Robinson, Wang,

Rathbun, Zhang, Wilkinson-Flicker, Barmer, & Dunlop Velez, 2015). However, Arizona's ELL population was slightly lower with only 7% of K-12 students identified as ELLs (Kena, et al., 2015; Arizona Department of Education, 2018). In 2014, Latin@s represented 85% of all ELLs in K-12 public schools followed by Asians and Whites at 4%, American Indian at 3% and Black/African American and other at 2% (Arizona Department of Education, 2017). The majority of ELLs, 79%, were enrolled in elementary school and decreased progressively with 13% in middle school and 9% in high school (Arizona Department of Education, 2018). Further, the overall ELL K-12 student population decreased dramatically from 161,136 to 66,275 within the last ten years (Milem, Salazar, & Bryan, 2016).

The decrease of ELL representation across grade levels and enrollment were attributed to Arizona's assessment of ELL's English fluency as measured by the Arizona English Language Learner Assessment (AZELLA). Annually, the AZELLA has been used to determine the English language proficiency levels of ELLs in K-12 public schools (Jimenez-Silva, Gomez, & Cisneros, 2014; Hass, Tran, & Huang, 2016; Milem, Salazar, & Bryan, 2016). Once ELLs passed the AZELLA, they were reclassified as fluent English proficient (FEP) and mainstreamed into K-12 classrooms (Arizona Department of Education, 2017).

According to current research (Jimenez-Silva et al., 2014; Hass et al., 2016; Milem et al., 2016) ELLs exited from their ELD programs too early which resulted in the "erroneous reclassification of thousands of ELLs" (Jimenez-Silva et al., 2014, p. 189). This meant that former ELLs reclassified as FEPs were not proficient or on grade-level with their English-speaking peers. Yet, their annual academic performance as defined by



standardized tests counted towards the overall achievement as per their ethnicity. This reclassification had serious implications for understanding the achievement gap and student performance, especially in regard to Arizona’s Latin@ student population.

Since 2014, Latin@ students became the majority of all ethnic groups in K-12 public schools (Arizona Department of Education, 2017) and continued to perform at or near the bottom on every achievement measure (Valenzuela, 2016). In addition, Latin@ students were also the majority of all ELL students. This was important to recognize as former ELLs were reclassified into mainstream courses by ethnicity. Because Latin@ students represented the majority, former ELLs who were not really ‘proficient’ counted towards their group’s achievement as defined by standardized testing.

In the 2014-2015 school year, the Arizona Department of Education reported ELLs performed lower in NAEP assessments for reading and mathematics than any other sub-group population including, special education (Department of Education, 2017) as seen in Figure 1.

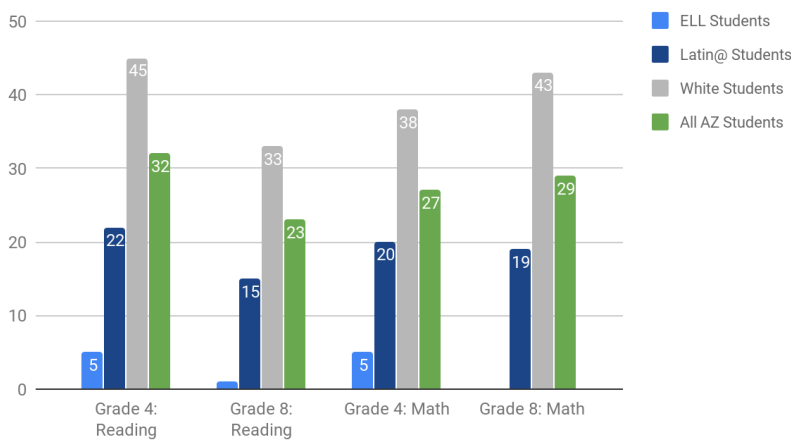


Figure 1. Percentage of Students Proficient in Reading and Math.

In addition, the majority of CLD students represented as Latin@ in Figure 1 also fell far behind their White counterparts as well as all other ethnicities (Perez Huber, Huidor, Malagon, Sanchez, & Solorzano, 2006; Solorzano & Yosso, 2006; Yosso, 2006). Further, documentation of the leaks in the pipeline were identified through completion rates. Even with a recent growth in graduation rates, Latin@s still lagged behind all other ethnic groups at every level from elementary school to college (Perez Huber et al., 2006; Solorzano & Yosso, 2006; Yosso, 2006). For example, on average in Arizona, White students graduated from high school at an 84% rate as compared to 72% for Latin@s and 18% for ELLs (Arizona Department of Education, 2017).

The achievement gap between English language learners and their English-only counterparts was attributed, in part, to inequitable access to appropriately trained teachers (Darling-Hammond, 2010; Noguera, 2008; Valenzuela, 2016; Villegas & Lucas, 2002a, 2002b; Villegas & Lucas, 2011). The Center for Research on Education, Diversity and Excellence (2001) asserted teacher quality as the single most determining school-based factor correlating to ELL achievement, graduation, and college eligibility (Darling-Hammond, 2003, 2010; Garcia, 2010; Valenzuela, 2016). Despite this claim, instead of emphasizing stronger teacher preparation courses to teach CLD students, the opposite occurred. In Arizona, teacher preparation programs were substantially influenced by restrictive legislation limiting credentialing requirements passed by the state legislature.

In 2000, Arizona passed Prop 203, “The English Only Law,” requiring all educators with a valid K-12 certification to complete the Structured English Immersion (SEI) endorsement. As of June 15th, 2015, Arizona Department of Education (ADE) reduced the SEI endorsement requirement from two three-credit courses to one three-

credit course. Outlined in Table 1 were the required courses, total credits, foreign language knowledge, and practicum experience requirements. It was important to note that the SEI endorsement could be completed through Higher Education Institutions or private agencies. Therefore, ADE accepted a three-credit college course or, the equivalency of 45 hours of training.

Table 1

*Arizona Endorsements to Teach ELLs: SEI, ESL and Bilingual*

Endorsement	Required Coursework	Total Time by Credit and Hours	Foreign Language	Practicum Field Experience
Structured English Immersion	Foundations, SEI Model, Language Development, Instructional Strategies	One course - 3 credits or 45 hours of training	None	Optional; not required
English as a Second Language	Foundations, ESL Methods Curriculum & Materials, Assessment, Linguistics School Community & Family	6 courses - 3 credits each for a total of 270 hours	6 credits = 90 hours	3 Semesters or 2 years teaching experience in ESL settings
Bilingual Language	Foundations, Bilingual Methods ESL for Bilingual Settings, BLE Curriculum & Assessment, Linguistics, School Community & Family, Special Education	7 courses - 3 credits each for a total of 315 hours	Proficiency Exam or Degree	3 Semesters or 2 years teaching experience in Bilingual settings

Further, candidates completing this endorsement did not have a required field experience providing them the opportunity to work with CLD students as they learned how to apply theory to practice. Thus, in comparison to the English as a Second Language (ESL) and Bilingual Language endorsements, the SEI endorsement lacked the rigor in content knowledge (Faltis & Arias, 2012; Garica, 2010; Wright, 2005) *and* field

experience to adequately prepare preservice teachers to teach CLD students (Ballantyne, Sanderman, & Levy, 2008; Faltis & Arias, 2012).

Six years later, additional language-restrictive legislation was passed in HB2064, which required the four-hour Structured English Immersion (SEI) model to be adopted state-wide. Under this program, ELLs were placed into a four-hour block with peers of the same language ability segregating them from their English-speaking peers. The prescribed curriculum consisted of “rigorous” and “intensive” English language instruction in reading, writing, listening, and speaking. However, 80% of an ELL student’s day was spent learning English only by teachers who were certified with an SEI endorsement (Arizona Department of Education, 2015).

Not only were ELLs prevented from receiving the same curricular opportunities as their peers (Faltis & Arias, 2012; Garcia, 2010; Lillie, Markos, Arias, & Wilely, 2012; Wright, 2005), but they were also taught by less qualified teachers (Darling-Hammond, 2010; Flores, 2017; Garcia, 2010; Valenzuela, 2016; Villegas & Lucas, 2011). This had a severe effect on the widening of achievement gap as seen in the academic achievement and outcome data (Department of Education, 2017). As Arizona continued to require the ELD four-hour model, it remained clear that content area preservice teachers needed to become better prepared and more knowledgeable about how to teach CLD learners.

### **Situational Context**

Maricopa County Community College District (MCCCD), located in a highly diverse urban city, has served as one of the largest community college systems in the United States. Mesa Community College (MCC) has functioned as one of the ten colleges within the MCCCD. With recent Latin@ upward demographic trends, Mesa became an

emerging Hispanic Serving Institution (HSI). As defined through the Higher Education Act of 1965, HSI included accredited and degree-granting public or private nonprofit institutions of higher education with 25 percent or more total undergraduate Hispanic full-time equivalent (FTE) student enrollments (U.S. Department of Education, 2016). At this time, Latin@s represented almost 25% of student population marking Mesa an emerging HSI. With such dramatic growth trends, MCC's Latin@ population has been predicted to become the largest minority group on campus.

Mesa Community College has been one of the largest Education Studies Department channeling preservice teachers directly into the college pipeline. MCCC has established strong articulation agreements that facilitate preservice teachers' pathways to complete their degree and teacher certification. Therefore, Mesa Community College has offered an array of opportunities for preservice teachers to complete the first two years of their studies in Early Care, Early Childhood, Elementary, or Middle and High School education. Along with degree options, MCC has offered professional endorsements for certified teachers and professional development through the Educators Academy.

MCC has been greatly affected by ADE's decision to change the certification requirements about the SEI endorsement. Previously, when two courses were mandated, preservice teachers at MCC were required to complete the provisional course before transferring. However, with the change in certification requirements, the course could only be offered as an elective. As a result, MCC could not require preservice teachers to take the course, but it was highly recommended to be included in their plan of study to prepare them for their work in the future with CLD students.

Each semester, preservice teachers with a wide range of background experiences enrolled in the course. According to the Office of Institutional Effectiveness at MCC (2015), 58% of the preservice students attended MCC on a part-time basis for various socio-economic reasons. Due to their personal schedules, students took classes based upon their work schedule rather than the advised sequence of courses. For this reason, almost 25% of the students enrolled in the course did not have any K-12 classroom experience. The remaining 75% ranged from limited to a vast amount of K-12 classroom experiences depending on the education courses taken previously (Office of Institutional Effectiveness, 2015).

### **Purpose of the Study**

Based on the increasing population of Latin@ students and ELLs in Arizona, the disparity of the achievement gap and the decreased expectations for teaching certification for ELLs by ADE, the need to increase pre-service teachers' critical consciousness of how to teach and advocate for CLD students became apparent. Therefore, the purpose of my action research study was to examine how a Culturally Responsive and Linguistic Teaching Framework influenced pre-service teachers' knowledge, skills, and dispositions toward teaching CLD students.

### **Innovation**

Having the knowledge about CRP and how to use it, did not make for a 'good teacher' alone (Valenzuela, 2016). When pre-service teachers have had the opportunities to apply theory to practice, they have developed a deeper understanding of theory (Ramirez, Jimenez-Silva, Boozer, & Clark, 2016; Ramirez, 2017; Villegas & Lucas, 2002a, 2002b) resulting in enhancing their ability to make a difference in their future

students' achievement outcomes (Darling-Hammond, Chung, & Frelow, 2002; Darling-Hammond, Holtzman, Gatlin, & Heilig, 2005). Therefore, in my innovation, I implemented a CRLT Framework that combined two approaches for preparing preservice teachers: (a) a CRP designed curriculum and (b) a team-based service-learning experience with CLD students.

### **Research Questions**

The research questions guiding this study included:

RQ1: How and to what extent did a CRP curriculum influence pre-service teachers' knowledge about teaching CLD students?

RQ2: How and to what extent did a team-based service-learning experience influence pre-service teachers' knowledge about teaching CLD students?

RQ3: How and to what extent did preservice teachers feel prepared to teach CLD students in the future?

## CHAPTER 2

### THEORETICAL PERSPECTIVES AND RESEARCH GUIDING THE PROJECT

I relied on existing literature to guide this study. The research was related to preparing preservice teachers to work with English Language Learners using, a culturally responsive and linguistic theoretical framework and related concepts. Three areas of research guided this study. In the first section of this chapter, I examined asset-based pedagogies from decades of research to build a foundation for Culturally Responsive and Sustaining Pedagogy. Following this section, I explained a theoretical framework, Culturally Responsive and Linguistic Teaching that was used to understand how preservice teachers develop critical consciousness and emerging practices in teaching CLD students. In the final section, I outlined and discussed related studies followed by a conclusion to summarize the chapter.

#### **A Pathway from Culturally Relevant and Responsive Pedagogy to Sustaining Pedagogy**

As today's classrooms have become more culturally and linguistically diverse, teacher preparation programs have needed to become culturally responsive toward the growing population of English language learners in the K-12 educational system. Although there was ample research about culturally relevant and responsive teaching, a gap existed on how to prepare preservice teachers to utilize culturally sustaining and linguistically responsive approaches. As a result, preparing preservice teachers to meet the linguistic and academic needs of English language learners became a major concern (Cochran-Smith, Davis, & Fries, 2004; Gay, 2000; Lucas, 2011; Villegas & Lucas, 2002a, 2002b, 2007).



Although the student demographics continued to shift becoming more racially, ethnically, and linguistically diverse, the teacher workforce had not. It continued to remain largely hegemonic with approximately 80% being White and female (Griner & Stewart, 2012; Klien, 2015; Ladson-Billings, 2017; National Center for Education Statistics, 2016; Paris, 2016) who were overwhelmingly monolingual English speakers (Valenzuela, 2016). By comparison, students of color represented 51.2% of the student population making them the majority (Griner & Stewart, 2012; Klien, 2015). Of these students, 4.5 million spoke a second language other than English at home (National Center for Education Statistics, 2016).

This created a cultural gap between teachers and students which led to tensions as teachers' expectations conflicted with students' cultural identity of who they were in and outside of school (Gay, 2002; Lucas & Villegas, 2011; Villegas & Lucas; 2002a). With Latin@ students representing a large segment of the K-12 student population, this had the potential to affect them the most. If teachers failed to understand how to make curriculum relevant and responsive towards their culturally and linguistically diverse students, then students would have fewer opportunities to achieve academically in school (Gay, 2002; 2010). This mismatch has contributed to the ongoing disparity of academic achievement, graduation rates, and college eligibility between CLD students, ELLs, and their White peers (Darling-Hammond, 2003; Garcia, Lawton, & Diniz de Figueiredo, 2010; Irizarry, 2017).

### **Culturally Relevant Pedagogy**

In response to these issues, proponents of culturally relevant pedagogy (CRP) sought to empower administrators, teachers, and teacher educators to overcome these

trends by addressing the academic, linguistic, and cultural inequities inherent within the current education system (Ladson-Billings, 2006). Ladson-Billings (2009) described CRP as “a pedagogy that empowers students intellectually, socially, emotionally, and politically by using cultural referents to impart knowledge, skills, and attitudes” (p. 382). To implement CRP, Ladson-Billings (2006) identified three essential principles: (a) academic achievement, (b) cultural competence, and (c) sociopolitical consciousness. The first principle reinforced that teachers must have high expectations while at the same time scaffolding the support needed by their students to achieve them. The second emphasized integrating students’ background experiences into the curriculum by fostering relationships with their students, families, and community. Finally, the third focused on teachers developing a sociopolitical consciousness to confront the social disparities such as gender, class, race, and so on that continued to be embedded within the educational system.

### **Culturally Responsive Pedagogy**

Adopting a broader approach to CRP, Gay (2002, 2010) defined it as culturally ‘responsive’ pedagogy as purposefully incorporating “the cultural characteristics, experiences, and perspectives of ethnically diverse students” (p. 106) to teach more effectively. Using a student-centered approach, students’ social, cultural, and linguistic identities were placed as the focal point of teaching and learning. Grounded in the ethics of caring, Gay (2010) believed that learning became more relevant and effective when teachers integrated their diverse students’ “cultural knowledge, prior experiences, frames of reference and, performance styles” (p. 3). As a result, Gay (2010) identified four critical aspects of culturally responsive teaching: (a) developing a warm demand

approach to develop a culturally caring learning community with high expectations, (b) building effective cross-cultural communication skills, (c) designing culturally relevant curriculum based on student's cultural and linguistic background experiences, and (d) delivering culturally responsive instruction that actively engages students. Importantly, there was not a hierarchical order to these aspects and each supported the other as teachers developed, changed, and became more proficient in their practice.

The practice of critically responsive teaching was defined as “dynamic, dialectical and interwoven” (Gay, 2010, p. xix). As a result, when students felt valued, they became more engaged and motivated, which had a positive effect on learning (Gay, 2010; Kennedy & Romo, 2013). Using CRP, teachers intentionally planned the curriculum to be responsive to their students' lives and experiences to bridge the gap between their academic and cultural identity (Gay, 2000; Ladson-Billings, 2011). Culturally responsive teachers understood and respected the students' cultures creating a safe and welcoming classroom environment where students felt valued and accepted (Gay, 2010; Villegas & Lucas, 2007) and supported in using their native language resourcefully (Kennedy & Romo, 2013; Lucas & Villegas, 2011; 2013).

### **Linguistically Responsive Teaching**

Although the work of CRP provided a foundation to support diverse students, Lucas and Villegas (2011) expanded upon this by claiming that being responsive was not enough by itself to close the achievement gap for CLD students. They recognized the importance of culture and language as essential aspects in teaching CLD students. Linguistically Responsive Teaching (LRT) sought to overcome the deficit perception that a “Dominant American English” existed (Lucas, Villegas, & Freedson-Gonzalez, 2008;

Paris & Alim, 2017). *Dominant* American English referred to a standard of English that restrictive school policies required students to become proficient at the expense of losing their own native language (Irizarry, 2017). In contrast, LRT recognized the linguistic knowledge, skills, (Delpit, 1992; Gay, 2000, González, Moll, & Amanti, 2006) and cultural wealth (Yosso, 2006) that CLD students brought to the classroom. This placed the students' cultural and linguistic experiences as a central component of lesson design and brought attention to the need to articulate essential orientations, knowledge, and skills needed to teach CLD students (Lucas et al., 2008, Lucas & Villegas, 2011).

Therefore, Lucas and Villegas (2011) proposed the importance of including a culturally and *linguistically* responsive pedagogical approach in teacher preparation courses. As a result, culturally, linguistically responsive pedagogy emerged to focus on the linguistic knowledge and skills that teachers needed to develop to support their CLD students (Lucas & Villegas, 2011). Becoming a culturally and *linguistically* responsive teacher emphasized the importance of gaining an awareness of and integrating the principles of second language acquisition theory into the curriculum (Lucas et al., 2008; Lucas & Villegas, 2011).

Being a culturally and linguistically responsive teacher involved: learning about ELLs, using students' linguistic backgrounds, scaffolding their academic needs to develop English proficiency, and incorporating knowledge of language acquisition theories in practice (Lucas & Villegas, 2011; Lucas et al., 2008). By teaching preservice teachers (PSTs) about culturally and linguistically responsive pedagogy, PSTs would have a better understanding of how to support their future CLD students. Therefore, Lucas and Villegas (2011, 2013) devised a framework that guided teachers to interact

with their ELLs in meaningful ways to actively engage students in the learning process that ultimately, supported their linguistic and academic proficiency.

Earlier conceptions of the culturally, linguistically responsive pedagogical framework originally included culture in teaching and learning, the most recent version by Lucas and Villegas (2013) placed an emphasis on the linguistic skills PSTs needed to develop. The intent was to focus on the language-related issues that often became lost within the discussions emerging around culturally responsive teacher preparation (Lucas & Villegas, 2013). It was especially important to note that the cultural components were not eliminated but, instead embedded within each component of the framework (Lucas & Villegas, 2013). The Linguistically Responsive Teaching (LRT) framework (Lucas & Villegas, 2011; 2013) included two key attributes: (a) orientations and (b) knowledge and skills of culturally responsive teachers.

Lucas and Villegas (2011) defined orientations as “tendencies or inclinations towards particular ideas and actions, influenced by attitudes and beliefs” (p. 56). Within this, they defined three specific types:

1. *Sociolinguistic consciousness*: an understanding that language, culture, and identity are deeply interconnected; and an awareness of the sociopolitical dimensions of language use and language education.
2. *Value for linguistic diversity*: belief that linguistic diversity is worthy of cultivating, and accompanying actions reflecting that belief.
3. *Intention to advocate for ELLs*: understanding of the need to take action to improve ELLs’ access to social and political capital and educational opportunities, and willingness to do so.

The focus on orientations engaged PSTs to reflect upon their personal cultural and linguistic background experiences, affirm student's prior learning experiences as assets, and embrace the opportunity to advocate for more equitable learning experiences (Lucas & Villegas, 2002b).

The second component of the LRT framework included the knowledge and skills of culturally relevant teachers. Lucas and Villegas (2011) defined them as “complex and interconnected disciplinary knowledge, pedagogical content knowledge, knowledge of learners, and pedagogical skills needed by teachers” (p. 56). There were four types of pedagogical knowledge and skills identified as:

1. *A repertoire of strategies for learning about the linguistic and academic backgrounds of ELLs in English and their native languages:* understanding of the importance of knowing about the backgrounds and experiences of ELLs, and knowledge of strategies for learning about them.
2. *An understanding of and ability to apply key principles of second language learning:* knowledge of key psycholinguistic, sociolinguistic, and sociocultural processes involved in learning a second language, and of ways to use that knowledge to inform instruction.
3. *Ability to identify the language demands of classroom tasks:* skills for determining the linguistic features of academic subjects and activities likely to pose challenges for ELLs, including identifying key vocabulary, understanding syntactic and semantic features of academic language, and the linguistic expectations for successful completion of tasks.

4. *A repertoire of strategies for scaffolding instruction for ELLs*: ability to apply temporary supports to provide ELLs with access to learning English and content taught in English, including using extralinguistic supports such as visuals and hands-on activities; supplementing written and oral text with study guides, translation, and redundancy in instruction; and providing clear and explicit instructions. (Lucas & Villegas, 2013, p. 101)

By tapping into their CLD students’ cultural and linguistic backgrounds, linguistically responsive teachers made content more meaningful and relevant, which validated and affirmed students’ contributions to the classroom. With the understanding of second language acquisition theory, linguistically responsive teachers scaffolded lessons to continually develop CLD students’ language and content knowledge. This, in turn, facilitated academic success while at the same time validating their culture and language.

Gay (2000) and Ladson-Billings (1995) described culturally and linguistically responsive teaching as an effective way to support the academic and social needs of CLD students. To become an effective linguistically responsive teacher, PSTs needed to develop both the orientations, pedagogical knowledge, and skills as illustrated below in Figure 2.

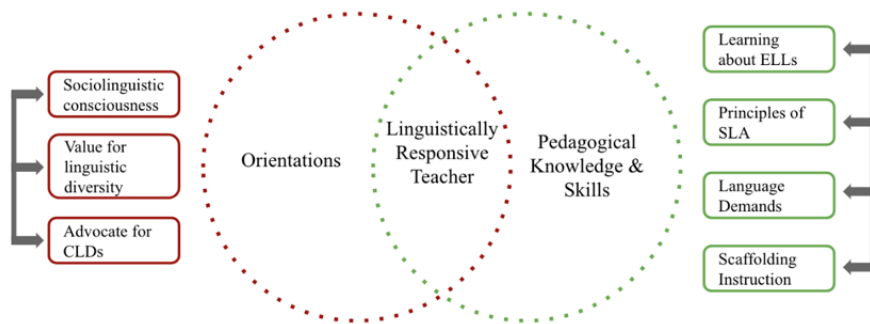


Figure 2. A Linguistically Responsive Teaching Framework to Prepare Preservice Teachers

One without the other, would not sustain their culture, language, nor their academic attainment. This framework provided culturally responsive teachers a foundation from which to teach and empower their students culturally and linguistically to succeed academically.

### **Culturally Sustaining Pedagogy**

Ladson-Billings (1995) asserted that culturally relevant or culturally responsive pedagogy was “just good teaching” that empowered students through “academic success, cultural affiliation and personal efficacy” (Gay, 2010, p. 127). For decades, CRP counteracted deficit teaching practices offering asset-based approaches to improve the academic achievement of students from diverse, racial, ethnic, cultural, sociolinguistic, and socioeconomic backgrounds. Like many others, Paris (2012) was inspired by the research “to make teaching and learning relevant and responsive to the student’s languages, literacies and cultural practices” (p. 94) existing within a culturally linguistically diverse classroom.

However, over time, Paris (2012) questioned what was actually meant by the terms “responsive” and “relevant” and if they were descriptive enough of the research that guided the practices to educate CLD students. Despite the efforts over the last 80 years of asset-based pedagogy (Ladson-Billings, 1995; Moll & Gonzales, 1994; Villegas & Lucas, 2002a; Yosso, 2006), the reality remained that U.S. educational policy and practice continued to be centered on White, middle-class norms (Izicarry, 2017; Paris, 2016; Paris & Alim, 2017) and perpetuated by the measures of standardized testing that defined “educational attainment” (Darling-Hammond, 2010; Paris, 2016). The



assimilation of CLD students to the dominant White linguistic and cultural educational system continued to plague classrooms across the nation (Gay, 2010, Paris, 2012; Paris & Alim; 2017). These deficit approaches to teaching and learning reinforced the mainstream culture and value that perceived language, literacy, and culture as deficiencies (Paris, 2012; Valenzuela, 1999).

Therefore, in response to these prevalent issues, Paris (2012) and other scholars embarked on a ‘remix’ of CRP to be redefined as Culturally Sustaining Pedagogy (Paris, 2016, Paris & Alim, 2017). Ladson-Billings (2014) claimed that scholarship, like culture, has been fluid, dynamic and ever-changing to meet the needs of the community. Ladson-Billings (2014) wrote, “culturally sustaining pedagogy uses culturally relevant pedagogy as the place where the beat drops,” it did “not imply that the original was deficient” but rather speaks “to the changing and evolving needs of dynamic systems” (p. 76; as cited in Paris, 2016). As the demographic, cultural, and social needs continued to shift, a ‘remix’ of CRP called attention to how theory also continued to develop and grow to ensure the success of all students (Coulter & Jimenez-Silva, 2017; Ladson-Billings, 2014).

This could be achieved through culturally sustaining pedagogy. Paris (2012) wrote, “culturally sustaining requires that our pedagogies be more than responsive of or relevant to the cultural experiences and practices of young people – it requires that they support young people in sustaining the cultural and linguistic competences of their communities while simultaneously offering access to dominant cultural competence” (p. 95). Paris (2012) described the need to develop pedagogies that spoke to our shifting cultural and linguistic realities as representative in the communities we served. To achieve this, Paris and Alim (2017) called for a shift in practice to prepare tomorrow’s

teachers with the orientations and pedagogical skills that would ensure students' access to participate within a pluralistic multicultural and multilingual society.

### Using a Culturally Responsive and Linguistic Teaching (CRLT) Framework

In response to the growing presence of CLD students and the overwhelming statistics highlighting their achievement struggles, it remained clear that teacher education programs needed to change their approaches for preparing PSTs to teach CLD students (Coulter & Jimenez-Silva, 2017; Lucas, 2011; Villegas & Lucas, 2002b; Wong-Fillmore & Snow, 2005). In response to these broad needs for this study, I developed a Culturally Responsive and Linguistic Teaching Framework that took account of three components: (a) dispositions, (b) pedagogical knowledge, and (c) service learning. Each of these while separate worked in tandem to cultivate culturally responsive PSTs as illustrated in Figure 3.

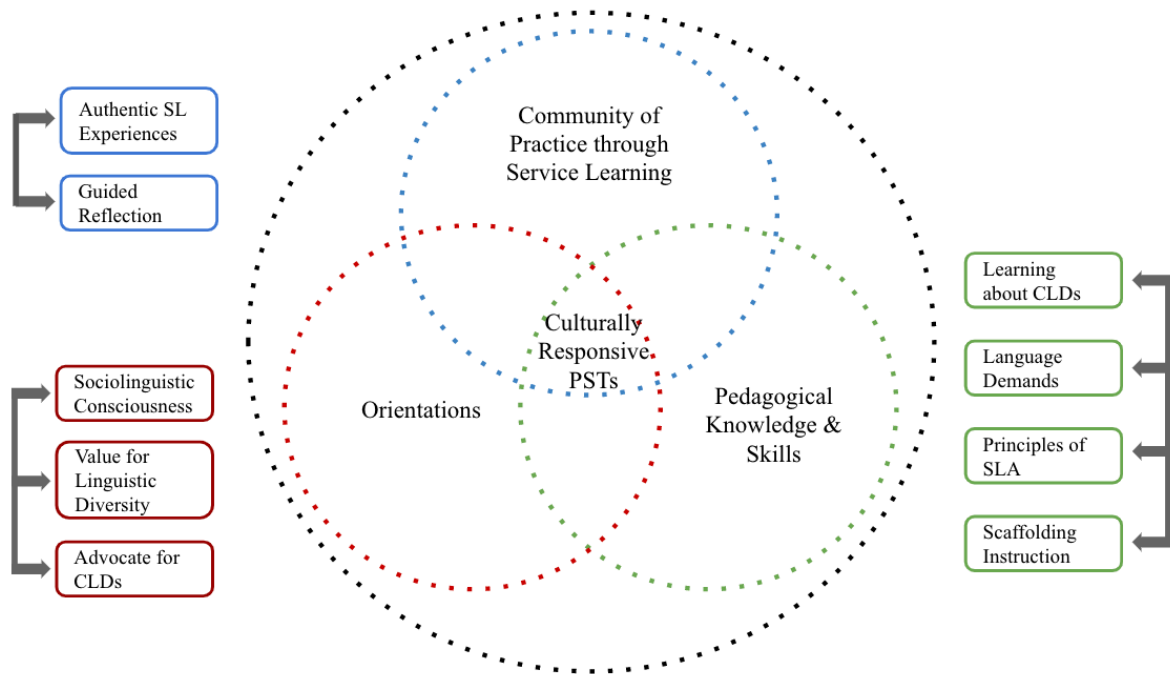


Figure 3. A CRLT Framework to Prepare Preservice Teachers

They were made from the knowledge and skills, dispositions and experiences that, like the strands of thread in a piece of cloth, constantly intertwine and depend on one another to form a cohesive whole...they must be consciously and systematically woven throughout the learning experiences of prospective teachers in their coursework and fieldwork. (Villegas & Lucas, 2002b, p. 21)

Although each component defined separate attributes shaping PSTs' understanding of CRP, as a collective whole they were interconnected strengthening PSTs' ability to move fluidly between theory and practice.

The first and second components, guided by Lucas, Villegas and Freedson-Gonzalez' (2008) research on Culturally Responsive Teaching, focused on two key attributes (a) orientations and (b) pedagogical knowledge and skills with seven essential and interconnected strands. In this section, I explained the first component about how PSTs' dispositions influenced their beliefs and attitudes towards CLD students. Second, I explained the pedagogical knowledge through four critical stands that provided a foundation about how to draw upon CLD students' linguistic and academic experiences to make curriculum more meaningful.

Finally, the third component focused on the application of Culturally Responsive Teaching as preservice teachers "learn by doing" (Vygotsky, 1978) with CLD students in authentic learning environments. This third component of the CRLT framework explained how a service-learning placement influenced preservice teachers' dispositions, knowledge, and skills. By using these components, I conducted this research study to document how PSTs gained additional understanding about teaching CLD students

through a culturally responsive curriculum and service-learning experience reflective of the students within our community.

### **Orientations for Developing a Critical Consciousness in Preservice Teachers**

Preparation of preservice teachers entailed more than developing knowledge and skills to support teaching and learning. Effective, culturally responsive teachers held the fundamental belief that all students were capable of learning and succeeding academically (Villegas & Lucas, 2002b). This essential attitude was influenced by our own sociocultural views and beliefs. Therefore, in this section, I explained how the following three specific strands: (a) sociolinguistic consciousness, (b) valuing linguistic diversity, and (c) intention to advocate for CLD students were fundamental for teaching a culturally and linguistically diverse student population.

**Sociolinguistic consciousness.** Guided by earlier research, (Lucas & Villegas, 2011, 2013; Villegas & Lucas, 2002b) developing a sociolinguistic consciousness began with the understanding that language, culture and politics were interwoven within the fabric of society. Consequently, preservice teachers needed to become aware of the social and political contexts of language when working with CLD students. Lucas & Villegas (2011) defined this as having a sociolinguistic consciousness which “entails 1) an understanding that language, culture and identity are deeply interconnected, and 2) an awareness of the sociopolitical dimensions of language use and language education” (p. 56).

Developing a sociolinguistic consciousness began with the understanding of language, culture and identity, and the sociopolitical nature of language use and policy. Teachers were not produced in a factory assembly line, with each one a replica of the

other. We have developed our own identities shaped by the cultural and linguistic contexts that we lived and experienced within our communities (Villegas & Lucas, 2002b). Culture, language, and identity have been interwoven together and were fluidly changing as one influenced the other.

Nevertheless, individuals have come from different cultural and linguistic backgrounds which in turn, influenced and shaped their worldviews. We have used this cultural perspective (Cochran-Smith, 1991; Irvine, 2003) to make sense of the world and those within it (Davis, 2012; Hammond, 2015). These views have been shared from person to person and from one generation to the next through language. This discourse has been deeply entwined within our self-identity, our interactions with others, and embedded within the norms of the community (Delpit, 1998; Valdés, Bunch, Snow, & Lee, 2005).

Therefore, it was only natural that we held implicit biases shaped from our background and life experiences (Hammond, 2015). As we navigated our day-to-day lives, these became virtually invisible because they became accepted as how society operates (Allen & Hermann, 2013; DiAngelo, 2012; Gay & Kirkland, 2013). Unfortunately, these implicit biases caused us to make unfair assumptions, judgements, and even stereotypes about culturally and linguistically diverse learners. By gaining a self-awareness of our own beliefs that we held about language and culture, we began to overcome our own biases.

Recognizing our own worldviews and accepting that those around us may differ, has provided an opportunity to shift our sociolinguistic perspective to develop a critical consciousness that supported the linguistic and cultural needs of our CLD students.

Therefore, by developing a sociolinguistic consciousness, PSTs began to view others not by their own worldviews, but with an openness and acceptance of others (Lucas & Villegas, 2011). Recognizing how one's identity was inextricably tied to language, literacy, and culture (Izicarry, 2017) began an asset-based perspective that sustained the cultural wealth CLD students had to offer (Yosso, 2006).

**Valuing for linguistic diversity.** The second aspect of developing sociolinguistic consciousness was gaining an awareness of the sociopolitical aspect of language. Although over 300 languages have been spoken in the United States (Irizarry, 2017), Dominant American English (DAE) became an accepted 'standard' used in formal settings such as K-12 classrooms (Alim & Paris, 2016; Gay, 2010; Izcarray, 2017; Paris & Alim, 2017). Reinforcing this myth, school policies required all students to become proficient in English as an unspoken prerequisite for participating in K-12 schools.

In many states, including Arizona, language restrictive English Only laws and policies (Coulter & Jimenez-Silva, 2017; Paris & Alim, 2017; Wright, 2005) discouraged and even prohibited the use of any language other than DAE. In Arizona, English Language Learners were assessed and segregated from the mainstreamed population into structured English immersion classes until they became sufficiently 'proficient' to be reclassified as 'fluent' speakers. The only goal of these programs was the acquisition of DAE at the expense of the grade level academic content. These 'tracking' practices devalued the linguistic and cultural strengths that CLD students brought to school (Anyon, 1981; Villegas & Lucas, 2002b).

Unfortunately, as students were asked to check their language at the door, the message received was one of alienation and disempowerment (Villegas & Lucas, 2002a,

2002b). As a result, CLD students often felt isolated and disconnected from the content and the classroom community. This deficit approach has had a harmful effect on students' identities by sending the message that they were not valued which ultimately, negatively affected their academic and educational goals. For far too long English-only education operated with a deficit-based perception of students that devalued students' language and culture (Duncan-Andrade & Morrell, 2008, Valdex, Bunch, Snow, Lee & Matos, 2005; Villegas & Lucas, 2007; Wright, 2010). Therefore, it was important to raise PSTs' sociolinguistic consciousness to make them more aware of how attitudes about language and policy were embedded within the education structure, as well as, the influence it had on students' academic progress.

Instead of seeing linguistic diversity as a deficit, something that needed to be 'fixed,' linguistically responsive teachers viewed language as an asset (Villegas & Lucas, 2002a, 2002b). They encouraged the use of the primary language and even, cultivated bilingualism. Linguistically responsive teachers relied upon their content and pedagogical knowledge skills to develop lessons that sustained CLD students' language and culture. Instead of developing lessons solely based on standards, they considered the linguistic and academic backgrounds of their students to create curriculum responsive to their needs (Cammarota, 2011; Duncan-Andrade & Morrel, 2008; Villegas & Lucas, 2002a; 2002b). Choosing content that drew upon their students' cultural backgrounds and linguistic experiences created a classroom where CLD students felt valued and supported.

**Advocating for CLD Students.** To prepare PSTs to meet the needs of CLD students, the role of the teacher had to be considered (Hutchinson, 2013; Jimenez-Silva, Olson, & Jimenez Hernandez, 2012; Villegas & Lucas, 2002a, 2002b). "Teachers are

moral actors whose job is to facilitate the growth and development of other human beings” (Villegas & Lucas, 2002b, p. 53). Thus, teachers had a moral obligation to make sound educational decisions for all of their students, not just some. As a result, Villegas and Lucas (2002b) explained the role of the teacher needed to shift from a ‘technician’ to a ‘change agent.’

Teachers who operated as technicians assumed that schools were neutral spaces in which all students had an equal opportunity to succeed if they worked ‘hard enough’ (Freire, 1973; Villegas & Lucas, 2002b; Valenzuela, 1999). From this perspective, teaching was the development of the technical skills needed to deliver curriculum such as planning, classroom management, instructional methods, and assessment strategies. Their effectiveness was defined by their ability to impart the knowledge and skills prescribed by the school curriculum and adopted by school boards and policy makers. Using a teacher-centered approach, technicians viewed their students as ‘empty vessels’ waiting to be filled with knowledge (Freire, 1973). Their main priority focused on the curriculum as means to provide students access to an education. They forged ahead from one unit to the next expecting students to adapt to their teaching style. Ultimately, they defined their success based upon the results of their students’ scores as measured by standardized tests.

In contrast, teachers as agents of change understood the interconnectedness between schools and the communities they served (Villegas & Lucas, 2002b). In their views, schools either perpetuated the inequalities and social injustices or challenged them. Although change agents relied upon the same skill set as technicians (planning, classroom management, instructional methods and assessment strategies), they also realized the social and political implications that affected their students daily (Duncan-



Andrade & Morrell, 2008, Villegas & Lucas, 2002b). Even though they taught the same curriculum and standards as the technicians, they empowered their students with the knowledge and skills to overcome challenges they faced. These teachers represented the change agents needed today for tomorrow's classrooms.

Change agents adapted the curriculum to be responsive to their CLD students (Duncan-Andrade & Morrell, 2008, Villegas & Lucas, 2002a) because they continuously viewed their classroom through the eyes of their students. Essentially, they became educational architects (Ladson-Billings, 2011) designing curriculum and adjusting their practice as defined by their CLD students (Coulter & Jimenez-Silva, 2017; Duncan-Andrade & Morrell, 2008; Lucas & Villegas, 2013; Yosso, 2006). Therefore, it was extremely important for PSTs to develop a deeper understanding of their students' linguistic and academic proficiency.

Lucas and Villegas (2011) reminded us of the importance of developing future educators that had the fundamental understanding and disposition to advocate for CLD students. By raising their awareness to the issues that confronted CLD students, PSTs were afforded opportunities to revise the curriculum to ensure that issues related to culture and language were not marginalized or ignored (Duncan-Andrade & Morrell, 2008; Paris & Alim, 2017). Instead, they built upon the cultural wealth and experiences that students brought to enhance their educational experience (Coulter & Jimenez-Silva, 2017; Yosso, 2006).

This in itself, the adaptation of materials, instructional practice, and authentic assessment, provided examples of teacher advocacy (Villegas & Lucas, 2002b). As PSTs became trained with asset-based pedagogical approaches, the effects in their classroom

had the potential to influence their colleagues, the district, and even the state.

Collectively, each of us as change agents had a moral obligation (Villegas & Lucas, 2002b) to increase access to learning and academic success by challenging the existing inequities presented in our educational systems (Coulter & Jimenez-Silva, 2017; Duncan-Andrade & Morrell, 2008; Paris & Alim, 2017).

### **Developing Pedagogical Knowledge and Skills for Pre-service Teachers**

In the previous section, I introduced three essential strands that teacher preparation programs needed to consider to prepare preservice teachers for teaching CLD students; (a) developing sociolinguistic consciousness, (b) valuing diversity, and (c) advocating for change. In this section, I built upon these to include the pedagogical skills that focused on the linguistic aspects of teaching and learning. Understanding second language acquisition theory prepared PSTs to develop meaningful opportunities for CLD students to access the curriculum (Echavarría, Vogt & Short, 2008, 2010a, 2010b; Lucas & Villegas, 2011; Lucas, Villegas & Freedson-Gonzalez, 2008; Villegas & Lucas 2002b). In the CRLT framework these theories were defined as the key principles grouped into four strands: (a) linguistic and academic backgrounds, (b) language demands and tasks, (c) key principles of second language acquisition, and (d) scaffolding instruction. In this section, I explained each and their relevance to prepare PSTs with the pedagogical knowledge and skills to teach CLD students.

**Learning about linguistic and academic backgrounds.** Lucas and Villegas (2011) emphasized the importance of understanding their CLD students' linguistic backgrounds, experiences and language proficiencies. Although CLD students were often referred to as a homogenous group, they were not (Lucas & Villegas, 2011; Villegas &

Lucas, 2002a). They were individuals who entered school with various levels of proficiency and literacy in their native language and English as well as varied experiences in schools (Lucas & Villegas, 2011; Villegas & Lucas, 2002a). Although some had strong academic background knowledge about core content concepts, others did not due to a variety of reasons such as interrupted schooling, underprepared teachers, or schools that failed them (Echavarría et al., 2008, 2010a, 2010b; Lucas & Villegas, 2011; Villegas & Lucas, 2002a). Unfortunately, all of these experiences influenced their ability in acquiring a second language and becoming academically competent (Cummins, 2000; Lucas & Villegas, 2011; Villegas & Lucas, 2002a).

Therefore, it was important for PSTs to recognize their CLD students' language and academic background in English and their home language. By accessing their prior knowledge and background experiences, PSTs could drive the curriculum to build upon their CLD students' linguistic and academic skills. Using their students' own life experiences, the curriculum became more relevant and meaningful by relating it to their personal and cultural backgrounds (Echavarría et al., 2008, 2010a, 2010b; Lucas & Villegas, 2011; Villegas & Lucas, 2002a). This approach helped CLD students connect vocabulary and concepts from what they previously learned to what they were currently learning in English (Echavarría et al., 2008; 2010a, 2010b). Making the content meaningful provided a stronger foundation that continually built their conceptual knowledge academically and linguistically to explicitly connect past learning to present concepts.

For PSTs to effectively achieve this, they needed to understand how to connect the cultural and linguistic experiences according to the language proficiency levels of

their students. Key to developing effective lessons that wove their cultural, linguistic and academic experiences together, was the understanding of stages of the second language acquisition. Krashen and Terrel (1983), identified the five stages as (a) pre-production, (b) early production, (c) speech emergence, (d) intermediate, and (e) advanced fluency. Cummins (2000, 2010) additionally emphasized the benefit of the continued development of the native language to facilitate the second language acquisition process. The understanding of the importance of the stages and the role of the native language supported PSTs' ability to plan and design lessons to meet their students' needs (Echavarría et al., 2008, 2010a, 2010b; Krashen & Terrel, 1983). As a result, this drew upon the continued development of the academic and linguistic assets that CLD students already possessed.

**Identifying language demands and classroom tasks.** However, it was not enough to identify learning tasks that challenged CLD students, PSTs also needed to be prepared to identify the linguistic demands of oral and written discourse for the given task (Cummins, 2000; Wong-Fillmore & Snow, 2005). PSTs needed to analyze the language demands for instruction, learning activities, materials (textbooks, online readings, etc.), and assessments (Cummins, 2000; Echavarría et al., 2008, 2010a, 2010b; Lucas & Villegas, 2011; Villegas & Lucas, 2002a; Wong-Fillmore & Snow, 2005). This involved identifying the key vocabulary, the linguistic and academic demands of the materials, and how language was expected to be used to complete the learning task (Lucas & Villegas, 2011).

By identifying the linguistic demands involved throughout a lesson, PSTs critically evaluated how to support their CLD students' linguistic and academic

needs. When PSTs focused on the linguistic demands, they provided meaningful opportunities for CLD students to engage in the learning process (Echavarría et al., 2008, 2010a, 2010b). To do this, lessons were designed to integrate the four language domains; reading, writing, listening, and speaking. With this, CLD students were given opportunities to develop their linguistic proficiency *and* their academic skills.

**Key principles of second language acquisition.** Further, PSTs needed to develop knowledge of key principles involved in learning a second language, and ways to incorporate that knowledge to inform instruction. In their research, Lucas, Villegas and Freedson-González (2008) referenced six key principles of second language acquisition that were essential for PSTs to develop as shown in Table 2.

Table 2

*Six Key Principles of Second Language Acquisition*

<p>1. <b>BICs versus CALP.</b> Basic Intrapersonal Communication Skills (BICs) was readily acquired through informal social settings whereas CALP was only developed through academic settings focused on cognitive and language skills needed to perform in academic settings (Cummins, 1991, 2000, 2008; Collier &amp; Thomas, 2009; Echavarría et al., 2008, 2010a, 2010b).</p>
<p>2. <b>Comprehensible Input.</b> CLD students needed access to comprehensible input that provided meaningful opportunities to practice the academic tasks by reaching slightly beyond their current proficiency level to develop their cognitive abilities (De Jong &amp; Harper, 2005; Echavarría et al., 2008, 2010a, 2010b; Krashen, 1983, 2003).</p>
<p>3. <b>Social Interaction.</b> Actively engaged CLD students in meaningful academic tasks to provide opportunities that fostered language development and skills in speaking, listening, reading, and writing (Echavarría et al., 2008, 2010a, 2010b; Vygotsky, 1978; Wong-Fillmore &amp; Snow, 2005).</p>
<p>4. <b>Primary Language (L1) Skills.</b> CLD students with strong native language skills transferred their academic, linguistic, and cognitive skills from one language to the other. CLD students who continued to develop their L1 while acquiring their L2 outperformed their monolingual English-speaking peers (Collier &amp; Thomas, 2009; Cummins, 2000, Echavarría et al., 2008, 2010a, 2010b).</p>

(continued)

Table 2 Six Key Principles of Second Language Acquisition (continued)

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**5. Learning Environment.** Reducing anxiety in the educational setting by creating a welcoming and safe learning environment that valued the native language was essential for CLD students (Collier & Thomas, 2009; Echavarría et al., 2008, 2010a, 2010b; Krashen, 2003).

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**6. Language Forms and Functions.** Explicit attention to the linguistic form and function of second language instruction as applied to the academic discipline made content more meaningful and relevant. Understanding the cognitive tasks influenced by language structures was essential for continued academic development (De Jong & Harper, 2005; Echavarría et al., 2008, 2010a, 2010b; Mora-FLores, 2011).

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*Note.* Adapted from T. Lucas, A. M. Villegas, & M. Freedson-Gonzalez. (2008). Linguistically responsive teacher education: Preparing classroom teachers to teach English language learners. *Journal of Teacher Education*, p. 363.

***Principle 1: BICs versus CALP.*** According to Samson and Collins (2012) developing highly prepared PSTs focused on providing educators with the working knowledge of academic language. Essential to this concept was recognizing the differences between conversational and academic language. To support ELLs, educators needed to develop the academic discourse used in instruction and cognitively demanding tasks to be fully engaged in the learning process (Delpit, 1992; Samson & Collins, 2012). Cummins (2000) distinguished between two types of language proficiency with respect to discourse: BICS, the social language and CALP, the academic language.

Cummins (2008) defined Basic Interpersonal Communication Skills (BICS) as language acquired in social settings without formal instruction. These skills were used for conversational fluency in speaking and listening to interact with others in day-to-day situations. On average students took up to 2-3 years to acquire BICs depending on the learners' background experiences in their primary language (Cummins, 2000). This social language was acquired more easily because meaning was derived from social cues (e.g.,

facial expressions, gestures, body language, etc.) within the context of the setting (Cummins, 2000, 2008). Further research by Thomas and Collier (2012) found similar patterns aligned to Cummins' research (Cummins, 2000, 2008) in developing conversational fluency in the second language. Nevertheless, ELLs conversing socially was not the same as the academic discourse needed in the classroom to succeed academically (Cummins, 2000, 2008; Delpit, 1992; Thomas and Collier, 2012).

Thus, Cummins' distinction between BICS and CALP was essential for PSTs to address the role of academic language in instruction to support CLD students' linguistic and academic development (Cummins, 2008; Diaz-Rico & Weed, 2010, Samson & Collins, 2012). Academic language has posed special challenges for all learners, but especially for CLD students who were trying to learn language as well as content. The purpose of academic language was different than that required for conversational proficiency. For example, academic language relied on specialized vocabulary, complex sentence structures and discourse, and higher order thinking skills (analyzing, hypothesizing, evaluating, etc.). Cognitive Academic Language Proficiency (CALP) was a more formal and complex language structure used in the academic discourse needed to be successful in the classroom. These were the 'deep structures' of language needed to participate in an academic setting. ELLs' abilities to understand the linguistic demands, tasks, and skills to interact meaningfully in the classroom relied heavily on their CALP ability. Although ELLs acquired BICs within a couple of years of immersion, CALP took on average 5-7 years to be on the equivalent grade level as their native English-speaking peers (Collier & Thomas, 2009, 2014; Cummins, 2008; Diaz-Rico & Weed, 2010).

***Principle 2: Comprehensible input.*** Krashen's input hypothesis (1983, 2003) suggested that CLD students acquired language through comprehensible input by providing meaningful learning opportunities that challenged them to reach just beyond their current proficiency (Echavarría et al., 2008, 2010a, 2010b; Krashen, 1983, 2003). Krashen (1989) referred to comprehensible input (i) as the messages received and understood that were used by CLD students to acquire a second language. Instructional input in English was meaningless if learners could not understand it (De Jong & Harper, 2005; Villegas & Lucas, 2011). CLD students needed to understand the messages conveyed to them during instruction. Therefore, frequent input was used to help CLD students understand the meaning of the communication presented (Echavarría et al., 2008, 2010a, 2010b; Krashen, 1989). However, Krashen (1989) also explained that the best input challenged learners just beyond their competency level (i +1) to enhance their linguistic and cognitive skills (Krashen, 1989).

Therefore, to make content comprehensible, lessons needed to be designed based on the learners' background experiences and prior knowledge *and* purposefully linked to build upon new concepts being taught. By focusing on what the learner already knew, the lesson could be scaffolded to develop their linguistic and academic skills. In addition, comprehensible output opportunities needed to be provided for students to use the target language in meaningful and authentic ways (Echavarría et al., 2008, 2010a, 2010b; Krashen, 1989). This combination of providing quality instruction that focused on the input (messages received) and output (messages conveyed) was essential for academic success (De Jong & Harper, 2005; Echavarría et al., 2008, 2010a, 2010b; Krashen, 1989). Scaffolding instruction to meet the linguistic needs of CLD students throughout the



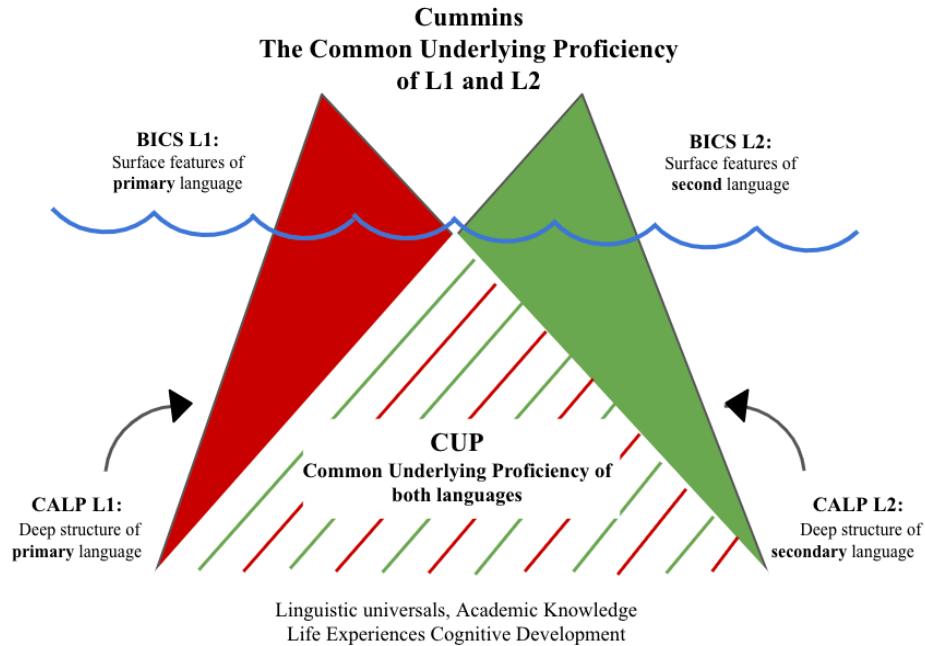
lesson made content relevant and developed both content knowledge and language skills (Lucas & Villegas, 2011).

***Principle 3: Social interaction.*** According to sociocultural language theory, language was socially constructed and developed through meaningful interactions (Vygotsky, 1978). Learning was a social endeavor that occurred primarily in the classroom. The interactions between (a) teachers and students, (b) students and students, and (c) students and content affected how CLD students learned. Actively engaging CLD students in meaningful tasks provided opportunities to foster language development (speaking, listening, reading, and writing) and academic skills (Echavarría et al., 2008, 2010a, 2010b; Vygotsky, 1978; Wong-Fillmore & Snow, 2005). According to Vygotsky (1978), learning originated through social interactions that provided opportunities to develop both social and academic discourse. Therefore, CLD students needed frequent opportunities to interact with other students who were fluent in that language (Wong-Fillmore & Snow, 2005). Through these authentic experiences, CLD students negotiated meaning to make content comprehensible and meaningful that advanced their understanding of concepts taught.

However, an important element to develop these opportunities was rooted in Vygotsky's theory of learning (1978) identified as the zone of proximal development. Vygotsky (1978) emphasized how learners benefitted from working through learning tasks with more capable peers. Vygotsky's theory (1978) suggested that CLD students benefitted from working with more knowledgeable students such as native English-speaking peers to develop the target language (Echavarría et al., 2008, 2010a, 2010b) and bilingual peers to clarify academic tasks in the native language (Collier & Thomas, 2009,

2014; Cummins, 2008; Diaz-Rico & Weed, 2010). By working in groups, CLD students were given more opportunity to produce language by interacting with other speakers (Echavarría et al., 2008, 2010a, 2010b). Scaffolding group configurations with more knowledgeable peers provided CLD students with opportunities to engage in authentic conversations in a meaningful context that developed both language and academic skills (Echavarría et al., 2008, 2010a, 2010b; Vygotsky, 1978).

***Principle 4: Primary language skills.*** Unfortunately, most classroom interactions focused on the development of the target language, English, due to the wave of English language restrictive laws across the nation and especially, in Arizona. For many CLD students, linguistic and academic competence in their primary language were often overlooked. However, according to Cummins' Common Underlying Proficiency Theory (Cummins, 2000), the linguistic and academic skills developed in the primary language transferred to the second language (Collier & Thomas, 2014; Cummins, 1991, 2000; Diaz-Rico & Weed, 2010; Freeman & Freeman, 2006). Therefore, it was important to access the CLD students' prior knowledge in their primary language to better understand the learner's cognitive ability. Figure 4 illustrates the ELLs interdependence between the primary and secondary language as seen on the next page.



*Figure 4.* CUP adapted from Cummins (2000) and Collier & Thomas (2014)

The image symbolized two icebergs converging into one. At the surface level, an ELL appeared to understand the second language as illustrated with the tips of the iceberg above water. This represented their ability to use language in social contexts. However, it was difficult to observe one's depth of knowledge symbolized by the large majority of the iceberg under the water. This was students' academic ability not readily seen unless assessed formally. The icebergs convergence represented the transfer of academic knowledge from one language to the other (Collier & Thomas, 2009, 2014; Cummins, 1991, 2000; Diaz-Rico & Weed, 2010; Freeman & Freeman; 2006).

In other words, CLD students who had strong academic language skills in the native language transferred these skills to the second language (Collier & Thomas, 2009, 2014; Cummins, 1991, 2000; Thomas & Collier, 2002). CLD students with strong primary language and cognitive skills acquired a second language successfully and achieved academic parity with their native speaking peers (Collier & Thomas, 2009,

2014; Thomas & Collier, 2002). Therefore, understanding the student's depth of knowledge and how it transferred increased teachers' ability to scaffold linguistic and academic demands, tasks, and skills to make content more comprehensible (Ballantyne, Sanderman & Levy, 2006, 2008; Collier & Thomas, 2009, 2014; Cummins, 1991, 2000; Delpit, 1992; Freeman & Freeman, 2006) to develop linguistic and academic knowledge.

***Principle 5: Learning environment.*** Research results indicated CLD students' academic and linguistic progress was influenced by their sense of belonging (Perez, 2004; Krashen, 2003). Valuing CLD students' language, culture, home, and community increased their self-confidence and motivation to learn (Diaz-Rico & Weed, 2010; Kennedy & Romo, 2013; Perez, 2004; Vygotsky, 1978) positively influencing their academic performance. According to research results, there was a strong correlation between achievement and a safe learning environment (Gay, 2000; Lucas et al., 2008; Noguera, 2008) especially one that valued the sociocultural background of students within the classroom. When CLD students' language and culture were valued in the classroom, they had the potential to achieve academic parity equal to and even higher than their native English-speaking peers (Thomas & Collier, 2009).

Yet, an important factor influencing their success, was how CLD students felt about learning in the classroom (Gay, 2000; Krashen, 1982, 2003). Krashen (1982, 2003) hypothesized that when CLD students felt anxious about learning, they lacked the self-confidence to actively engage in the learning task. Krashen (1982, 2003) defined this emotional reaction about learning as the affective filter. He described this as a filter that intensified as the student's anxiety about learning increased. When this occurred, the filter prevented students from making sense of the comprehensible input received about

the content being taught. As a result, students became distracted and disengaged from meaningful classroom interactions intended to develop language and academic knowledge.

As noted above, how CLD students felt within the learning environment strongly influenced their ability to learn, but an equally important factor for their success was the extent to which they believed that their teachers cared (Gay, 2000; Noguera, 2008). Classrooms needed to be carefully constructed to cultivate learning that fostered a safe and positive learning environment where students felt valued and accepted. “If teachers expect students to be high or low achievers, they will act in ways that cause this to happen.” (Gay, 2000, p. 57). Gay suggested that teachers have a powerful influence over their students’ performances in school.

Therefore, essential to CLD students’ success, was the development of authentically caring teachers who held high expectations of their students including the belief their students could succeed (Gay, 2000; Noguera, 2008; Lucas et al., 2008). According to Bondy and Ross (2008), these teachers were known as warm demanders. First, they established caring relationships with their CLD students based on trust and respect. They took time to get to know their CLD students by learning about them through their cultural experiences, their family, and their community. They used this information to guide their instruction to make the curriculum meaningful and relevant.

Second, these teachers held high expectations that encouraged their CLD students to perform at high levels. They maintained rigor in their instruction by scaffolding it according to their CLD students’ cognitive and linguistic abilities (Diaz-Rico & Weed, 2010; Echavarría et al., 2007). They reinforced this by adopting a ‘no excuse’ policy

because they understood the importance of developing a strong conceptual knowledge base. Therefore, they established clear and consistent academic and behavior norms that communicated their expectations (Bondy & Ross, 2008; Ware, 2006). Combining all of these actions developed an environment that fostered mutual respect and an authentic level of caring reflected in every aspect of learning within the classroom community.

***Principle 6: Linguistic forms and function.*** Although instructional practices of second language acquisition have shifted between grammar-translation and holistic approaches, a continued focus on linguistic forms and functions of the target language remained of the utmost importance to teach (Lucas et al., 2008; Lucas & Villegas, 2011). As the CLD student population continued to grow in mainstreamed classrooms, every teacher needed to become a language teacher (De Jong & Harper, 2005; Lucas et al., 2008). Each discipline had specialized vocabulary and language structure embedded that needed to be made explicit to ELLs.

A contrastive analysis approach developed an asset-based mindset that affirmed and sustained the CLD students' primary language as they acquired the secondary, English (Cummins, 1991, 2000; De Jong & Harper, 2005). This approach built upon Cummins' Common Underlying Proficiency theory (Cummins, 1991, 2000) by comparing what they already knew in their primary language to transfer learning to the secondary language. By using the primary language as reference points, CLD students began to notice and compare the nuances between the two languages. As a result, CLD students developed the knowledge of language forms and functions.

Language forms identified the structure of language such as patterns, rules, and grammar; whereas functions focused on the intended use of language as the primary

purpose (Lucas et al., 2008, Lucas & Villegas, 2011). Language form and function varied in complexity and use across disciplines. Therefore, it was important to identify these unique features and characteristics of language to explicitly teach how they were used within context. In academic settings, CLD students were expected to use language across various cognitive levels such as sequencing events, making inferences, drawing conclusions, defending their ideas, and so on (De Jong & Harper, 2005; Echavarría et al., 2008, 2010a, 2010b). Each of these cognitive skills required CLD students to understand how to use language within the context provided (De Jong & Harper, 2005; Echavarría et al., 2008, 2010a, 2010b). Therefore, CLD students required frequent and purposeful opportunities to use language for a variety of purposes at both their cognitive ability and proficiency level (Echavarría et al., 2008, 2010a, 2010b; Lucas et al., 2008).

**Scaffolding instruction.** To create meaningful and rigorous learning experiences for CLD students, several scholars suggested carefully scaffolding the instruction throughout the lesson (Echavarría et al., 2008, 2010a, 2010b; Gay, 2010; Lucas et al., 2008; Lucas & Villegas, 2011). Scaffolding was introduced by Vygotsky's (1978) notion of the Zone of Proximal Development (ZPD). In essence, Vygotsky (1978) identified the metaphorical space between the current level of performance of what a student could accomplish independently in comparison of what they could do when guided by a more capable peer or adult. ZPD led to the conceptualization of scaffolding instruction to make content more comprehensible for CLD students.

Essentially, scaffolds provided CLD students with the linguistic and academic support to accomplish the demands of the learning task (Echavarría et al., 2008, 2010a, 2010b; Lucas et al., 2008; Lucas & Villegas, 2011). Scaffolds provided temporary

supports that helped CLD students accomplish the learning task. The goal of scaffolding was to move the learner from dependence to independence. Scaffolds such as teacher or peer support were gradually removed as CLD students demonstrated their ability to carry out the activity alone. In this sense, scaffolds provided enriched linguistic and cognitive supports to make content accessible to CLD students (Echavarría et al., 2008, 2010a, 2010b; Lucas et al., 2008; Lucas & Villegas, 2011). A growing body of literature focused on scaffolding instruction highlighted four different approaches as demonstrated in Table 3.

Table 3

*4 Approaches to Scaffolding Instruction*

<p><b>1. Using extra-linguistic cues.</b> To provide meaningful context to academic context not conveyed through language, include: (a) visuals to reduce processing time, (b) graphic organizers to clarify relationships and thinking maps to identify processes, and (c) timelines to organize dense information.</p>
<p><b>2. Supplementing and modifying written text.</b> To overcome increasingly complex and challenging academic texts, scaffold by providing (a) study guides to focus on key vocabulary, concepts, etc., (b) outlines to identify major concepts, (c) supplemental readings to enrich background knowledge and conceptual understanding, and, (d) annotations and highlights to point out key vocabulary and concepts.</p>
<p><b>3. Supplementing and modifying oral language.</b> Increase oral comprehension by implementing supports such as minimizing idiomatic expressions, pausing intentionally to increase comprehension, repeating and paraphrasing key ideas and concepts, establish consistent routines so CLD students can focus on content not process.</p>
<p><b>4. Giving clear and explicit instructions.</b> Maximize time on task by providing clear instructions reviewed orally and in writing (on the board, on paper, etc.). Model, demonstrate and if necessary, have the students paraphrase to explain the procedural process in a language they understand.</p>

*Note.* Adapted from Echavarría et al., 2008, 2010a, 2010b; Lucas et al., 2008; Lucas & Villegas, 2011.

Using scaffolds throughout the lesson created a less stressful learning environment where CLD students felt supported in completing the learning tasks. Research results suggested



use of purposeful scaffolds helped CLD students develop language proficiency *and* academic knowledge (Echavarría, 2008, 2010a, 2010b; Lucas et al., 2008; Lucas & Villegas, 2011).

### **Using Service Learning to Apply CRP**

As the demographic landscape continued to shift in Arizona, a heightened awareness of how to prepare PSTs effectively to teach CLD students continued to be debated. As previously introduced, many PSTs did not share the same cultural or linguistic background as their students. Additionally, the majority also tended to have very limited experiences working with CLD students in the classroom. Therefore, to address this sociocultural gap between teachers and students, the intervention for my research study emphasized two components (a) a course curriculum based on culturally responsive pedagogy and (b) service learning in a classroom with CLD students.

As outlined in the previous section, the course was re-designed through the implementation of a Culturally Responsive and Linguistic Teaching framework (Lucas, 2011; Lucas & Villegas, 2011; 2013; Paris & Alim, 2017; Ramirez, 2017). Nevertheless, it was not enough to simply read about asset-based pedagogies to prepare PSTs to teach CLD students in their future classrooms (Bennet, 2012; Paris, 2016; Paris & Alim, 2016; Ramirez, 2017; Villegas & Lucas, 2011). In fact, courses taught in isolation through readings and discussions had a limited effect on changing preservice teachers' perceptions about teaching CLD students (Bennet, 2012; Cochran-Smith & Zeichner, 2005; Hutchinson, 2013; Paris, 2016).

However, in recent studies, several researchers asserted coursework combined with field experiences increased PSTs' understanding of how to move from culturally

responsive pedagogy theory to practice (Bennet, 2012; Hutchinson, 2013; Paris, 2016; Ramirez, 2017). Yet, most of these studies focused on more experienced PSTs who were moving towards the completion of their teacher preparation programs. The research remained sparse in determining how CRLT training affected PSTs who were in the early stages of preparation and who lacked pedagogical training and classroom experience. Therefore, the CRLT framework was comprised of a third component of equal importance and consisted of an intentional placement of PSTs in classrooms with CLD students.

In theory, service learning provided an authentic experience for PSTs to learn how to teach and work with CLD students in an educational environment that extended beyond the college curriculum. Bringle and Hatcher (1996) defined service learning as an educational experience in which students (a) participate in an organized service activity that meet identified community needs and (b) reflect on the service activity in such a way as to gain further understanding of course content, a broader appreciation of the discipline, and an enhanced sense of civic responsibility. (p. 38)

Through these service activities and the reflective processes, service learning created a bridge from theory learned in the college coursework to its application of practice in a real classroom.

**Authentic service-learning experiences.** The first component of service learning defined by Bringle and Hatcher (1996) identified the importance of engaging PSTs in meaningful service that addressed real-life situations within the school community. Through these experiences, PSTs gained the pedagogical knowledge and skills to connect

to the course content in an authentic manner (Mason, 1999; Villegas & Lucas, 2002a). Valenzuela (2016) reminded us that having the knowledge about culturally responsive and sustaining pedagogy did not make for a ‘good teacher’ alone. It was equally important to engage PSTs in classrooms with CLD students whose backgrounds and experiences differed from their own (Bennet, 2012; Paris, 2016; Paris & Alim, 2017; Ramirez, 2017; Lucas & Villegas, 2011). When theory was tied to practice the information gained about CLD students and the application to teaching became more relevant and meaningful (Ballantyne et al., 2008; Coulter & Jimenez-Silva, 2017; Villegas & Lucas, 2002a; Mason, 1999).

In this sense, the service-learning experience became a ‘lived text’ as PSTs confronted the linguistic and academic challenges that CLD students faced daily in the classroom (Villegas & Lucas, 2002a). By having required contact hours with CLD students in a K-12 classroom, PSTs gained first-hand knowledge of CLD students’ daily experiences and interactions in an academic setting (Lucas et al., 2008; Villegas & Lucas, 2002a). This provided opportunities for PSTs to see CLD students as individuals with varied cultural, linguistic, and academic experiences (Lucas et al., 2008; Villegas & Lucas, 2002a, 2002b). As this occurred, caring relationships began to take root that challenged PSTs to reflect upon their previously held assumptions about teaching CLD students (Lucas et al., 2008; Villegas & Lucas, 2002a, 2002b).

As PSTs’ appreciation for, and knowledge of, CLD students expanded, they developed a stronger understanding of how to effectively teach using a culturally sustaining and responsive pedagogy (Ramirez, 2017). When PSTs valued their CLD students’ linguistic backgrounds and academic experiences to create learning

opportunities, they began to develop a social justice approach to teaching and learning (Coulter & Jimenez-Silva, 2017; Nieto, 2005; Ramirez, 2017). As preservice teachers worked with CLD students, they saw practice in action in which their college course work became more meaningful and relevant (Jimenez-Silva & Olson, 2012; Mason, 1999; Ramirez, 2017). Service learning reinforced theory by scaffolding opportunities for PSTs to apply it to practice with CLD students in an authentic learning environment (Ballantyne et al., 2008; Faltis & Arias, 2012).

The combination of a well-designed course aligned to a purposeful service-learning experience extended PSTs' understanding about culturally sustaining and responsive pedagogy (Jimenez-Silva & Olson, 2012; Ramirez, 2017). Insights gained from the field were used in the course and vice versa as they worked in tandem influencing one another (Jimenez-Silva & Olson, 2012; Ramirez, 2017). They built upon each other as PSTs' dispositions changed and pedagogical knowledge developed (Jimenez-Silva & Olson, 2012; Ramirez, 2017). Collectively, these experiences provided them a social justice approach of what it meant to teach children that differed from themselves by connecting what they were learning about theory to their experiences (Coulter & Jimenez-Silva, 2017; Jimenez-Silva & Olson, 2012; Ramirez, 2017).

**Guided reflection a tool to bridge service and learning.** Bringle and Hatcher (1996) also concluded that reflection as a critical component to bridge service and learning. Reflection enabled PSTs to analyze how their knowledge, skills, and dispositions about teaching CLD students related from course theory to their experiences in the classroom. Required academic tasks such as journaling, blogging, and class discussions deepened the learning process as they analyzed their experience within

context (Villegas & Lucas, 2002a). Reflection was used to help PSTs process what they saw in practice as they considered how it was related to theory (Bringle & Hatcher, 1996; Villegas & Lucas, 2002a).

Guided reflection activities were essential in expanding PSTs' dispositions, knowledge, and skills about teaching CLD students (Bringle & Hatcher, 1996; Villegas & Lucas, 2002a). Grappling with theory challenged PSTs to analyze teaching and learning from a real-world application. In this, the stakes were high because they forged relationships with real students. No longer were they simply reading about an imaginary student as defined in a case study or scenario. The student was real and so were the consequences. Through guided reflections, PSTs had a voice to share their experiences and interactions with CLD students in their classrooms (Bringle & Hatcher, 1996; Villegas & Lucas, 2002a).

Because most early in the program PSTs had limited field experiences, scaffolding discussions with their peers maximized learning (Ballantyne et al., 2008; Villegas & Lucas, 2002a). Working with their peers afforded them insights about their experiences that they would not have concluded on their own (Jimenez-Silva & Olson, 2012). Reflective activities challenged PSTs to reflect on and test their beliefs about teaching CLD students as they became more socioculturally aware and pedagogically knowledgeable (Jimenez-Silva & Olson, 2012; Ramirez, 2017; Villegas & Lucas, 2002a). This type of reflection was critical because it allowed PSTs to co-construct knowledge about teaching CLD students that they readily applied to their students in their service learning (Jimenez-Silva & Olson, 2012). As a result, when preservice teachers critically reflected, they began to envision themselves as culturally sustaining and responsive

teachers in their future practice (Coulter & Jimenez-Silva, 2017; Jimenez-Silva & Olson, 2012; Ramirez, 2017; Villegas & Lucas, 2002a).

### **Developing a CoP through Service Learning**

According to Wenger (1998), learning was considered to be a social endeavor in which participants actively engaged with each other and their communities. Grounded in sociocultural theories of learning and development, communities of practice (CoP) created opportunities for learning and knowing by building relationships with others through shared experiences that occurred over time (Wenger, 1998). In CoP, as participants became more actively engaged with others who shared the same social context, their identities, perspectives, and worldviews changed. Thus, a COP was ideal for an educational course focused on a team-based, service-learning approach.

As a result, Etienne Wenger's (1998; Wenger, McDermott, & Snyder, 2002) communities of practice (CoP) was incorporated into the CRLT Framework in this study. Wenger et al. (2002) defined three critical elements of a CoP: "a *domain* of knowledge, which defines a set of issues; a *community* of people who care about this domain; and the shared *practice* that they are developing to be effective in the domain" (p. 27, italics in original). Each of these elements played a critical role within the context of this study.

As defined by Wenger et al. (2002), "The *domain* of a CoP creates a common ground and sense of common identity .... The domain inspires members to contribute and participate, guides their learning, and gives meaning to their actions" (p. 27-28, italics in original). The domain of knowledge as applied to this study was the CRP curriculum. Too many times, PSTs have learned about theory in isolation in the confines of a college classroom. To overcome this challenge in this study, the PSTs learned about CRP from

their college course instructor and with a culturally responsive teacher in their service-learning classroom. This approach had the potential to deepen PSTs' understanding of CRP because as they developed a shared knowledge about CRP, they would be able to apply it to practice in their service-learning classroom.

Developing a domain about CRP had the potential to provide a strong foundation in which the PSTs acquired knowledge and skills through the participation with others rather than in isolation. Wenger et al. (2002) claimed, "The community creates the social fabric of learning. A strong community fosters interactions and relationships based on mutual respect and trust" (p. 28). Because this study focused on novice PSTs who lacked prior experience working with CLD students, fostering a community of practice was essential. The placement of PSTs in teams within culturally responsive classrooms provided the opportunity to develop relationships in and outside of the classroom. As trusting relationships developed, PSTs would be able to negotiate meaning about CRP in terms of how it applied to their CLD students in practice. Moreover, if they became more invested in learning about CRP they would be able to develop meaningful relationships with their peers on their team, their in-service teachers, and the CLD students in their classrooms.

Finally, as they had the opportunity to share their experiences and explore how to apply CRP with their CLDs, their sociolinguist views might change as their pedagogical knowledge deepened. Wenger et al. (2002) described this as practice. "The *practice* is a set of frameworks, ideas, tools, information, styles, language, stories, and documents that community members share. ... the domain denotes the topic... [whereas] the practice is the specific knowledge the community develops, shares, and maintains" (Wenger et al.,

2002, p. 29, italics in original). In addition, guided reflective activities were scaffolded to provide purposeful opportunities for discussions about how to use CRP in relation to their service-learning classrooms. During these sessions, teams would be able to share various strategies (anchor charts, sentence starters, contrastive analysis, grouping configurations, etc.) to problem-solve how to support their students in their service-learning classroom.

Thus, PSTs were afforded opportunities to develop a *domain* of CRP knowledge, a *community* with the others who cared about CRP, and a shared *practice* to apply CRP, which could make them more knowledgeable, more collaborative with their community, and allow them to envision themselves as culturally responsive teachers in their future practices.

### **Selected Studies Guiding the Research Study**

Much attention has focused on the need to prepare better PSTs to work with the increasing number of CLD students in today's classrooms. Therefore, in this section, I highlighted several influential studies that have contributed to my research study. Each one was conducted from slightly different perspectives as I progressed through each cycle of action research. Because these studies occurred over time, I was afforded insights about my problem of practice (PoP) that contributed to my intervention (Buss, 2018). The findings from each cycle guided me to sift continuously through the literature to develop a stronger understanding of what the data meant in terms of my problem of practice.

Critical reflection each cycle required me develop a stronger theoretical understanding of how to approach my research and design my intervention. Therefore, I drew upon critical reflexivity to explain this section because of the dramatic changes I made to my intervention from one cycle to the next. With each iteration, I reflected upon



the findings and drew upon the literature to guide my practice and ideologies as reflected in my study. Therefore, I described this process through the cycles of action research and the following selected studies that influenced and contributed to my final study.

### **Cycle 1: A Theoretical Shift toward CRP**

A shift in practice was proposed to begin ELL training at the PST level as early and frequently as possible (Ballantyne et al., 2006; Hutchinson, 2013; Working Group on ELL Policy, 2009). As evidenced in the research, novice teachers expressed feelings of being underprepared to instruct CLD students effectively (Ballantyne et al., 2006; Cartiera, 2006). Specifically, Hutchinson's study went beyond designing a stand-alone course to prepare PSTs. Instead, Hutchinson (2013) explored how to bring theory from the classroom to practice in the real-world.

In this study, Hutchinson (2013) redesigned a three-credit college course to prepare PSTs more effectively. This entailed two components (a) a curriculum based on culturally responsive pedagogy and (b) a required field experience placement with second language learners. Using a mixed methods approach, Hutchinson (2013) systematically investigated the effect of the course by gathering data from pre- and post-intervention surveys and classroom observations. The participants included 25 PSTs representing mostly White female (80%) and varied ages with the majority 18-24 years of age (64%). Corresponding with the literature, only one fifth (20%) were from minority backgrounds (Griner & Stewart, 2012; Klein, 2015).

Two critical issues emerged from the study. First, Hutchinson (2013) emphasized the importance to design courses based on a Culturally Responsive Pedagogy combined with field experience to challenge PSTs' preconceived assumptions about teaching CLD

students. Second, Hutchinson highlighted the importance of employing critical reflection to allow PST to engage in self-reflection and to challenge their preconceived attitudes and assumptions about teaching CLD students. Through reflection, PSTs explored how their experiences in and outside of class influenced their own sociocultural perspectives, as well as, considering how to better plan for and teach CLD students. As a result, data demonstrated significant increases in two areas: (a) a positive change in dispositions towards CLD students and (b) growth of pedagogical knowledge about how to teach CLD students effectively. In conclusion, Hutchinson (2013) recommended the importance of designing courses with a CRP curriculum and experiential learning opportunities to increase PSTs' critical consciousness about teaching CLD students.

**Influence on the study.** This was the first article that had a profound influence on my study. At this time, my action research focused on developing the pedagogical and content knowledge of PSTs to differentiate instruction through the use of technology. Because I was focused initially on preparing PSTs to teach CLD students by developing their pedagogical, content, and technological knowledge, I selected TPACK, the Technological Pedagogical and Content Knowledge (Mishra and Koehler, 2006) as my theoretical framework to guide my research.

Mishra and Koehler (2006) were concerned with how teachers' knowledge about pedagogy, content, and technology interacted as they incorporated them into lessons. They formulated TPACK based on Shulman's (1987) earlier work of defining how pedagogical and content knowledge (PCK) worked in tandem as teachers' delivered lessons to support their students' diverse needs. Based on this premise, Mishra and Koehler (2006) expanded Shulman's PCK model by adding technology. Thus, the model

included content knowledge, (CK), pedagogical knowledge (PK), technological knowledge (TK), and notably the various combinations such as pedagogical-content knowledge (PCK), technological-pedagogical knowledge (TPK), technological-content knowledge (TCK), and technological-pedagogical-content knowledge (TPACK). In particular, their interest focused on how teachers incorporated these types of knowledge into lessons and how each of these interacted as they planned and delivered lessons.

After reading Hutchinson (2013), I realized TPACK focused mostly on preservice teacher's content and pedagogical knowledge as supported through technology. However, it did not address preservice teacher's sociocultural perspectives or views about teaching CLD students. As a result, I reviewed the literature in more depth and changed my intervention to focus on culturally responsive pedagogies (Villegas & Lucas, 2002a) to sustain CLD students' culture and language.

**Perceived barrier: Service-learning placement.** In addition to changing my theoretical framework, I also concluded the need to develop a more purposeful field experience. However, this posed two primary concerns. The first was placing PSTs into schools with CLD students. Our department was small and did not have the personnel to place students into schools. As a result, the students had self-selected their own placement in schools based on the course criteria. This was a major concern because many students could not identify who ELLs were on the first day of class. As a result, their placements had neither been very representative of CLD students nor of teachers who could teach them how to work effectively with CLD students. Second, the school sites had to be located close to the college because many of the PSTs relied on public transportation. As a result, I located a Title I elementary school with a high CLD

population within two miles of the college that agreed to place all of the PSTs in their school.

## **Cycle 2: Using CRP with a Team-based Service-Learning Approach**

After I read how Ramirez, Gonzales-Galindo and Roy (2016) used Culturally Sustaining Pedagogy with teacher candidates, I reflected about the possibilities as I shifted my focus from CRP towards CSP. Ramirez et al. conducted a multiple case study approach drawing upon the theoretical framework of a Culturally Sustaining and Linguistic Teaching (CSLT) approach based upon the work of Lucas and Villegas (2011). The participants of the research study included six PSTs, four White females, one Latina, and one male. Over a ten-month period, they documented their student teaching experiences with CLD students in a general education program at a high school level. Additional data collection included interviews, field notes, and observations. All participants had less than one year of experience working with CLD students with the exception of the Latina PST.

Although only one participant had the same cultural and linguistic background, all indicated how much their sociocultural perspectives influenced their teaching experience. As noted by Lucas and Villegas (2011) when preservice teachers worked with CLD students, they developed a sociocultural consciousness that influenced their ability to support better the CLD students. This occurred as the PSTs developed caring relationships with their CLD students (Gay, 2000). By understanding their CLD students' backgrounds, the PSTs were able to plan meaningful lessons that drew upon students' cultural and linguistic experiences. By the end of the study, PSTs felt more confident in

scaffolding instruction with effective strategies to develop linguistic proficiency and content knowledge.

The findings Gay's (2000) and Ramirez et al.'s (2016) studies emphasized the importance of teacher education programs providing opportunities for PSTs to learn about Culturally Sustaining Pedagogy in context. Therefore, the recommendations included developing rigorous course content based on the CSLT framework to provide PSTs with the pedagogical knowledge of how to support second language learners. To apply this knowledge, the researchers emphasized the importance of placing preservice teachers in classrooms with CLD students. Through these real-life experiences, preservice teachers developed a realistic understanding of the academic and linguistic challenges faced by CLD students in the classroom. By understanding their needs, preservice teachers learned how to support them by applying what they have learned in their coursework. In conclusion, the study demonstrated that when preservice teachers connected theory in practice, it positively influenced how they taught CLD students in the classroom.

In another study, Jimenez-Silva and Olson (2012) defined how a community of practice (CoP) influenced PSTs' beliefs and understandings about teaching CLD students and the application to their future practice. This mixed-method study was conducted in two course sections with 33 PSTs. The participants' ethnicity and gender included 19 White females, nine White males, four Latina females, and one African American female. Only the Latinas identified themselves as bilingual whereas the remaining 29 were monolingual English-speakers. Researchers collected quantitative data through course

evaluations. Qualitative data were collected through case studies, semi-structured interviews, and focus groups.

The findings from this study emphasized the importance of developing a CoP to create a learning environment in which PSTs felt safe to share, discuss, and question their own assumptions and ideologies about teaching CLD students. Through these shared experiences, a CoP emerged with critical friends that provided social, emotional, and scholarly support. As the CoP evolved through the semester, the PSTs fostered a trusting and collaborative environment which in turn, led to more robust discussions about applying theory in the situated context of their field placement. Through the CoP, theory and practice began to meld together supported by the relationships between their peers, faculty members, and the community.

Jimenez-Silva and Olson's (2012) study brought an important issue to light regarding the fostering of a CoP. Through the CoP PSTs were able to learn about theory, negotiate meaning, and apply it to practice. The researchers claimed providing time for critical reflection and scaffolding the reflection were important. PSTs needed to be able to discuss theory as it applied in a real-world context. These reflective activities allowed PSTs to bridge the gap between theory and practice as they learned to define it in terms of their CLD students' cultural and linguistic backgrounds in their field experience. As result, PSTs developed a stronger sense of their own identities especially in terms of how they perceived themselves as practitioners of CLD students currently in their field experiences *and* in their future classrooms.

**Influence on my study.** After the first cycle, I re-developed the curriculum based on the Culturally Sustaining and Linguistic Teaching Framework (Lucas & Villegas,

2013; Ramirez, 2017; Villegas & Lucas, 2002a, 2002b). I aligned the framework to the course competencies and the curriculum. In addition, self-paced culturally sustaining and responsive pedagogy modules were included. The intent of the modules was to provide novice PSTs more time to deepen their learning about how to apply CRP in practice. In addition, I developed a partnership with a Title 1 elementary school and placed students in pairs with the same teacher. This provided them the opportunity to collaborate with their peers and the potential to draw stronger conclusions about teaching CLD students as they engage in discourse with one another.

**Perceived barriers: Partners to teams.** After Cycle 2, I realized although the PSTs had a partner with whom to discuss their experiences in and out of the classroom, they still needed more scaffolded support. Influenced by Jimenez-Silva and Olson's (2012) work about developing CoPs with PSTs, I decided to group the PSTs in teams of four with the same in-service teacher for the dissertation study. The challenge would be to coordinate their preferred grade level as well as their school and work schedules. In addition, norms and responsibilities needed to be established with the in-service teachers to emphasize the importance of the PSTs having authentic learning opportunities to work with CLD students. They needed more time interacting and engaging with the CLD students instead of just observing and grading.

As PSTs became more actively engaged with others who shared the same social context, it was anticipated PSTs' identities, perspectives, and worldviews would change. To influence PSTs' dispositions, knowledge, and skills about teaching CLD students, they needed understanding of theory and time to practice it. In the dissertation study, theory was developed through the CRP curriculum and cultivated in practice through

their service-learning experiences. Wenger (1988) stated, "...participation shapes not only what we do, but also who we are and how we interpret what we do" (p. 4). It was further anticipated, that the relationships cultivated in an outside of the classroom through their instructor, peers, in-service teachers, and CLD students would influence their learning about CRP and how to apply. Thus, using a course designed with a CRLT framework that emphasized a CRP curriculum and a team-based service-learning experience was ideal for beginning PSTs focused on teaching CLD students.

## **Conclusion**

In the beginning of the chapter, the rationale for culturally responsive pedagogy was explained because it provided the foundation for the Culturally Responsive and Linguistic Teaching Framework. CRP had become widely accepted among prominent scholars who provided decades of research in asset-based pedagogy, which provided support for its use (Gay, 2000; Moll & Gonzales, 1994, Ladson-Billings, 1995, Villegas & Lucas, 2002a, Yosso, 2006). Notably, these scholars had recognized that 'just good teaching' simply was not good enough (De Jong & Harper, 2005) because it failed to draw upon the two most influential aspects to help CLD students succeed in school; their language and culture (Coulter & Jimenez-Silva, 2017; Paris, 2016; Paris & Alim, 2017). If, on the other hand, PSTs were trained through a culturally responsive pedagogy approach as presented in the CRLT Framework, they would have a greater chance of meeting the needs of *all* learners (Coulter & Jimenez-Silva, 2017; Paris, 2016; Paris & Alim, 2017; Ramirez, 2017).

Therefore, in this action research dissertation, I employed a CRLT Framework for providing a linguistic and cultural foundation to influence PSTs' practice for teaching



CLD students. It drew upon the importance of preparing PSTs early within their program of study so they could draw upon these experiences as they progressed through their program. In early work in this area, most studies focused on PSTs who were finishing rather than beginning their teacher preparation programs. As a result, more research was needed to determine how implementation of an ‘early’ program would affect those just beginning their training. This study was conducted to document how a CRLT framework influenced ‘early’ PSTs’ dispositions, knowledge, and skills about teaching CLD students through their coursework and service-learning experiences.

## CHAPTER 3

### METHOD

In Chapter 3, the methodology of this action research study has been described. To introduce the purpose of my research, I defined action research and the frame I used to guide my study. Subsequently, the setting, participants and the role of the researcher were explained. Next, the intervention, the CRLT Framework, were presented to outline the CRP curriculum and the service-learning component. The following section included the instruments and data collection. After this section, the data collection and data analysis procedures were summarized. Finally, I concluded with the validity and trustworthiness of my study.

As previously established in Chapter 1, culturally and linguistically diverse students consistently performed lower than their peers (Arizona Department of Education, 2017; Gramlich, 2017, Krogstad, 2016). A contributing factor to this was the inconsistent preparation of quality pre-service teachers to educate CLD students (Center for Research on Education, Diversity & Excellence, 2001; Darling-Hammond, 2003; Garcia, 2001). Therefore, the focus of this study was to examine how a course implementing culturally responsive pedagogy and a purposeful service-learning experience influenced preservice teachers' knowledge, skills and dispositions about educating CLD students (Oakes & Saunders, 2008).

#### **Action Research**

Stringer (2014) defined action research as “a systematic approach to investigation that enables people to find effective solutions to problems they confront in their everyday lives” (p. 1). Action research, unlike traditional research, has been focused on practical

issues for a specific community. Participation in action research studies, allowed the practitioner-researcher and the participants to work in a collaborative and reflective process to co-construct knowledge about a phenomenon to enact social change (Ivankova, 2015).

For my study, I approached my action research based on Kemmis and McTaggart's spiral model: plan, act and observe, and reflect (Buss, 2018; Herr & Anderson, 2015; Ivankova, 2015, Mertler, 2014). I chose this model because of the self-reflective cycles that had the potential to inform change by beginning with a plan, acting upon the plan, observing the process and consequences, and reflecting upon it (Herr & Anderson, 2015). With each iteration, the plan spiraled, evolved and expanded based upon the previous discoveries (Buss, 2018; Herr & Anderson, 2015; Ivankova, 2015, Mertler, 2014). Thus, the research continually built upon the co-constructive knowledge gained from the collaborative efforts between the participants and practitioner-researcher as they engaged in the study together (Creswell, 2015; Herr & Anderson, 2015, Ivankova, 2015).

The research questions guiding my study were:

1. How and to what extent did a CRP curriculum influence pre-service teacher's knowledge about teaching CLD students?
2. How and to what extent did CRP team-based service-learning experience influence pre-service teachers' knowledge about teaching CLD students?
3. How and to what extent did preservice teachers feel prepared to teach CLD students in the future?

## **Setting**

This study took place in the Education Studies Department at Mesa Community College (MCC) in the fall of 2018. MCC has one of the largest departments among the 10 community colleges across the Maricopa County Community College District. The program offered a diverse range of opportunities for pre-service teachers to focus their studies in the areas of early care, early childhood, elementary, or secondary education. MCC has maintained strong articulation pathways for pre-service teachers to transfer their first two years from the community college to a four-year teacher preparation program to complete their degree and teacher certification for Arizona.

The action research study was situated within the context of an introductory course to prepare preservice teachers to teach culturally and linguistically diverse students. Recall from Chapter 1 that restrictive legislative decisions imposed limitations on preservice teacher certification requirements in regards to CLD students. Whereas, this course previously was required for teacher certification by the Arizona Department of Education, it now, only met an elective requirement toward the Associate of Arts in Elementary Education (AAEE) degree. As a result, this limited the number of potential preservice candidates who took the course.

Additionally, as required by the course competencies, preservice teachers must also complete a service-learning experience with CLD students. Therefore, a Title I school was selected as the site placement based on the following criteria: (a) a high CLD population, (b) proximity to the college, and (c) an asset-based approach to teaching and learning.

## Participants

In the fall of 2018, I taught one section of an introductory ELL course offered bi-weekly in a face-to-face format over the sixteen-week semester. Of the 18 enrolled preservice teachers (PSTs) at the end of the add/drop period, all participated in the study. According to the Office of Institutional Effectiveness (2018), the majority of the PSTs enrolled identified as native English speakers (78%), female (72%), younger than 28 years old (89%) and selected elementary education (66%) as their major. In addition, more than half of those (61%) enrolled did not have any prior experience with CLD students. As a result, the service-learning teams were created before the add/drop date based on the preservice teacher's grade level interest, their language, and experience working with CLD students in a K-12 classroom. Team membership varied due to attrition. Below, in Tables 4 and 5, I have presented the demographics for participants in the service-learning teams, photovoice diaries, and the semi-structured interviews.

Table 4

### *Demographic Overview of the Service-Learning Teams (Photovoice: Digital Diary)*

n = 18 Teams	Participant (pseudonym)	Grade Level	Gender	Ethnicity	Primary Language	CLD Experience
Team 1	María Isabel	Sophomore	F	Latina	Spanish	2 semesters
	Pam	Sophomore	F	Latina	English	None
	Karen	Sophomore	F	White	English	None
Team 2	Sally	Sophomore	F	White	English	None
	Julie	Sophomore	F	White	English	None
	César	Sophomore	M	Latino	Spanish	1 semester
Team 3	Tara	Sophomore	F	White	English	None
	Camilla	Sophomore	F	White	English	None
	Sandra	Sophomore	F	Latina	Spanish	None
Team 4	Ruby	Sophomore	F	White	English	None
	Sylvia	Sophomore	F	Latina	Spanish	1 semester
Team 5	Judy	Freshman	F	White	English	None
	Duncan	Freshman	M	White	English	None
	Bao	Sophomore	M	Asian	Chinese	3 semesters
Team 6	Francisco	Freshman	M	Latino	Spanish	None
	Irene	Sophomore	F	White	English	None
	Alma	Sophomore	F	Latina	Spanish	2 semesters
	Roger	Sophomore	M	White	English	None

Table 5

*Demographic Overview of the Participants (Interviews)*

n = 8 Participant (pseudonym)	Year	Gender	Ethnicity	Primary Language	CLD Experience
Karen	Sophomore	F	White	English	None
Tara	Sophomore	F	White	English	None
Roger	Freshman	M	White	English	None
Pam	Sophomore	F	Latina	English	None
Sylvia	Sophomore	F	Latina	Spanish	1 semester
María Isabel	Sophomore	F	Latina	Spanish	2 semesters
Francisco	Freshman	M	Latino	Spanish	None
César	Sophomore	M	Latino	Spanish	1 semester

**Role of the Researcher**

In this action research study, I assumed the role of a practitioner-researcher (Herr & Anderson, 2015). Because the study was situated in my course, I could not separate myself from the context in which it occurred. Due to this participatory nature, I enacted an insider-outsider perspective as I actively engaged in learning about my problem of practice as I shifted from practitioner to researcher (Herr & Anderson, 2015; Ivankova, 2015) within my study.

As a practitioner, I was the instructor of the course and responsible for creating the CRP curriculum as well as assigning participants to their service-learning site. Additionally, I engaged with my participants on a personal level as we fostered our learning community throughout the semester. This certainly had its advantages as a practitioner. Because I became more familiar with my participants, I learned more about the context as they openly engaged with me as an accepted member of the community. As a result, I was able to gather insights about their experiences that I could not otherwise have obtained as a distant observer. This fluidity between me as the practitioner-

researcher and the participants guided the study through a reflective and iterative process as we co-constructed our knowledge together.

Herr and Anderson (2015) pointed out that “intense self-reflection ... is hallmark of good practitioner research” (p.58). As the researcher, I remained cognizant of my “insider” positionality and critically reflected systematically and purposefully throughout the research stages and process. My primary role as the researcher in this study was to develop, collect, and analyze the quantitative and qualitative data. This included, surveys, photovoice diaries, and semi-structured interviews. I systematically observed, collected, and reviewed the data to guide the development for my research (Creswell, 2015).

### **Intervention**

The intervention for this action research study was grounded in the seminal work by Lucas and Villegas (2002a, 2002b) to develop a Culturally Responsive and Linguistic Teaching framework (Ramirez, 2017). This CRLT Framework emerged from what I learned from previous cycles of research and the literature. Further, the CRLT framework was congruent with the theoretical perspectives outlined in the previous chapter. The CRLT framework focused on two areas: (a) a CRP curriculum and (b) a service-learning experience.

**The CRP curriculum.** To redesign the course, I reviewed the course competencies to highlight emerging themes. From these themes, I created thematic units. Next, I read each of the CRLT definitions as described in Table 6 and aligned them to the thematic units. This intentional mapping of the course provided a purposeful sequence scaffolding CRP as the preservice teachers progressed through the course. In addition, it was important to note that the framework did not have a hierarchical order. As seen in the

Table 7, on the next page some of the attributes were repeated. This was planned purposefully to deepen the learning process as preservice teachers built their conceptual knowledge about the framework. After completing the alignment, I developed a curriculum map to determine the lessons for each thematic unit. When the course concluded, I reviewed and reflected on how the lessons were taught and received by the students as noted in my journal. Then, I reviewed the map and analyzed the process to make additional curricular adjustments to enhance my study for fall 2018.

Table 6

*Definitions of the Attributes for a CRLT Framework*

Orientation (OR) definitions	
1. Sociolinguistic consciousness	An understanding that language, culture, and identity are deeply interconnected; and an awareness of the sociopolitical dimensions of language use and language education.
2. Value for linguistic diversity	Belief that linguistic diversity is worthy of cultivating, and accompanying actions reflecting that belief.
3. Inclination to advocate for CLD students	Understanding of the need to take action to improve ELLs access to social and political capital and educational opportunities, and willingness to do so.
Pedagogical knowledge and skills (PKS) definitions	
1. Learning about the linguistic and academic backgrounds of CLD students	Understanding of the importance of knowing about the backgrounds and experiences of ELLs, and knowledge of strategies for learning about them.
2. Identifying Language Demands and Classroom Tasks	Skills for determining the linguistic features of academic subjects and activities likely to pose challenges for ELLs, including identifying key vocabulary, understanding syntactic and semantic features of academic language, and the linguistic expectations for successful completion of tasks.
3. Key Principles of SLA	Knowledge of key psycholinguistic, sociolinguistic, and sociocultural processes involved in learning a second language, and of ways to use that knowledge to inform instruction.
4. Scaffolding Instruction	Ability to apply temporary supports to provide ELLs with access to learning English and content taught in English, including using extralinguistic supports such as visuals and hands-on activities; supplementing written and oral text with study guides, translation, redundancy in instruction; and providing clear and explicit instructions.

*Note.* Adapted from Lucas & Villegas, 2011; Lucas, Villegas, & Fredson-Gonzalez, 2008; Lucas & Villegas, 2013.



Because many of the preservice teachers entered the course with limited knowledge about CLD students and teaching in general, I also required PSTs to complete seven CRP online modules that were aligned to the curricular framework. The Sanford Inspire Program in the Center for the Art and Science of Teaching at Arizona State University (2017) developed CRP modules in their On-Demand series. They were open-source, research-based, and asynchronous online professional development modules. Each module was selected to reinforce the knowledge, skills, and dispositions needed to teach CLD students. Table 7 demonstrates the alignment of the Sanford Inspire CRP On-Demand Modules with the course curriculum and the CRLT framework.

Table 7

*Course Curriculum & CRLT Framework Alignment Reinforced with CRP Modules*

Unit & Course Curriculum	CRLT Framework	Sanford Inspire Modules
1. Developing a Community of Learners by Creating a Safe and Respectful Learning Environment	OR1. Sociocultural Consciousness OR2. Valuing Lang. Diversity	Using Warm Demand to Build Student Achievement
2. Valuing Bilingualism through History and Program Development	OR1. Sociocultural Consciousness OR3. Advocating for CLD Students	Valuing Bilingualism
3. Planning Instruction for CLD Students through Content and Language Objectives	PKS2. Language Tasks OR2. Valuing Lang. Diversity	Linking Identity & Achievement through Cultural Competence
4. Building Connections through Background Experience, Prior Knowledge and Academic Vocabulary	PKS1. Learning about CLD Students PKS2. Language Tasks PKS4. Scaffolding Instruction	Affirming Difference & Valuing Background Knowledge
5. Making Content Meaningful by Designing Instruction based on SLA Theory and Strategies	PKS3. Second Language Acquisition Theories	Structuring Academic Conversations Using Contrastive Analysis & Using Morphology to Support CLD Students
6. Enhancing Academic Discourse through Interaction and Delivery	PKS4. Scaffolding Instruction	Supporting Language Through Social Interactions
7. Assessing CLD Students & Becoming a CRP Teacher	PKS1. Learning about CLD Students OR3. Advocating for CLD Students	Teachers as Agents of Change

*Note.* OR = Orientations; PKS = Pedagogical Knowledge and Skills; the numbers indicate the attribute as defined in Table 6.

**The service-learning experience.** After designing the CRP curriculum, I developed the second component of my study. This focused on an intentional placement for the pre-service teachers' service-learning experience. Previously, preservice teachers self-selected their service-learning placement at MCC. However, their choice was not always aligned to and consistent with the purpose of the course. As a result, I developed a partnership with a Title I school within a local K-12 school district.

I selected the school based on five criteria: (a) a high ELLs population, (b) a high CLD population, (c) a CRP instructional approach, (d) a Title I classification and, (e) within a close in proximity to the college. Location was included as criteria because many of my pre-service teachers work part-time while attending school and lack their own transportation. Therefore, close proximity to the college was a determining factor when selecting the site placement.

Creating a team-based approach to service learning was intentionally designed to foster a community of practice among teams of preservice teachers. To create the teams, I grouped them by their language background and CLD experience. Each team consisted of a preservice teacher who was a native English speaker, a bilingual speaker, and at minimum one member who had prior experience working with CLD students in a K-12 classroom. Scaffolding the groups in this manner brought the preservice teachers lived experiences to light as the team grappled with theory and determined how it applied to practice.

To remain honest and transparent, it should be noted that I have previously designed the course and taught the curriculum. However, this intervention differed from previous iterations of the course in two ways. First, although I taught the course from a

culturally responsive approach, I placed an emphasis on the technical skills of delivering curriculum such as planning, classroom management, instructional methods, and assessment strategies. Although, I taught second language acquisition, I had not considered how students’ sociocultural perspectives shaped their instructional practices. I naively trusted that we all cared and wanted to support CLD students. Second, although service learning had always been required, PSTs were not intentionally placed in schools with CLD students or grouped in teams. The CRP curriculum and team-based service learning provided the PSTs with a more comprehensive, rigorous, and cohesive curriculum than had been previously experienced by students in the course.

**Curriculum scope and sequence.** The CRP curriculum scope and sequence spanned the entire 16-week semester as outlined in Table 8.

Table 8

*CRP Curriculum Scope and Sequence*

Period per Unit	Curricular Highlights
Weeks 1-2 Unit 1: Learning about CLD students	<ul style="list-style-type: none"> <li>• Define who ELLs and CLD students are by accessing prior knowledge</li> <li>• Complete autobiographical “I am a teacher from” poems to access background experiences about themselves and beliefs on teaching</li> <li>• Apple lesson - to focus on student’s assets by on the Cultural Wealth Model</li> <li>• Fish is Fish lesson - to discuss the dispositions teachers need that values all learners</li> </ul>
Weeks 3-4 Unit 2: Valuing Bilingualism	<ul style="list-style-type: none"> <li>• Shock and Show Language Simulation lesson - to teach the value of language</li> <li>• ELL court cases and legal history lesson - to define and discuss how legislation impacts teaching and programs</li> <li>• Program lesson - to compare, contrast and rate ELD programs using the Prism Model</li> <li>• ELL Profile lesson - to place students based on their needs</li> <li>• Service-learning examples: share experiences and connections to theory</li> </ul>
Weeks 5 - 6 Unit 3: Planning for CLD students	<ul style="list-style-type: none"> <li>• Introduce language proficiency stages</li> <li>• Explain the purpose of state standards and objectives</li> <li>• Define how to write measurable content and language objectives</li> <li>• Service-learning examples: share experiences and connections to theory</li> </ul>
Week 6 -7 Unit 4: Background Experiences & Prior Knowledge	<ul style="list-style-type: none"> <li>• Chicken lesson - to explain how our background experiences influence learning</li> <li>• Tiered vocabulary lesson - to define how to identify and teach academic key terms</li> <li>• Discuss strategies to build background experiences, prior knowledge and vocabulary</li> <li>• Service-learning examples: share experiences and connections to theory</li> </ul>

(continued)

**Table 8 CRP Curriculum Scope and Sequence (continued)**

Week 7 - 9 Unit 5: Making Content Meaningful through Second Lang. Acquisition Theory	<ul style="list-style-type: none"> <li>• Theorist Venn Diagram - compare and contrast second language theorists</li> <li>• Titanic lesson - modeling SLA and how to make content meaningful and relevant</li> <li>• Discuss strategies to build academic language and discourse</li> <li>• Service-learning examples: share experiences and connections to theory</li> </ul>
Week 10-11 Unit 6: Scaffolding Instruction	<ul style="list-style-type: none"> <li>• Gum Drop lesson - scaffold learning through grouping,</li> <li>• Discuss strategies to scaffold instruction to make content meaningful</li> <li>• Service-learning examples: share experiences and connections to theory</li> </ul>
Week 11-12 Unit 7: Assessing CLD students	<ul style="list-style-type: none"> <li>• CATs lesson - compare and contrast formative and summative assessment</li> <li>• Discuss strategies to assess CLD students' language development and academic knowledge</li> <li>• Service-learning examples: share experiences and connections to theory</li> </ul>
Week 12-16 Unit 7: Micro-Teach with CLD students	<ul style="list-style-type: none"> <li>• Plan a micro-lesson for the in-service teacher</li> <li>• Teach the lesson to the class with your team</li> <li>• Lesson plan delivery: share experiences and connections to theory</li> </ul>

### **Instruments and Data Collection**

The research design I applied to my study was the concurrent mixed-method approach (Creswell, 2015; Ivankova, 2015). According to Creswell & Plano Clark (2015) and Greene (2007), the mixed method approach is one of the most powerful because it combines both quantitative and qualitative approaches increasing validity in the research process. For instance, the qualitative data gathered at the end of each unit established a baseline for the PSTs' understanding about CRP. These data were used to guide my lessons to continually build upon the PSTs' understandings of theory in the course to practice in their service-learning classroom.

This information was used to plan and guide my instruction more effectively building their conceptual knowledge about CRP. To provide a richer, deeper understanding of the PSTs' experiences with CRP, I collected data from a variety of qualitative data sources such as photovoice diaries and semi-structured interviews (Creswell, 2015, Greene, 2007; Mertler, 2014). Followed by the retrospective, pre- and

post-intervention surveys to determine the PSTs’ growth and to inform the results from the qualitative findings.

In the following section, I have presented an overview of the quantitative and qualitative data collections tools used to answer the research questions. In the first section, I defined the types of tools implemented. Then, in the following section, I described how data were collected and analyzed. In Table 9, I outlined the alignment of the data sources used to inform the research questions.

Table 9

*Alignment of Data Sources to Research Questions*

Research Questions	Survey	Digital Diary: Photos	Digital Diary: Reflections	Interview
RQ1: Influence of the course on PSTs knowledge about CRP	X	X	X	X
RQ2: Influence of service learning on PSTs knowledge to use CRP	X	X	X	X
RQ3: Relevance of CRP to use in PSTs future practice	X			X

**Retrospective pre- and post-intervention survey.** The Knowledge, Self-Efficacy and Use (KSEU) survey was used for the retrospective pre- and post-intervention questionnaires for this research study. This survey was adapted from the Knowledge, Confidence and Use survey originally developed by Barton-Atwood, Morrow, Lane, and Jolivette (2005) and implemented by Teachers of Language Learners Learning Community (TL3C) grant at MCC.

A retrospective pre- and post-intervention survey was selected over a more traditional pre- and post-intervention assessment because ratings in this survey present a high likelihood for response-shift bias (Drennan & Abbey, 2008; Lam & Bengo, 2003).

Traditional pre- and post-surveys measure the participant's knowledge as it changes in comparison from the pre- to the post-intervention scores. However, this evaluation method may be influenced by response-shift bias (Drennan & Abbey, 2008; Lam & Bengo, 2003). Response shift-bias occurred when participants' criteria for assessing the construct being measured changed between the pre- and post-survey (Drennan & Abbey, 2008; Lam & Bengo, 2003).

For example, preservice teachers do not enter educational programs as “blank slates.” They hold their own biases about teaching due to their background experiences as a student in the K-12 system. These have had the potential to influence how they would respond when taking a pre-survey about general constructs such as classroom environment, grouping, feedback, etc. As a result, they often rate themselves higher before the intervention and lower at the end because they overestimate their knowledge and ability about the item initially. Then, at the post-intervention assessment, they employed new, more stringent criteria, which they learned during the intervention; hence, their post-intervention scores tended to decrease. Such outcomes have suggested the intervention was ineffective; when, in fact, participants used new, more stringent criteria—the response shift bias. This results in inaccurate pretest ratings that influence how the results of the intervention (Drennan & Abbey, 2008; Lam & Bengo, 2003). To control for response shift bias, retrospective pre-intervention and post-intervention surveys were selected for this study to maximize validity of the survey results.

The KSEU survey measured three constructs: (a) knowledge about CRP, (b) confidence to use CRP and (c) anticipated use of CRP in future practice. The questionnaire included ten demographic questions and 60 survey items. Each of the items

were aligned to the CRLT framework, the course curriculum and the Sanford Inspire On-Demand Modules. Three parallel items were identified for each of the units. Each of the constructs contained 20 questions designed to focus participants' attention on one item at a time.

To demonstrate the survey items, I provided a sampling for each construct. For example, one item used to assess *knowledge* about CRP was, "I have the knowledge to use a warm-demand approach to create a respectful learning environment." An item used to assess self-efficacy for use of strategies was, "I can identify effective strategies to access background experiences to make content culturally relevant and meaningful." Finally, a third item to assess their *use* of CRP to future practice, was "In my future classroom, I will use language functions and stems to develop academic discourse." Participants responded using a 6-point Likert-scale ranging from 6 = "*Strongly Agree*" to 1 = "*Strongly Disagree*." See Appendix B for the complete set of survey items.

The quantitative retrospective pre- and post-intervention surveys were administered online in class to the participants. The post-intervention survey was administered to the PSTs after they had completed receiving the intervention in November. The PSTs completed it in class using laptops. One week after completing the post-intervention survey, PSTs were given time in class, once again, to complete the retrospective, pre-intervention survey. This survey consisted of the same items and measures from the post-intervention survey, but PSTs were asked to reflect on their knowledge, skills, and dispositions about CRP as they recalled them on the first day of the semester, and to rate themselves on each item, retrospectively.

**Photovoice.** In recent years, photovoice has received growing attention among action researchers as a research tool. It has been recognized as a genuine source of data and information (Flint, 2014). In using Photovoice, there were three goals: (a) to enable participants to record and reflect their community's strengths and concerns, (b) to promote critical dialogue and knowledge about important issues through large and small group discussion of photographs, and (c) to reach policymakers (Flick, 2014, Wang & Burris, 1997). As suggested by its definition, photovoice allowed researchers to capture the participant's worldview through their eyes.

For this study, participants created a digital diary to demonstrate their understanding of CRP in theory and practice. An app, Class Dojo, was used to create the digital diary. Class Dojo was selected for several reasons. First, the app was easily accessed across devices and platforms. In addition, the app contained a password protected student portfolio that was not accessible to anyone outside of the class. Finally, the app did not require a sign in. This meant PSTs easily added content such as posts or even pictures of the class layout, documents, norms, etc. within seconds without any hassles. In addition, they even audio recorded themselves allowing accessibility to a variety of learners.

Because Class Dojo offered a dual capability, each entry included: (a) photos and (b) guided reflections posted in Class Dojo. Participants posted a total of eight entries to the diary. These posts included (a) a pre-knowledge entry defining themselves as a future teacher, (b) six entries based on the CRLT framework and, (c) a post-knowledge entry re-defining themselves as preservice teachers of CLD students. As previously discussed in Chapter 2, guided reflexivity activities enhanced the understanding of theory in practice.



Therefore, the digital diary was also used to collect PSTs' reflections about their coursework and service-learning experiences as they progressed through the semester. Samples of digital diary entries can be viewed in Appendix C.

***Digital diary: Photos.*** As mentioned, Photovoice allowed participants to capture their experiences through visual representations. PSTs documented their experiences in the classroom by collecting photos. Photos included the physical layout, norms, bulletin boards, graphic organizers, etc. However, they were not permitted to take pictures of any K-12 students or their work due to FERPA regulations. The photos were used to stimulate conversations with their peers, especially their service-learning teammates. In addition, the preservice teachers added captions to their photos describing their journeys of becoming CRP teachers.

***Digital diary: Reflective prompts.*** Towards the end of each unit, PSTs were given reflective prompts to connect their experiences from theory to practice. They posted their responses in their digital diary in Class Dojo. I purposefully selected the Class Dojo app because their reflections contained personal information that they did not want shared publicly. This app remained private so they could feel safe in sharing their experiences.

Using open-ended prompts allowed for the participants to freely voice their experiences unconstrained by the influence of predetermined response options (Plano Clark & Creswell, 2015). Drawing upon second language acquisition theory, each entry included various sentence starters to model theory in practice (De Jong & Harper, 2005; Echavarría, et al., 2008, 2010a, 2010b; Villegas & Lucas 2002a). With these reflective entries, I gathered data capturing how their knowledge, skills, and dispositions changed throughout the course. This information was used to expand and clarify concepts as PSTs

defined how their coursework and service-learning experiences influenced their knowledge about teaching CLD students.

**Semi-structured interviews.** One-to-one, semi-structured interviews provided the researcher with opportunities to learn more about participants' perceptions and experiences of a phenomenon (Plano Clark & Creswell, 2015). The one-to-one interviews allowed participants to share more personal and detailed responses through open-ended questions. Follow-up probe questions helped me encourage the participants to clarify their thoughts and elaborate upon their ideas (Plano Clark & Creswell, 2015). Appendix D contains the semi-structured interview questions.

To select the interview participants, I used purposeful sampling based on the PSTs' linguistic and cultural assets as well as their experiences working with CLD students. In all, I interviewed eight PSTs. Three were native English speakers and three were bilingual Spanish speakers. For the remaining two, I selected them based on their prior experience working with CLD students. In addition, I also considered their cultural background and ethnicity; one identified as Latina whereas the other as Caucasian. Because I conducted the study to focus on novice PSTs, I selected participants with limited experiences with CLD students.

By using a semi-structured interview format, I intentionally gathered data from the predetermined questions with the flexibility to clarify or expand as the interview progressed. The interview questions were written to determine the influence of the intervention. The questions were designed to elicit a discussion about the pre-service views about the knowledge, skills, and dispositions gained as a result of their coursework and service-learning experiences. The interviews were recorded using an app called Rev

on my iPhone. Interviews lasted approximately 30 to 60 minutes (Plano Clark & Creswell, 2015) and held within my office to avoid any disruptions (Brinkmann & Kvale, 2015).

**Research journal.** Herr and Anderson (2015) pointed out that “intense self-reflection ... is the hallmark of good practitioner research” (p. 58). As a practitioner-researcher, I found reflection to be a key component of the research process that was done purposefully and systematically at all stages. Therefore, I recorded my thoughts, feelings, and impressions documenting my experiences and research decisions (Herr & Anderson, 2015). The journal served as a way for me to write my own narrative by recording my actions and reactions to those events. As a result, I created a research journal that explained my decision process by learning from the experiences of others. I used this as a self-reflection process to inform and guide my steps throughout the research process as well as drive future decisions about the course.

### **Analysis of Quantitative and Qualitative Data**

In this action research study, I used a mixed method approach for data collection and analysis. The analysis of quantitative and qualitative data provided insights to better understand the influence of the intervention based on the CRLT Framework on the preservice teachers involved in the study. The following includes the process of analysis of the quantitative and qualitative data along with the timeline used to guide the study.

**Quantitative Data.** Participants were asked to create a reproducible identification code using the first three letters of their mother’s first name and the last four digits of their phone number. This reproducible identification code was used to match survey respondents from the retrospective, pre-intervention survey to the post-intervention

survey to analyze their responses. Numerical data gathered from surveys were analyzed using reliability analyses, inferential statistical procedures such as repeated measures ANOVA, and descriptive statistical procedures.

**Qualitative Data.** The data collected from the semi-structured interviews and photovoice, digital diary entries were entered into HyperResearch (HyperResearch 3.7.5, 2017). I analyzed the data using the constant comparative method (Strauss & Corbin, 1998), including a first cycle, in vivo coding (Saldaña, 2013) and concepts were coded to create initial codes that captured the participant's voice through their words, phrases and comments. A second cycle, focused coding, was applied to group the codes based on frequency and significance. As categories emerged, the framework method was applied to determine the alignment to the theoretical lens guiding this study (Gale, Heath, Cameron, Rashid & Redwood, 2013). As a result, assertions were created based on the emergent themes.

**Study Timeline.** The intervention for the study occurred in fall, 2018. Therefore, I included the timeline to explain the sequence of events needed to complete the study. As a practitioner-researcher, I developed the protocols for the sequence of the study to include the timeframe, the actions needed to be taken with the procedures and data collection. This included the quantitative and qualitative instruments used to observe, collect and analyze data.

The study timeline outlined in Table 10 includes the timeframe, actions, procedures and data collection for the fall 2018 study as seen on the next page.

Table 10

*Fall Timeline, Procedures, and Data Collection*

Time Frame	Actions	Procedures and Data Collection
July Prior to Fall the Semester	<ul style="list-style-type: none"> <li>Meet with the Center for Teaching and Learning (CTL) to book a date and time for the photo event.</li> <li>Design the pre-intervention survey.</li> </ul>	<ul style="list-style-type: none"> <li>Secure location in R-25 Live.</li> <li>Record progress and self-reflections in my researcher's journal.</li> <li>Set up pre-intervention survey in Canvas.</li> </ul>
August Week 1 Unit 1: Learning about CLD students	<ul style="list-style-type: none"> <li>Introduce and recruit pre-service teachers to participate in the study. Explain the purpose of the pre-intervention survey.</li> <li>Explain the Digital Diary and how to use Class Dojo. Explain service-learning paperwork and placement.</li> </ul>	<ul style="list-style-type: none"> <li>Have volunteer PSTs complete the IRB consent form, photo release, pre-intervention survey and service-learning paperwork.</li> <li>Digital Diary 1: Post an "I am a teacher from...poem" and selfie.</li> <li>Researcher's Journal: Observe and record.</li> </ul>
August Week 2 Unit 1 cont.	<ul style="list-style-type: none"> <li>Identify pre-service teachers service-learning teams by grouping PSTs based L2 experience, working with CLD students &amp; grade level interest.</li> </ul>	<ul style="list-style-type: none"> <li>Calendar: Build schedules &amp; send them to the classroom teachers. Have PSTs send an introductory letter.</li> <li>Researcher's Journal: Observe and record.</li> </ul>
September Week 3-4 Unit 2: Valuing Bilingualism	<ul style="list-style-type: none"> <li>Teach lessons for Unit 2.</li> <li>Post prompt for digital diary 2.</li> <li>Have PSTs take notes and post their service-learning observations in their digital diary.</li> </ul>	<ul style="list-style-type: none"> <li>Digital Diary 2: Add photos (bulletin boards, norms, etc.) for valuing culture &amp; language. Write a post about class demographics.</li> <li>Researcher's Journal: Observe and record.</li> </ul>
September Week 4-5 Unit 3: Planning for CLD students	<ul style="list-style-type: none"> <li>Speed Dating: share experiences about CRP and service learning based on valuing bilingualism.</li> <li>Teach lessons for Unit 3.</li> <li>Post prompt for digital diary 3.</li> <li>Have PSTs take notes and post their service-learning observations in their digital diary.</li> </ul>	<ul style="list-style-type: none"> <li>Digital Diary 3: Add photos about the school &amp; community. Write a post about valuing CLD students.</li> <li>Researcher's Journal: Observe, record and analyze the qualitative data.</li> </ul>
Sept. - October Week 6-7 Unit 4: Building Connections	<ul style="list-style-type: none"> <li>Teach lessons for Unit 4.</li> <li>Post prompt for digital diary 4.</li> <li>Have PSTs take notes and post their service-learning observations in their digital diary.</li> </ul>	<ul style="list-style-type: none"> <li>Digital Diary 4: Add photos about connecting to culture or vocabulary builders. Write a post about how to build connections using language and culture.</li> <li>Researcher's Journal: Observe and record.</li> </ul>
October Week 7-9 Unit 5: SLA	<ul style="list-style-type: none"> <li>Teach lessons for Unit 5.</li> <li>Post prompt for digital diary 5.</li> <li>Have PSTs take notes and post their service-learning observations in their digital diary.</li> </ul>	<ul style="list-style-type: none"> <li>Digital Diary 5: Add photos about making content meaningful (anchor charts, graphic organizers, etc.). Write a post about how to develop opportunities to practice and apply language and content.</li> <li>Researcher's Journal: Observe and record.</li> </ul>

(continued)

Table 10 Fall Timeline, Procedures, and Data Collection (continued)

<p>October Week 7-9 Unit 5: SLA</p>	<ul style="list-style-type: none"> <li>• Teach lessons for Unit 5.</li> <li>• Post prompt for digital diary 5.</li> <li>• Have PSTs take notes and post their service-learning observations in their digital diary.</li> </ul>	<ul style="list-style-type: none"> <li>• Digital Diary 5: Add photos about making content meaningful (anchor charts, graphic organizers, etc.). Write a post about how to develop opportunities to practice and apply language and content.</li> <li>• Researcher’s Journal: Observe and record.</li> </ul>
<p>October Week 10 Unit 6: Scaffolding Instruction</p>	<ul style="list-style-type: none"> <li>• Speed-Discussion about knowledge, skills and dispositions needed based on Units 3-5.</li> <li>• Teach lessons for Unit 6.</li> <li>• Post prompt for digital diary 6.</li> <li>• Have PSTs take notes and post their service-learning observations in their digital diary.</li> </ul>	<ul style="list-style-type: none"> <li>• Digital Diary 6: Add photos about interactive strategies (buddies, groups, etc.) Write a post about scaffolding support for CLD students.</li> <li>• Researcher’s Journal: Observe, record and analyze the qualitative data.</li> </ul>
<p>November Week 11-12 Unit 7:</p>	<ul style="list-style-type: none"> <li>• Teach lessons for Unit 7.</li> <li>• Post prompt for digital diary 7.</li> <li>• Have PSTs take notes and post their service-learning observations in their digital diary.</li> <li>• Send an email to remind in-service teachers for lesson plan ideas.</li> <li>• Submit the post-intervention survey.</li> </ul>	<ul style="list-style-type: none"> <li>• Digital Diary 7: Add photos about assessing CLD students (CATs, parent communications tools, etc.). Write a post about how to assess CLD students using CATs.</li> <li>• Researcher’s Journal: Observe and record.</li> </ul>
<p>November Week 12-15</p>	<ul style="list-style-type: none"> <li>• Speed-Discussion about knowledge, skills and dispositions needed based on Units 6-7.</li> <li>• Brainstorm, plan and deliver lessons with service-learning teams in K-12 classroom. Post prompt for digital diary 8.</li> <li>• Submit the pre-intervention survey.</li> </ul>	<ul style="list-style-type: none"> <li>• Digital Diary 8: Add photos about micro-teach lesson and write reflections about the experience.</li> <li>• Researcher’s Journal: Observe, record and analyze the qualitative data.</li> </ul>
<p>December Week 16-17</p>	<ul style="list-style-type: none"> <li>• Present take-a-ways from teaching a lesson to CLD students with service-learning teams.</li> <li>• Explain where they began as a PST to where they ended as a CRP teacher.</li> <li>• Interview the pre-service teachers.</li> </ul>	<ul style="list-style-type: none"> <li>• Have students compare their initial thoughts about CLD students and post in their digital diary.</li> <li>• Record the interview using an app called Rev.</li> <li>• Transcribe audio recordings.</li> <li>• Code and analyze the data to create themes.</li> <li>• Researcher’s Journal: Observe and record.</li> </ul>
<p>December &amp; January</p>	<ul style="list-style-type: none"> <li>• Analyze the data.</li> </ul>	<ul style="list-style-type: none"> <li>• Conduct a qualitative data analysis.</li> <li>• Researcher’s Journal: Record final thoughts about the process and self-reflections.</li> </ul>

## **Validity, Trustworthiness, and Transferability**

Creswell and Miller (2000) defined validity as “how accurately the study represents the participants’ realities of the social phenomena and is credible to them” (p. 124). Therefore, I needed to employ strategies to establish credibility. Creswell (2015) recommended using at least two validation strategies to ensure the credibility of the study’s findings. In terms of internal validity, I used researcher reflexivity and member checking. For external validity, I presented and discussed the notion of transferability.

**Researcher Reflexivity.** As a practitioner-researcher with an insider perspective, it was important for me to self-disclose my assumptions, beliefs, and biases that may have influenced my study, that is to say ‘bracketing’ my study (Herr & Anderson, 2015). Through the process of bracketing, I reflected on my own views and experiences related to my study by describing these perspectives in my research journal and setting them aside. By setting them aside, I may not have totally eliminated bias (Creswell, 2015) but, I remained more cognizant of my perspectives as the study proceeded (Herr & Anderson, 2015). This process helped me to ensure that my perspectives did not interfere with the views of participants’ which in turn, enhanced the credibility of the study’s findings (Herr & Anderson, 2015).

**Member Checking.** Member checking has been used as a process to validate interpretations of participants’ responses. This process entails asking the participant if the interpreted account accurately reflects the narrative account, which was originally provided by the participant and whether the interpretation was consistent with their thoughts and their intent. This includes asking about realistic descriptions, appropriate themes, fair interpretations, and representative perspectives. For example, after the

interviews, I asked participants to read the findings to determine whether the narrative realistically represented their views and perspectives. Allowing the participants to incorporate their comments into the final narrative built the credibility of the study.

**Transferability.** With respect to external validity, I did not nor do I now propose that the findings from this study were generalizable to other teacher preparation programs in a community college setting. However, Mishler (1986) suggested,

... the structure of the story is built into the human mind much like deep structures of grammar, and it is largely through narratives that humans make sense of and express their understanding of events and experiences. (p. 76, as cited in Herr & Anderson, 2015)

Thus, the reader must determine whether the situational context described here and their own context were sufficiently similar to allow for transferability, i.e., application to their own context. The reader understands her own situational context intimately and although no two are exactly alike, she can evaluate whether and how to apply the methods and results of this study. Lincoln and Guba (1985) described this notion as the transferability of findings from one context to another in which the receiver determines the influence.



## CHAPTER 4

### DATA ANALYSIS AND RESULTS

The purpose of this action research study was to explore the effect of a CRLT framework that combined two approaches for training preservice teachers: (a) a CRP designed curriculum and (b) a team-based service-learning experience with CLD students. In this chapter, I have presented the results from the quantitative and qualitative data analysis. In the first section, the quantitative data results from the post-intervention and retrospective pre-intervention KSEU survey were presented. The qualitative data findings, which included interviews and photovoice through a digital diary with reflections and photos, have been provided in the second section.

The analysis of the data from the quantitative and qualitative results have provided insight about the research questions guiding this study: (a) How and to what extent does a CRP curriculum influence preservice teachers' knowledge about teaching CLD students? (b) How and to what extent does a team-based service-learning experience influence pre-service teachers' knowledge about teaching CLD students? (c) How and to what extent do preservice teachers feel prepared to teach CLD students in the future?

#### **Quantitative Data Results**

Cronbach's alpha reliabilities were computed using SPSS prior to conducting analysis of the quantitative data. The retrospective, pre-intervention assessment reliabilities were .95, .95, and .98, respectively for the knowledge, self-efficacy, and use variables on the survey. The reliabilities for all the dependent measures were all well above .70, which has been the criterion for an acceptable level of reliability. Thus, these

data were highly reliable and indicated students were responding consistently on the measures.

A repeated measure analysis of variance (ANOVA) was used to analyze whether there were differences between the retrospective, pre- and post-intervention scores for the three dependent variables. The overall repeated measures ANOVA was significant, multivariate- $F(3, 15) = 67.46, p < .001$ , with  $\eta^2 = .931$ , which is a very large within-subject's effect size based on Cohen's criteria (Olejnik & Algina, 2000). Follow-up, individual repeated measures ANOVAs were conducted for the three dependent variables. The repeated measures ANOVA for knowledge was significant,  $F(1, 17) = 189.51, p < .001$ , with  $\eta^2 = .918$ , which is a very large within-subject's effect size. Thus, there were substantial differences in the retrospective, pre- and post-intervention means for the knowledge variable. This fact was evident in Table 11 in which means and standard deviations for three dependent measures have been presented. See Table 11 on the next page. Similarly, the repeated measures analysis for self-efficacy was significant,  $F(1, 17) = 192.78, p < .001$  with  $\eta^2 = .919$ , which is a very large within-subject's effect size based on Cohen's criteria (Olejnik & Algina, 2000). Finally, the repeated measures analysis for use was significant,  $F(1, 17) = 51.44, p < .001$ , with  $\eta^2 = .752$ , which is a very large within-subject's effect size. Taken together, there were substantial changes in the dependent variables with scores changing from about 2 or 3 on the six-point scale to well over 5 as seen in Table 11 on the next page.

Table 11

*Means and Standard Deviations\* for Pre- and Post-Intervention Scores for the Three Dependent Variables from the Survey (n = 18)*

Variable	Pre-Intervention Scores	Post-Intervention Scores
Knowledge	1.94 (0.86)*	5.42 (0.44)
Self-Efficacy	2.12 (0.88)	5.43 (0.47)
Use	3.19 (0.49)	5.72 (0.41)

*Note.* Standard deviations have been presented in parentheses.

### **Qualitative Data Results**

The qualitative findings from the digital diary entries contributed to answering parts of the first and second research questions whereas, the structured interviews responses aided in answering parts of all three. All of the preservice teachers (n =18) participated in the digital diary by posting their entries in a secured student portfolio using a unique identifier code to protect their identity and keep their information confidential. Participant details are outlined in Chapter Three (Table 4). The journal entries were downloaded from Class Dojo and uploaded into HyperRESEARCH (HyperResearch 3.5.2, 2014).

The semi-structured interviews were conducted with eight purposefully selected participants based on their experiences working with CLD students as well as their cultural and linguistic backgrounds. For participant details refer to Chapter Three (Table 5). The interviews were audio-recorded, transcribed and imported into HyperRESEARCH (HyperResearch 3.7.5, 2017). To interpret the qualitative data, data were analyzed using the constant comparative method (Strauss & Corbin, 1998) to draw comparisons from the data about the preservice teacher experiences.

During the first cycle of coding, *in vivo coding* and concepts were coded to create initial codes that captured the participant's voice through their words, phrases, and comments (Saldana, 2013). Following initial coding, codes were grouped by importance and frequency using *focused coding*. As categories emerged, the *framework method* was used to aid in organizing the data to ensure higher level codes were conceptually aligned to the theoretical framework guiding the intervention: orientations, pedagogical knowledge and skills, and team-based service learning. This provided for a richer, deeper perspective with respect to the data, which eventually led to themes and the creation of assertions as supported by quotes from the original data.

The *framework method*, increasingly more popular, allowed the researcher to use the theoretical framework guiding the study as a lens to deductively explore the data while leaving space to inductively discover the unexpected (Gale et al., 2013). This method is most commonly used to collect data from instruments such as semi-structured interviews and diaries (Gale et al., 2013; Smith & Firth, 2011). Analyzing the qualitative data according to the *framework method* contributed to the formulation of overall themes, and assertions as supported by the quotes from the original data.

As seen on the following page, Table 12 displayed an overview of the themes and theme-related components, and assertions as aligned to the theoretical framework guiding this study.

Table 12

*CRLT Framework, Frequency, Themes, Theme-related Components, and Assertions*

CRLT Framework	F	Theme and Theme-Related Concepts	Assertions
<b>Orientations</b> (Lucas & Villegas, 2011; Lucas, Villegas & Freedson-Gonzalez, 2008)	86	Developing a critical consciousness to teach CLD students 1. Identifying as a culturally responsive teacher 2. Valuing language diversity 3. Developing a CRP mindset	1. As PSTs develop a critical consciousness, they become more aware about how to become a culturally responsive teacher.
<b>Pedagogical Knowledge &amp; Skills</b> (Bondy & Ross, 2008; Ware, 2006)	76	Creating culturally responsive learning environments 1. Building empathy for, and awareness of CLD students 2. Recognizing warm demand	2. PSTs identify how to structure authentically caring learning environments to reach high levels of achievement.
<b>Pedagogical Knowledge &amp; Skills</b> (Echavarría, 2008, 2010a, 2010b; Lucas & Villegas, 2011; Lucas et al., 2008)	83 115	Developing culturally responsive instructional practices 1. Planning instruction for CLD students 2. Teaching academic language resourcefully 3. Scaffolding instruction to make content meaningful	3. PSTs identify how to apply CRP to develop meaningful and relevant lessons for CLD students.
<b>Team-based Service Learning</b> (Bringle & Hatcher, 1996; Villegas & Lucas, 2002a)	96	Growing culturally responsive teachers 1. Shifting sociocultural perspectives 2. Co-constructing CRP from theory to practice 3. Awakenning the culturally responsive teacher	4. PSTs influence one another as they collectively work together toward becoming culturally responsive teachers.

**Developing a Critical Consciousness to Teach CLD Students.** Assertion 1 stated, *As pre-service teachers (PSTs) develop a critical consciousness, they become more aware about how to become a culturally responsive teacher.* Responses from the semi-structured interviews and digital diary entries provided insights about how the

CRLT framework influenced PSTs understanding about teaching CLD students. The following three theme-related components comprised the theme that led to Assertion 1: (a) identifying as a culturally responsive teacher, (b) valuing language diversity, and (c) developing a CRP mindset.

*Identifying as a culturally responsive teacher.* PSTs enter their teacher preparation programs with their own preconceived notions about teaching CLD students based on their prior experiences in K-12 classrooms. These experiences influence their perceptions about teaching CLD students. For example, Roger identified as a White native English-speaking PST who attended predominantly white and high SES K-12 schools. He explained, “I know I am biased. I have my own perspective about things. At first, I would have thought that it would have been a barrier speaking Spanish. Like everyone else is speaking English, why can’t you too?” Even though he initially held these biases about CLD students, he explained how his perspective changed throughout the course. He stated, “Over the course, I realized that the importance of incorporating the primary language. It really helped me see that you can use both languages to help students succeed.”

Tara, was a native English speaker, also attended predominantly affluent White schools throughout her K-12 experience. During the interview, she commented,

I wasn’t Mormon, but all of the other kids were and they were all white. I think we had one little African American kid. My service learning was a game changer. We had a complete mix of Hispanic, white European and Arabic refugee students. I didn’t expect to find these kinds of students in Mesa, Arizona. It was shocking. It was nothing I experienced before.

As she continued, she discussed how her views shifted, “I had to overcome the fact that the CLD students were speaking another language. That’s not something I should be afraid of. Why was I thinking that it’s all about me? It’s not.” She explained that she had to go through this experience and because of it, she began viewing CLD students’ linguistic background as an asset. She stated, “All right, these kids, they speak other languages. They’re insanely smart because they can do everything I can do, but do it twice.”

Likewise, Karen, another White native English-speaking PST stated how she came from the same educational background and described how that influenced her sociocultural beliefs. She explained, “I’ve had to overcome my own cultural challenges. That’s something that I have had to change. I’ve applied the theories from this class, and it’s definitely shown a difference in my heart, as well as in my mind.”

On the contrary, the bilingual preservice teachers shared that their sociocultural perspectives remained the same. For example, César, a bilingual PST, explained “I don’t think I really changed. I felt that I remained the same just because I came from that. I had that background.” Instead of their views shifting, they felt reaffirmed because of their prior schooling experiences. Francisco stated, “Relating my background and my history and my experience, my personal experience as a child, it makes sense. That is me.”

***Valuing linguistic diversity.*** The CRLT framework emphasized that culturally responsive teachers operated on the belief that CLD students bring many assets to the classroom, including their language. Instead of seeing CLD students through a deficit perspective of needing to be “fixed,” culturally responsive teachers viewed them and their language as an asset. For example, César described his friend’s personal experience

demonstrating how Arizona's English-only education operated with this deficit-based perspective that isolated and devalued CLD students. He recounted his friend's experience as,

He came in as a 14-year-old coming to this country for the first time and not knowing a lick of English. And, he felt as is his teacher thought, 'Oh, God. Now, I have to start from scratch. And, it's gonna be a burden.' So, they put him in room for an hour or so. And, once he was back in the real world, he felt his teachers thought, 'I don't want to deal with you because you don't speak English.' He joined a gang. The system failed him. They saw a problem and looked away.

As a result of this experience, César stated, "I won't check their language at the door. I would use it to get children to understand content by using their own language."

Like César, as PSTs became more aware of deficit-based approaches, they questioned English-only practices. For example, Roger stated, "At first I would have thought correcting student's language would make them more apt to change, but now I understand that this can cause frustration when their home spoken word differs from standard English." Bao stated, "Just saying it's wrong, makes them feel inferior to their peers" and as Alma described, "[It} embarrasses them."

Instead of correcting them, María Isabel described how her mentor teacher valued her CLD students by incorporating their language into the classroom. She explained, "During a writing assignment, a student shared, 'I like playing with my Nana y Papa.' Instead of stating that "Nana and Papa" were incorrect, the teacher clarified by paraphrasing, "Oh, your grandma and grandpa." She stated, "Using language gives them



a sense that you do care because you come from that background or you are at least interested in their background.”

However, embracing linguistic diversity does not include practices that adopt CLD students as a class “ambassador” or “translator” for the teacher’s benefit. For example, César recounted his experience as an elementary student.

I was assigned the duty to pretty much be my neighbor’s ‘little tour guide.’ And, after a while, it got old for me. I got tired of touring and translating. And, it became a burden for me. I couldn’t concentrate on my work. And, I gave up on him ... And, I regret that every day.

As a result of hearing this problem, Judy wrote, “Even though I will encourage my students to use their native language, I will not assume that they automatically want to be a translator.” In conclusion, Pam summarized, “Learning a new language is hard. And, we need to make them feel important and valued throughout the process!”

***Developing a CRP mindset.*** As defined in the CRLT framework, culturally responsive teachers held the fundamental belief that all students can succeed. They advocated for their CLD students by firmly believing that teaching was not about changing the students, but the practices that keep them from reaching their full potential. Sylvia explained this when she said, “seeing the classroom through the student’s eyes” which meant “changing your practice to mirror the students’ needs.” In response, Camilla explained, “We teach content, but in a way for all students can learn. If it means we have to change our teaching style, then so be it. We need to do what we can so every student can succeed.”

At the same time, PSTs raised their critical consciousness as they identified their own biases about teaching became apparent. Tara explained her prior schooling experiences reflected more of a deficit mindset. She stated,

[The] majority of my early teachers were ‘technicians,’ that style of teaching was ingrained in my mind. And, there are likely little habits that I have picked up that are counter to CRP, so I need to be aware to break and replace those habits with ways to reach and encourage CLD students.

With this mindset, Ruby stated, “a good teacher is someone who makes the curriculum responsive to their students who helps them develop the knowledge and skills they will need in their everyday lives.” This team’s photo in Figure 5 clearly captured the essence of teaching to meet better students’ needs when they illustrated their commitment to change as shown in the figure, “Change begins with us! Because the influence of a good teacher can never be erased.”



Figure 5. Change Begins with Us!, photovoice digital diary

**Creating Culturally Responsive Learning Environments.** Assertion 2 stated, *PSTs identify how to structure authentically caring learning environments to reach high levels of achievement.* As defined in the CRLT framework, an important factor

influencing CLD students linguistic and academic success was the learning environment. Creating culturally and responsive learning environments was dependent cultivating authentically caring teachers who held high expectations and beliefs that CLD students could succeed. The following two theme-related components contributed to the theme that led to Assertion 2: (a) building empathy for, and awareness of CLD students and (b) incorporating a warm demand approach.

*Building empathy for, and awareness of CLD students.* Within the CRLT framework, culturally responsive teachers build strong relationships with their students. To aid in developing these caring relationships, they develop a sense of empathy for their CLD students by understanding their experiences. Because the majority of the PSTs were native English speakers, a language simulation lesson was taught during the second week of the course. The first part of the lesson simulated an English only approach whereas the second, a culturally responsive one. Tara explained how she felt during the lesson.

After experiencing the Shock n' Show first hand, knowing that it equates to an English Only environment, the importance of culturally responsive class became extremely important. During the exercise, my heart palpitations increased quickly and I could hear my inner voice telling me to "keep it cool". This uncomfortable anxiousness translated to poor performance during the practice test, I knew some of the Spanish words being used, but panicked forgetting everything I knew from Spanish class.

After this experience, Tara was able to relate to how CLD students felt daily and as a result, described how she would incorporate language and culture to support her students. She stated, "To prevent a student from being consumed by anxiety, I would create an

environment where students don't feel completely isolated due to a language barrier; using contrastive analysis and valuing bilingualism to involve the student's language and culture.”

Camilla, another native English speaker PST, realized “telling a student that their home language is wrong or bad makes them feel lower than everyone else” because of how she felt during the lesson when her language (English) was not valued. She explained “I understood how a student might feel not knowing any English. If I never did that Frankenstein group work, I would never have understood how ELL students felt.”

In contrast to the native English speaker PST's experiences, María Isabel, a bilingual preservice teacher, explained how empowered she felt by having her language valued. She wrote,

The activity of Shock 'n Show really got me thinking of valuing bilingualism because you had to know Spanish terms in order to complete this activity. So, for those who are bilingual they felt comfortable, for me knowing Spanish I felt comfortable and when it comes to valuing bilingualism this created a positive identity. Since the instructor accepted Spanish and knew the language it created a more positive environment for those who spoke Spanish as a second language.

Also, those who did not know Spanish it gave the bilingual students a chance to be able to teach and interpret to those who did not understand.

As a result, PSTs adopted more of an asset-based mindset focused on creating classrooms that valued bilingualism. In summary, Judy wrote, “I will encourage my CLD students to use their native language to preserve it and not push it away.”

*Recognizing warm demand.* As PSTs became more critically conscious, they focused on how to use culturally responsive pedagogy to teach CLD students. As a result, a recurrent theme discussed in their digital diary entries was how to use a warm demand approach. María Isabel wrote, “I found warm demand to be interesting because the meaning behind it is to balance care and discipline in order to help students achieve.” To accomplish this, she explained further,

This was a real eye opener. I learned you can’t just expect your students to respect you, you have to earn it. This is done by building relationships (caring) followed through with expectations (demand). This lets them know how you work as a teacher building trust and respect.

To foster a classroom based on warm demand, PSTs referenced a strategy called “high help.” They noted the importance of using “high help” to demonstrate their care and high academic expectations. For example, Duncan reflected,

As a student, I remember many of my teachers holding the ‘high expectations,’ this did not always translate well with students since many did not use ‘high help.’ That is a very important step in the teaching process, ‘high help’ with ‘high expectations’ will develop each student and show stronger achievement.

Similarly, Sylvia, a native Spanish speaker, also emphasized the importance of including high help. However, she expanded upon it by empowering students with strategies to support themselves through the learning process. She claimed,

I’m very caring. I love kids. I will do anything for them, but now I have the understanding of how to give my learners the strategies to do things themselves.

High help shows your students that you are there to help them, not just there to spit information out at them.

Additionally, she stressed how warm demand reflects the learners needs and therefore, was reflective of teachers' sociocultural views in terms of the community that you teach. She explained,

I love how warm demand can look different depending on the teacher because of the group of students and context of their school and community. Every classroom is going to need different things, and every teacher has different ways of providing the things their children need.

However, Roger noticed that in addition to using a warm demand approach, you also needed to scaffold support for your students to meet the classroom norms and expectations. He stated, 'my [in-service] teacher refuses to allow students to slide.' He described how she sets high expectations by scaffolding the support to help them achieve. As a result of observing her expectations, he asserted,

I understand that a warm demand means to have high and clear standards so that the students are pushed to work hard towards it. Then, the high help must exist to ensure that the students have the learning support they need to achieve the learning goals.

To reinforce the warm demand approach, the preservice teachers also noted a variety of visual cues and signals that their in-service teachers used to define their expectations. For example, two teams wrote about how their teachers used a banking system. Duncan explained, "Students were paid 'money' for positive behaviors which could be used to purchase class supplies, free time or even homework passes." In contrast, "if they did not

finish their homework, the students had to pay them and make up their work at lunch with their teacher's support.”

Essentially, as Team 1 noted, “Change the world through equality and love.” María Isabel defined “love” as a “revolutionary love” described as, “when you as a teacher have revolutionary love, you have the power to bring about change in the classroom, school, and even society.” Team 1’s philosophy is illustrated in Figure 6, which is taken from their photovoice diary.



Figure 6. Change the World through Equality and Love, photovoice digital diary

**Developing Culturally Responsive Instructional Practices.** Assertion 3 stated, *PSTs identify how to apply CRP to develop meaningful and relevant lessons for CLD students.* According to the CRLT framework, preservice teachers need to develop knowledge about second language acquisition and ways to incorporate that knowledge into instruction. Reflective of this understanding, the preservice teachers cited examples about how to connect their understanding of the principles of second language acquisition theory as observed in their service-learning classrooms. From the digital diaries as well as the semi-structured interviews, the following themes emerged (a) planning instruction for

CLD students, (b) teaching academic language resourcefully, and (c) scaffolding instruction to make content meaningful.

*Planning instruction for CLD students.* After learning about how ELLs were placed and reclassified based on their language skills, the PSTs began to develop a better understanding of the CLD students in their classrooms. As a result, they discussed how to plan more effective lessons focused on developing CLD students' linguistic and academic knowledge. For example, María Isabel explained the importance of writing lessons that incorporated both language and content objectives. She discussed how these could be used to plan more effectively to guide instruction by focusing on developing language and academic knowledge. She maintained,

I thought it was interesting because even though they all are in the same grade doesn't mean that they will be at the same level. Every child is different and some might need more help than others. Learning objectives are your check sheet for the student's proficiency and understanding. They keep you on track.

Roger also explained how his in-service teacher's CLD students spanned several reading grade levels even though they were in sixth grade. As a result, he realized the importance of including language objectives in addition to content objectives in his lessons. He wrote,

Another strategy would be language objectives. That's something I never considered before. So, for me, I know a lot about the content, specifically history. But working in those language objectives in order to ... alongside the content objective is necessary in order to move the meter as far as developing their vocabulary and comprehension of the subject.



In addition, Francisco explained the purpose of using objectives as,

My service-learning teacher uses learning objects for her lessons and has them written up on the board and reads them out loud for the students. This makes what the students are expected to get out of the lesson clear and easy to understand. I remember just recently learning about the purpose of and writing learning objectives, so I thought it was interesting to notice that in the classroom.

*Teaching academic language resourcefully.* Additionally, the PSTs discussed drawing upon CLD students' background experiences to make content more relevant. Duncan provided an example of how his in-service teacher used a news clip about riding bikes as compared to driving cars to teach debate. He stated, "This [the news clip] inspired lots of discussion in the classroom and it applied to their vocabulary words as used in the students' lives."

María Isabel also discussed how to make content more relevant by providing contextual examples through culture. In her class, the students were completing a writing assignment about Thanksgiving Day dishes. However, she noticed that the CLD students were not writing, so she asked them,

So, what did you have? Did you have rice, beans? She stated, "I knew some people don't eat the "normal" turkey, gravy and stuffing. 'Cause I know my family, we'll make Mexican food and I could relate that with them. So, I asked,

Like, "Did you eat rice? Beans?" And, they were like, "Yeah, we had all of that.

As a result, she said they began writing and concluded, "So, it was like a good--- connection, very good." Pam also affirmed how understanding their background experiences makes the content more relevant when she stated, "When you learn more

about the students' lives outside of the classroom, the content will easily follow." Duncan summarized this thought when he noted, "When we use cultural experiences and perspectives of students, it teaches them more effectively because it places students' social and cultural identities at the center of instruction."

In addition to relevancy, preservice teachers recognized that academic language heavily relied on specialized vocabulary with complex language structures. Therefore, they discussed ways their teachers taught vocabulary to develop the academic discourse needed to participate in the learning tasks. As a result, they identified several strategies to develop vocabulary such as word walls, realia, visual aids, and vocabulary dictionaries.

Pam discussed how word walls could be used to visually represent vocabulary. She explained, "Like Frankenstein. I can just look at it and see which word correlates to the body part. For example, If I forgot what the arm was called, I could just look up and see what it was even though it was in Spanish." An illustration of this word wall is provided in Figure 7. See Figure 7. Connecting this experience to her service learning, Pam wrote, "My teacher had pictures next to words all over the class. The students could easily grasp ideas because of these visual aids."

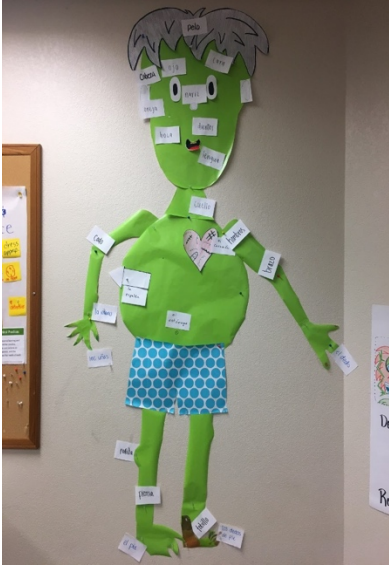


Figure 7. Frankenstein Word Wall, photovoice digital diary

Ruby noted how their in-service teacher used vocabulary dictionaries to build academic vocabulary. She stated, “My teacher made vocabulary dictionaries which defined the words with pictures and examples.” In addition to language dictionaries, Irene commented how her in-service teacher used them for mathematics terms. She explained the process as seen in Figure 8 as, “The students take a sheet of paper and fold it into three columns. The first column is for the vocabulary word, second is for the definition, and third is for a math example.”

word	Definition	Example
• Simplest form	A fraction is in simplest form when the numerator and the denominator have no common factor other than 1	$\frac{2}{12} = \frac{1}{6}$

Figure 8. Math Vocabulary Dictionary, photovoice digital diary

Alma, her teammate, added how they benefited the CLD students understanding of the math concept taught. She wrote, “The great thing about my in-service teacher’s lesson is that she goes over the math terms like fractions in the beginning by taking notes. I was really surprised that going over key terms can improve knowledge before using it.” In addition, they concluded that they could use them as a reference to complete homework.

In addition to using visuals such as pictures, several PSTs also commented on using short video clips to teach vocabulary. One of the service-learning teams explained how their in-service teacher showed a short clip about Hurricane Florence to teach about hurricanes. Ruby wrote, “The CLD students were engaged in the material and were asking questions about hurricanes after the video.” However, Tara posted a word of caution about selecting supplementary materials and the importance of making it relatable to CLD students.

Recently, the students watched two videos about invertebrates and vertebrates; one from the 80’s and the other from last month. The students paid zero attention to the 80’s one and were asking questions about the more recent video. Even though the information was relevant, the speaker and visuals did not appeal to the students.

Their other teammates also commented about the videos used in the lesson. Tara further explained, “You need to show how this can connect in their lives. This can also tie in with making content comprehensible.” As a result, they concluded teachers needed to be more cognizant of their students’ backgrounds when choosing supplementary materials to teach vocabulary.

Duncan provided an example of realia from his in-service teacher's lesson about the benefits to farming and eating common bugs as a food source. He discussed how the teacher used the reading to introduce the key vocabulary terms specifically highlighting, crickets, grasshoppers, and mealworms. He commented how his in-service teacher incorporated realia into the lesson. He recounted,

After defining the bugs in the reading, the teacher bought in dried bugs such as mealworms. And, since the article referenced how they could be used as a food source, he also bought in food made from bugs. My teacher actually brought in dried beetle worms for the kids to try and I myself brought chips that were baked from cricket flour.

Duncan concluded how much more engaged the students became because the teacher made the content relevant to the students' situations. He stated, "The students loved this activity, and whether they like to admit it or not, my teacher going that extra mile to bringing in actual cooked bugs made them enjoy it even more."

**Scaffolding instruction to make content meaningful.** In addition to developing academic vocabulary, the PSTs also discussed how to make content comprehensible and relevant by scaffolding instruction. María Isabel explained that culturally responsive teachers "make their curriculum responsive to students. Meaning if students are not getting the content teachers change the way they are teaching to make sure they [CLD students] understand." To do this, Sylvia explained how teachers need to scaffold their instruction using a variety of strategies when she wrote, "Scaffolding is helpful for the students because they're not going to be able to use just one path, one way of learning and just get everything from it, you need to combine the strategies."

In their digital diary posts, the PSTs captured how their in-service teachers scaffolded their lessons using a variety of strategies such as (a) modeling instruction, (b) grouping strategies, (c) sentence starters, graphic organizers and anchor charts, as well as, (d) checking for understanding, and (e) opportunities to use language. In the examples provided below, I selected lesson scenarios instead of individual topics because the teams wrote about their experiences as they co-constructed the lessons.

***Lesson scenario 1: Writing a personal journal.*** For this lesson, Team 3 described how their teacher taught a lesson about writing a paragraph by scaffolding instruction using modeling, graphic organizers, and grouping techniques. To begin the lesson, the team explained how the teacher made the writing more relevant by connecting it to their background experiences. Pam wrote,

Allowing the students the freedom to come up with their own entries, gave them the opportunity to share pieces of their culture and their home life. Incorporating these ideas into the lesson helps students to expand their vocabulary and continue to build upon what they already know connecting L1 to L2.

As the classroom students shared their experiences, the teacher modeled how to record the responses on their circle map. Karen wrote, “The students used these circle maps often. It helps them stay on task and organized.” She posted the photo of the math concept map to demonstrate how the students could apply a previously learned strategy to a new context. She wrote, “I chose this photo [Figure 9] because although this circle map demonstrates math, it shows how it can be used with any concept.” See Figure 9.

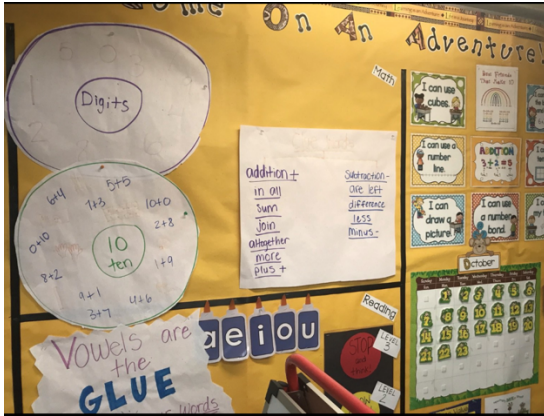


Figure 9. Math Circle Maps, photovoice digital diary

Then, she explained how the teacher used it for writing a narrative as she claimed,

The middle circle is the topic; the outside circle is a list of each item included in the topic. For example, they were creating a paper on their afternoon routines. The inside circle said ‘after school routine’ and the outside circle listed five things they did each day after school. I could tell they had gotten used to this because everyone was diving in and nobody seemed confused.

As they brainstormed and recorded their ideas in their maps, they worked with their partners to add details. Karen explained, “While completing their circle map, students were allowed to engage with each other. Some got stuck. When their partner shared ideas, they got ideas and added it to their map.”

Finally, they transferred this information from their map to a sequence map to write their journal entry. María Isabel explained, “They inserted this information into a sequence chart that included sentence starters. The sentence starters included: first, next, after that, finally and a conclusion.” And, the in-service teacher prompted them to use academic language as María Isabel shared, “So, what kind of words can we use?” What transition words can you start with each sentence?” Karen posted a picture of the poster

that defined the transition words used to sequence their events. She wrote, “I chose this photo of transition words because it displayed their transition words [Figure 10]. This allowed students to use their resources and reference it while using their words.” See Figure 10. Again, the writing was scaffolded with support by working with partners as defined by Karen when she shared, “They were able to transfer their ideas to sentence structures with the help of their partner.”

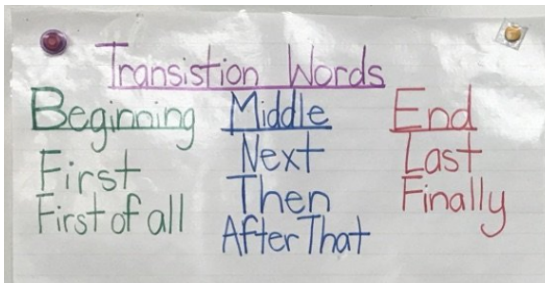


Figure 10. Transition Words Anchor Chart, photovoice digital diary

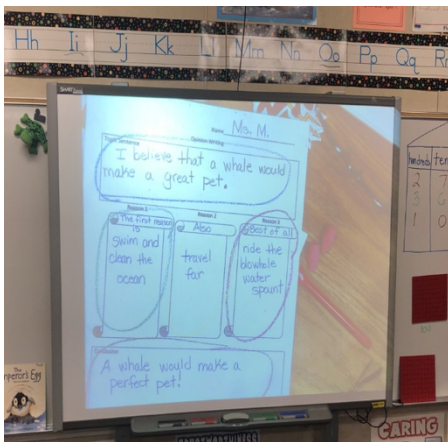
As a result, the team recounted how scaffolding instruction supported learners’ understandings of the lesson. Karen wrote, “It helps to break things down so it doesn’t become overwhelming.” María Isabel concluded, “I really liked this technique of sequencing events and using transition words. It was a good way for students to learn how to use transition words to write their story.” As they all agreed, “This really helped them write sentences and eventually, the paper.”

**Scenario 2: Presenting an informational poster.** Another team wrote about how their teacher taught a lesson about creating an informational presentation. The teacher scaffolded the lesson by (a) modeling explicit instructions, (b) using graphic organizers and anchor charts, as well as, (c) purposeful grouping. To begin the lesson, the students were prompted to select an animal previously taught that would make a good pet. To



define a ‘good pet,’ Sylvia explained that her in-service teacher modeled this thinking process using a flowchart with a whale as the example.

Sylvia wrote, “My teacher modeled how to use the flowchart” and she specifically stated, “the reasons couldn’t be ‘because they are cute,’ or ‘because they are nice,’ etc. Their reasons had to be scientifically correct.” Then, she continued to demonstrate the process as shown in Figure 11, “doing it upon the board with the like a projector, camera thing, doc camera” as recounted as, “It starts as a sentence starter and then the class helps her complete it. After[ward], they filled out their own papers.” See Figure 11.



*Figure 11.* Flowchart with Sentence Starters, photovoice digital diary

After adding their facts, they clarified their points with partners. Sylvia explained, “They shared their flow charts with a partner so they could assist each other if something did not make sense. They mingled around the room until the music stopped. Then, they shared their arguments with a buddy.” Sylvia explained the in-service teacher emphasized, “to correct their buddy if their argument wasn’t scientific and think of one together.” Afterwards in small groups, they selected one of the best animals for their project.

Before beginning the group project, the in-service teacher taught a mini-lesson about group responsibilities. Camilla commented,

My in-service teacher worked in a mini-lesson about sharing and being compassionate to your fellow students. She taught her students that sharing is important and showed them how to allocate the jobs so that everyone could participate to make the animal poster.

After establishing group roles, the teacher scaffolded how to create their informational posters by modeling the process. Sylvia, stated, “The teacher created an anchor chart about the penguin and explained each section of the poster; their habitat, physical features, diet, and interesting facts.” For example, “My teacher put the header on her example, like “habitat” then asked the class what were some examples of the habitats that penguins live in.” (Figure 12). See Figure 12 on the following page.

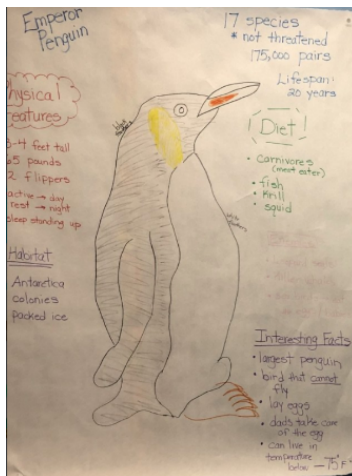


Figure 12. Penguin Project Anchor Chart Example, photovoice digital diary

As she modeled, she checked understanding by carefully selecting the students. Sylvia stated,

I noticed that she chose students who weren't shouting out the answers; the quiet ones or the ones that take longer to answer. I believe this allows her to assess her student's understanding to see if she needs to go deeper in explanation. Modeling helped them create their posters.

Camilla noted how the students used the anchor chart as a reference to create their work. She noted, "With the anchor chart, they can see the frame and create their own work from it." After completing their project, Sylvia described, "They were proud of their work and excited to share their masterpieces with the class."

***Scenario 3: Nomadic history lesson.*** Unlike the prior scenarios, the PSTs in Team 6 taught this mini-history lesson about nomadic tribes and survival. After meeting with the teacher, Roger wrote, "Finding out certain students passed the AZELLA in previous grades doesn't mean they are prepared now. So, you need to know where they are at [*sic*]." In gaining this insight, the team scaffolded instruction by accessing prior knowledge, defining key terms, and making content meaningful by using graphic organizers, sentence strips, anchor charts, and peer groups.

First, Roger began by accessing their prior knowledge about nomadic people by asking "Who are hunters?" and "Who are gatherers?" After table talking, the students responded. Roger wrote, "Everybody was table-talking about what they knew and wanted to express their thoughts—their prior knowledge." As a result, he stated, "Prior knowledge and background experiences are so important to build up from what they know and then moving from point one to point two."

Afterwards they taught "three key vocabulary words, bands, technology and consequences using a cloze notes graphic organizer with semantic omissions." Francisco

explained the words were taught because “they were tier two words” and have “different meanings based upon the situation in which they are used” as seen in Figure 13. See Figure 13. After reading aloud, each group discussed the reading and recorded their responses.

The image shows a graphic organizer titled "Notes for Hunters and Gatherers". At the top, there are fields for "Name" and "Date". Below the title, it says "Part 1: Complete the sections based on the reading from the textbook." The first section is "Vocabulary", which asks the student to "Define the vocabulary by writing in the missing words." It includes three items: "Bands: a group of \_\_\_\_\_ who live together and survive by \_\_\_\_\_ and gathering.", "Technology: using knowledge to \_\_\_\_\_ problems or invent useful \_\_\_\_\_.", and "Consequence: a result of an \_\_\_\_\_ or condition." The second section is "Living and Working Together, pg. 52-53". It has two columns: "Who are hunters and gatherers?" and "Write 2-3 facts about hunters and gatherers." The first column has a vertical line and a space for writing. The second column has a numbered list (1, 2, 3) followed by horizontal lines for writing.

Figure 13. Cloze Notes Graphic Organizer, photovoice digital diary

They used the same cloze notes graphic organizer to record their notes after reading. Francisco led the read aloud modeling and called on volunteers. Afterward group discussion, they shared their responses to check for understanding. Again, see Figure 13. Roger noticed that,

The students reacted with extraordinary enthusiasm, over half of the class wanted to contribute to the notes. I remember from in class when we discussed that collaborative group was more effective for CLD’s, but the response was overwhelming in a positive way.

At the same time, they noticed that the students were not checking their work as anticipated. Roger stated, “I realized we didn’t model it correctly because they should

have been writing their facts. So, I halted the lesson and re-explained it” Afterwards he remarked, “Okay, so modeling is really important.”

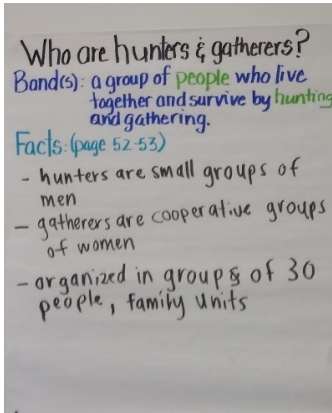


Figure 14. Hunters and Gatherers Anchor Chart, photovoice digital diary

To end the lesson, the students had to determine the “consequences” of the nomad’s actions as shown in Figure 14. See Figure 14. Due to the time limit, they decided to use sentence frames (sentence starters) to scaffold the activity as illustrated in Figure 15. See Figure 15. Irene demonstrated she was skeptical of sentence frames when she wrote, “I used to think that sentence frames were childish.” However, after using them in class she scribed, “I find myself able to thoroughly explain and bring quality additions to my sentences.” And, after the lesson she recorded, “Now, I believe that by using sentence frames, the students were able to learn and understand their content better than without the sentence frames.” Francisco wrote, “I was blown away. This reminded me of Bloom’s [Taxonomy] because ‘consequence’ [*sic*] is a higher order thinking skill.”

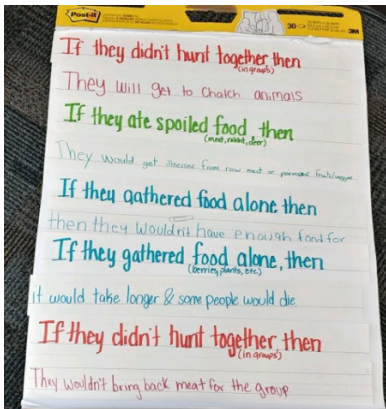


Figure 15. Consequence Sentence Starters, photovoice digital diary

And, capturing the spirit of the course, this team's photo shown in Figure 16 echoed many by stating, "Culturally Responsive Teaching, Matters!" See Figure 16.

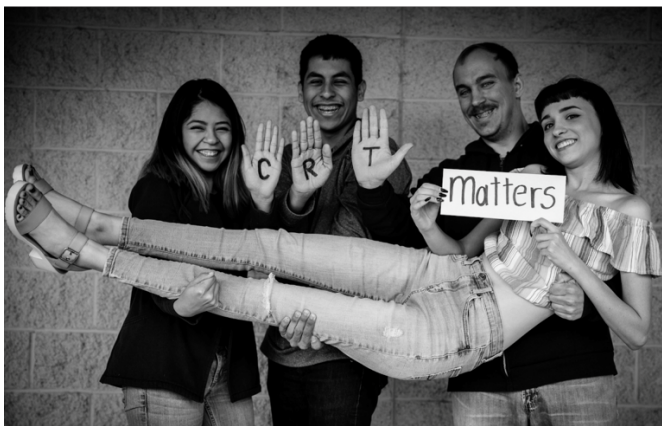


Figure 16. CRT Matters!, photovoice digital diary

**Growing culturally responsive teachers.** Assertion 4 stated, *PSTs influence one another as they collectively work together toward becoming culturally responsive teachers.* According to the CRLT framework, a purposeful service-learning experience can extend PSTs' understanding about CRP through guided reflection. As a result of their team-based experiences, PSTs supported each other to envision themselves as culturally responsive teachers. From the digital diaries as well as the semi-structured interviews, the

following themes emerged (a) shifting sociocultural perspectives, (b) co-constructing CRP from theory to practice, and (c) awakening culturally responsive teachers.

***Shifting sociocultural perspectives.*** Guided reflection activities challenge PSTs to reflect on and about their sociocultural beliefs about teaching CLD students. Karen explained how having different group members changed her perspective as she stated, “So, it [the team] really helped me, and opened my mind about different students in the classroom.” Tara commented how her group altered her sociocultural lens by explaining,

Being an individual, you have one perspective...you are always viewing it from your lens. My group [Sandra and Camilla] had different backgrounds than myself, so they thought of things completely different than I did. And, just being able to have somebody else’s perspective, definitely it helped me.

Roger also discussed the benefit of being grouped with members that differed from his experiences because their insights made him more socio-culturally aware as he explained,

So, it was really cool having Alma and Francisco on the team because I grew up over in East Mesa and most of the students were like me (white), and spoke the same language as me. So, in particular, Alma and Francisco, helped me understand what the kids were going through and how they were feeling.

***Co-constructing CRP from theory to practice.*** Because the PSTs had limited experiences with CLD students, scaffolded discussions and guided reflection (Ballantyne et al. 2008; Jimenez-Silva & Olson, 2012; Villegas & Lucas, 2002a) provided them with opportunities to deepen their understanding of CRP. Having teammates in the same

classroom on different days afforded insights they may not have ascertained on their own. César described his experience when he said,

Because, as team-based, we get to come back to the class and share, "Hey, so what did you see? What did I observe? Why is it different when you're there and not me?" We get to see different perspectives. And having more than one person going on a different day of the week, definitely. That's like us breaking ourselves into five and having a different experience every day.

Roger also mentioned, "They [the team] helped me fill in the gaps of what I didn't see and provide different examples of what was going on in our classroom from day to day." He described how he was more prepared to support the CLD students because of his teammates experience. He explained, "Based on what Alma previously told me [about the mathematics lesson], I was able to jump right in." Similarly, Pam also described how her teams' insights helped her identify CRP practices and apply it. She claimed,

By having several different perspectives within the same classroom, we are able to capture a lot more of the teaching strategies that we otherwise might have overlooked. So, we all were able to clarify and, in a sense, it maximized our time in the classroom just because we all learned from each other.

In addition, the team-based approach also helped them build the bridge to make connections from theory to practice. Pam explained, "They [my team] were able to make connections between our course material and our real-life experiences that I may not have observed right away on my own." Karen maintained,



I found it [the team] really helpful. ‘Cause some of the assignments I struggled.

So, it helped to have a team that you could get help and communicate with. Some things I struggled with, and maybe they didn’t. And then, vice versa.

Francisco commented how they co-constructed knowledge collectively through collaboration. He stated, “We all built on each other. I’ll be doing my part, he’ll be doing his part, and then we bring the parts together, and then it makes a lot more sense. And, that was because we had each other.”

*Awakening the culturally responsive teacher.* Although many of the PSTs lacked experience teaching CLD students, all felt more confident as a result of the course. César stated, “When I began the course, I knew nothing. I knew zero. But I am extremely confident [about] teaching CLD students. Absolutely! And, the reason why is because I was a CLD.” However, not all shared César’s culturally and linguistic background and yet, they still echoed his confidence in their ability to teach CLD students especially, in terms of their growth throughout the semester. For example, Roger described, “It’s [my confidence] much higher than it was at the beginning of the semester.” Pam made a similar comment when she claimed, “Compared to the beginning of the semester, definitely much more confident because I didn’t have any prior knowledge.” Tara also described how she became more knowledgeable when she suggested, “Walking in not knowing anything about CLD students and walking out knowing a lot more.” She, even stated, “I’m confident that I would be able to go ahead into a classroom and incorporate what I’ve learned and build upon that.”

Although the preservice teachers were confident in their ability to use CRP, they all shared the same desire to learn more about teaching CLD students through theory,

practice, and experience. For example, Karen maintained, “One semester is not enough. There’s a lot to learn. I’m like in the right direction but, I have more growth to do.” María Isabel shared Karen’s viewpoint when she mentioned, “I don’t think one class is enough. It’s always better to expand your knowledge. The more you know, the better.” In addition, to becoming more knowledgeable, Pam added the idea that experience was important when she said, “I also feel like I need more real-life exposure and practice. And, to learn from the people that have done it.” Francisco echoed his peers and explained his perspective with frustration when he noted,

One class is *not enough*. I don’t know. I feel like they [preservice teachers] need a lot more. More in depth, because knowledge is key, and it’s just, you can never have enough. It’s just something like you cannot have one class and then get your certificate, and be thinking you’re able to teach a CLD class. It’s just ... I don’t know. *It’s like angering. How can you think you can teach a whole CLD class with only one class?*

Like Francisco, César also agreed that one class was insufficient because teaching is a life-long practice in which we need to continually advance our knowledge throughout our career. He shared,

I don’t fully feel prepared. I’ll be honest. I don’t feel fully prepared because I still have a way to go. And, even after graduating and becoming a teacher, you’ll never be fully prepared. We have a long way to go with this...we’re just getting a foot in the door right now. We have a long way to go with this.

However, inspired by this quote, “Learners Today, Leaders Tomorrow” posted in her school entrance, Alma reflected “Today I am a learner but, tomorrow I will be teaching.”

And, this thought was captured by this team as shown in Figure 17 when they indicated they were not alone because, “Together Everyone Achieves More.” See Figure 17.



*Figure 17.* Together Everyone Achieves More, photovoice digital diary

## CHAPTER 5

### DISCUSSION

The purpose of this action research study is to explore the influence of a CRLT Framework that combined two approaches for training preservice teachers: (a) a CRP designed curriculum and (b) a team-based service-learning experience with CLD students. The intervention is based on the work of Lucas and Villegas (2002a, 2002b) and is designed to provide a Culturally Responsive and Linguistic Teaching Framework (Ramirez, 2017) that aligns the theoretical perspectives from Chapter 2. In this chapter, I present a discussion of the findings in the following sections: (a) complementarity and the integration of quantitative and qualitative data, (b) explanation of results, (c) limitations, (d) implications for practice, (e) implications of future research, and (f) personal lessons learned.

#### **Complementarity and the Integration of Quantitative and Qualitative Data**

Complementarity between quantitative and qualitative data contribute to the validity of the results because together they provide a more complete understanding than what could be accomplished through the use of one approach (Green, 2007). Results from the data in this study reveal high levels of complementarity. Specifically, the quantitative data indicate that knowledge, self-efficacy, and use about culturally responsive pedagogy increase significantly. Likewise, the qualitative data collected from the semi-structured interviews and photovoice indicate similar growth. By combining data from the two approaches, the words from the qualitative data provide a deeper understanding of what the numbers from the quantitative data represent. This approach produces better understanding of the data.

The results from the post-intervention survey indicate an increase in knowledge about culturally responsive pedagogy for preservice teachers. As shown in Table 11, the mean score for knowledge increases significantly, improving by 3.48 points. The meaning of this result becomes clearer when examined alongside the data from the semi-structured interviews and photovoice. For example, Pam explains her knowledge about CRP changes when she says, “In the beginning of the course, I was completely new to the entire concept of teaching. I had zero experience in how a teacher can use methods and strategies inside the classroom.” However, at the end, she describes her growth of knowledge when she states,

The theory of this class has allowed me to better understand the importance of building connections, being a warm demander, and strategies in teaching lessons. The skills I was able to practice in class and during service learning allowed me to feel much more capable of creating ways for students to learn in a more efficient way. I can use sentence frames and anchor charts as tools for ELLs and other students as well. I can incorporate what they already know in L1 and add it to L2. I can clarify by using lots of visuals and graphics organizers.

Similarly, the results from the post-intervention survey also indicate a significant increase in pre-service teachers’ self-efficacy to apply culturally responsive pedagogy. Likewise, preservice teachers’ scores increase by 3.31 points (See Table 11). These findings are enhanced through preservice teachers’ reflections and interview responses that clarify how their confidence increased. For example, Tara explains, “I’m confident that I would be able to go ahead into a classroom and incorporate what I’ve learned and then build upon that.”

Although the quantitative scores demonstrate an increase in self-efficacy, the qualitative data elaborates this by providing a more detailed part of the story. The preservice teachers describe how their confidence grows from the beginning to the end of the course, but they also state they would feel more assured if they have more training in CRP. María Isabel notes, “I do feel confident, but I think going through more classes would make me feel more confident. One class is not enough.”

The results for the use construct indicate a smaller increase of 2.53 points, which is still a significant change. Likewise, the qualitative data provide additional data about preservice teachers’ perceptions with respect to applying CRP in their future practice. For example, Karen suggests, “I will definitely use my experience and knowledge from this course and service learning and use it in my future as a teacher.” And, Alma exclaims, “I am part of the diversity that makes up this country, I will definitely bring in CRT in my classroom!”

When used in concert, quantitative and qualitative data can provide richer, deeper understanding about the results than when they are separate. In this study, the qualitative data is highly complementary to the quantitative data and enhances understanding of the quantitative data. In the following section, I expand upon this by providing a more complete explanation of the outcomes from the study.

### **Explanation of the Results**

Recall from Chapter 2, the CRLT Framework draws upon three theoretical lenses: (a) orientations, (b) pedagogical knowledge and skills, and (c) service learning as shown below in Figure 18. These perspectives act in tandem to foster culturally responsive preservice teachers as they develop their understanding of CRP to prepare these

preservice teachers (PSTs) to work effectively with CLD students. The discussion is organized around two areas: (a) influence of a CRP curriculum on PSTs, and (b) influence of service learning on PSTs as it pertains to the usefulness of the CRLT Framework on future practice.

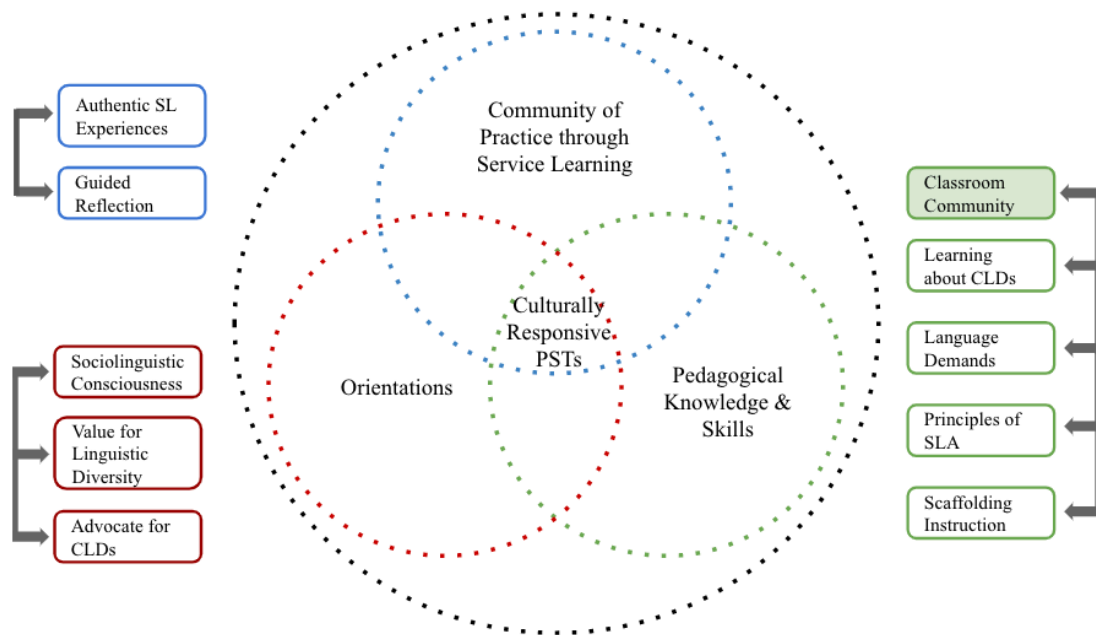


Figure 18. A CRLT Framework to Prepare Preservice Teachers

**Influence of a CRP curriculum on PSTs.** Based on the earlier work of Lucas and Villegas (2002a, 2002b) and Lucas, Villegas and Freedson-Gonzalez’ (2008), the CRP curriculum is viewed through two lenses: (a) orientations and (b) pedagogical knowledge and skills. Through these lenses, I will explain how preservice teachers attain additional understanding about teaching CLD students through a culturally responsive curriculum.

**CRP curriculum: orientations.** Villegas and Lucas (2011) define three specific orientations, on which to focus on when training PSTs: (a) sociolinguistic consciousness, (b) value for linguistic diversity, and (c) intention to advocate for CLD students. In this

action research study, I teach a CRP curriculum with readings and lessons focused on preparing preservice teachers to become linguistically responsive teachers. In addition, I implement experiential learning activities because learning through experience has been found to be more effective than other practices such as lectures (Jimenez-Sjlva, Olson & Jimenez-Hernandez, 2012).

Because a majority of the PSTs participating in the study lacked experience with CLD students, I teach a language simulation lesson in Spanish to emphasize the difference between a deficit approach of “English Only” and an asset-based approach of CRP. In the lesson, I model CRP in theory by scaffolding strategies that incorporate asset-based approaches such as contrastive analysis, bilingual materials, and purposeful grouping based on language and culture.

During the “Spanish Only” portion of the lesson, preservice teachers report feeling lost, confused and simply, not valued. After I teach the lesson a second time modeling CRP, the preservice teachers reflect and say they have a better understanding of what it might feel like to be a CLD. This experience, in turn, opens discussions as PSTs describe how their prior schooling influences their perceptions about educating CLD students especially, in regard to language and culture, as Arizona’s practices, programs and policies come into question. For example, Judy comments, “My team members helped me substantially gain new perspectives about the class [teaching CLD students].”

Based on the data, it is clear PSTs develop a stronger sense of their sociolinguistic awareness and how their world views influence developing a culturally responsive classroom that values culture and language. Despite their overall growth in all three orientation areas, the lowest score is PSTs’ intent to advocate for CLD students.



Although they aligned themselves as becoming change agents over technicians, they mostly defined this in terms of their role as a teacher in the classroom. Even though this is one component, it remains clear that more connections to the family and community need to be included.

***CRP curriculum: pedagogical knowledge and skills.*** Additionally, Villegas & Lucas (2002a, 2002b) claim culturally and linguistically responsive teachers integrate the principles of second language acquisition theory into the curriculum. These principles are defined as (a) linguistic and academic backgrounds, (b) language demands and tasks, (c) key principles of second language acquisition, and (d) scaffolding instruction. As explained above, I incorporated experiential learning activities instead of lectures to model CRP as aligned to the modular activities and readings (Jimenez-Silva et al., 2012).

Gay (2000) contends teacher's expectations of their students influence their motivation to learn and ultimately, succeed. Consistent with Gay's outcomes, the results of this study strongly suggest the importance of developing PSTs who value their student's language and culture to employ a warm demand approach. Three critical aspects related to this matter arise from the data. These are: (a) instruction must be relevant to the student's lives, (b) high expectations for academics and behavior must be emphasize, and (c) relationships must be built upon trust and respect. Based on the results of this study, I would recommend adding a strand emphasizing the importance of developing PSTs' awareness of their role in creating a culturally responsive classroom community as seen in Figure 18 on page 119.

According to Cochran-Smith (2004) and Darling-Hammond (2010), placing PSTs in schools with diverse student populations is not sufficient. Instead, placements need to

ensure that preservice teachers have the opportunity to observe theory in practice (Villegas & Lucas, 2002a, 2002b). Therefore, in this study, PSTs are placed in a school whose teachers provide lessons using culturally and linguistically responsive pedagogy in their classrooms. In fact, the in-service teachers engage in weekly professional development focusing on CRP, which they incorporate into their teaching practices.

Therefore, this bridge from theory to practice likely contributes to the PSTs' growth in knowledge, self-efficacy, and perception of usefulness of CRP as the survey results indicate. Because the in-service teachers model theory in practice, PSTs develop an ability to think critically about enacting culturally and linguistically responsive pedagogy. As PSTs post their observations in their digital diary, they begin to apply theory by explaining how they would enhance the lesson they observed. Sylvia notes this when she writes,

If I was teaching this lesson, I would have scaffolded their learning with a big anchor chart at the front of the class and chunked it so the students can do a section at a time with my help as I walk around ensuring the students are grasping the knowledge they should be. Depending on the lesson I could also have the students work with a buddy or their group for a part of it to scaffold understanding of the content.

Because PSTs see modeling of actions related to theory in their experiential learning in the course and in their in-service classrooms, they are better able to identify strategies that scaffold instruction to support CLD students in their classes. However, it is important to note that PSTs are not teaching lessons. This fact is evident in the results indicating a lack of understanding about using language domains to develop lessons. Although

language domains are taught in the course, PSTs may not have the opportunity to work with their in-service teachers about how they plan their lessons based on language domains and proficiency levels, which may affect the results.

In conclusion, by combining theory in the course with practice in the real-world, PSTs begin to envision themselves as culturally and linguistically responsive teachers. As they learn more about theory, it becomes more meaningful because of interactions with CLD students in their service-learning classrooms. Camilla summarized the importance of understanding theory being applied to practice by stating, “Krashen and Cummins has taught me every kid is an ‘iceberg,’ there is more [to them] than what we can see.”

**Influence of service learning on PSTs.** Villegas & Lucas (2002a, 2002b) contend PSTs need to be placed in classrooms with experienced teachers practicing culturally and linguistically responsive pedagogy. In the CRLT Framework of this study, the third component emphasizes a service-learning experience relating to two factors (a) authentic experiences and (b) guided reflection. Nevertheless, I maintain results from this study suggest a third factor, teams, must be considered when training novice preservice teachers.

The benefits of placing experienced PSTs with pedagogical training and classroom experience with CLD students is well documented (Beenet, 2012; Lucas, Villegas, & Freedson-Gonzalez, 2008; Paris, 2016; Ramirez, 2017). In addition, Jimenez-Silva and Olson (2012) highlight the effects of using a community of practice (CoP) model with guided reflection to develop PSTs’ knowledge and self-efficacy in using culturally and linguistically responsive pedagogy to teach CLD students. As a result, in

this study, I combine what I learned from the research to develop a team-based approach to service learning.

First, PSTs enrolled in this course are novices in terms of pedagogical training and their experiences with CLD students in the classroom. Therefore, teams are formed based on their linguistic, cultural backgrounds and prior experiences in working with CLD students. In the study, I also take their grade level interest into account. Recall, the site provides experienced in-service teachers who practiced culturally and linguistically responsive pedagogy in their classrooms.

By placing PSTs with in-service teachers who practice CRP, students gain first-hand knowledge about teaching CLD students. During each class session, PSTs entered and met with their teams sharing their service-learning experiences with one another. Through these conversations, they bond as a team and authentically care about one another as they define how to become more prepared and effective in their service-learning classroom. As a result, they explore ways to overcome their previously held assumptions about teaching CLD students and try to apply what they learn to practice. For example, Tara explains,

I realize that I would not understand the class as well as I should without their [my teammates'] experiences. Each of us had a different story and experience to give. They've helped me understand the students [and] the class as a whole. Something, I truly appreciate.

In addition to their impromptu conversations, purposeful guided reflection activities are carefully included at the end of each unit. During these sessions, they discuss theory in practice with their teammates. Because they share the same context,

they are able to build upon each other's experiences to fill in the gaps with what they did not observe. These opportunities afford them understandings they would not have if they complete their service learning independently. Alma summarizes how her team supported her when she states,

My teammates have been helpful in evaluating different teaching techniques that are being used in our service-learning classroom. They often are able to make connections between our course material and our real-life experiences that I may not have observed right away on my own. I think that by having several different perspectives within the same classroom, we are able to capture a lot more of the teaching strategies that we otherwise might have overlooked.

As they co-construct their understandings about teaching CLD students from their experiences, they become more sociolinguistically aware and pedagogically knowledgeable.

Thus, the team-based, service-learning experience likely contributes to the increases in results from the survey in knowledge, self-efficacy, and usefulness of CRP. According to Wenger (1998), learning is a social endeavor in which participants actively engage with each other and their community. "Such participation shapes not only what we do, but also who we are and how we interpret what we do" (Wenger, 1998, p. 4). The team-based, service-learning experience affords these opportunities as a community of practice (CoP) begins to emerge for the teams. Consequently, a process of learning and knowing develops over the course of the semester as relationships advance based upon their shared experiences in and outside of the classroom (Wenger, 1998). In their CoPs, PSTs become more actively engaged with each other and their classroom community,

which in turn, may influence their self-identity and their perspective and knowledge of becoming culturally and linguistically responsive teachers. Moreover, because “one course is not enough” is echoed by the preservice teachers, it is even more important to create a CoP to help them to bridge theory into practice through a team-based, service-learning experience.

### **Limitations**

I acknowledge there are several limitations in this action research study. As with every study, there are factors that influence the outcomes that deserve attention. Presented in this section, include three main limitations; (a) the context (b) sample size, and (c) my positionality and role as a practitioner-researcher.

The first limitation is the context. As with any action research, the context of the study is defined by the setting and deeply affects the study. For example, the team-based, service-learning component plays a critical role in the outcomes of this study. However, the feasibility of creating teams based on the PSTs’ primary language ability is highly contextualized to my particular setting. Therefore, the findings are not generalizable (Lincoln & Guba, 1985; Mertler, 2014). However, they could be transferable depending on the reader’s context. Specifically, the notion of transferability allows the reader to determine the most valuable aspects of the study as applied to their own context (Lincoln & Guba, 1985; Mertler, 2014).

Another limitation involves the sample size of my study. Although a sample size of 18 PSTs is adequate for action research, it is considered to be small by most researchers. In part, the size of the study is due to the fact that the course is not a certification requirement for future teachers. Additionally, of the 18 only eight are asked

to participate in the semi-structured interviews to provide equal representation of Native English and Spanish speaking participants. Thus, a different program with more courses and PSTs could deliver different results.

A final limitation focuses on my positionality in my role as both the practitioner and researcher in the study. As the practitioner, I instruct and work closely with the PSTs who are my participants in the study. Although participants are encouraged to openly share their views about teaching CLD students, possible bias may exist in their responses because I was their instructor. Additionally, I am also the researcher conducting the study. In an attempt to minimize my bias, the data are collected and coded with a unique identifier, and examined after the study. Moreover, the semi-structured interviews were conducted after final grades posted to encourage students to voice and discuss their experience freely.

### **Implications for Practice**

Given the current educational climate in Arizona and recent changes in teacher certification requirements eliminating teacher preparation courses about teaching CLD students, it is imperative to continue research in this field to educate PSTs to effectively work with language diverse students. This study offers information about how to prepare preservice teachers to engage with CLD students using a culturally responsive linguistic teaching lens. Thus, results from this study support two implications for practice: (a) an introductory course focusing on a CRP curriculum for novice preservice teachers and (b) a team-based, service-learning approach in classrooms with CLD students.

The findings in this study suggest we should continue to offer coursework that provides opportunities for PSTs to learn about CRLT. Because PSTs enter their teacher

preparation programs lacking knowledge about, and experience with, CLD students, I contend such coursework should be strategically placed early in their program of study. As PSTs became more knowledgeable about CRP, they challenge their sociocultural beliefs and bias to develop affirming attitudes towards teaching CLD students. It is clear that a purposefully designed CRP curriculum has the potential to raise the critical consciousness of PSTs about issues related to being teachers of CLD students. Thus, the course may serve as a gateway course providing them foundational knowledge about culturally and linguistically responsive teaching as they continue to grow as critically conscious teachers throughout their program of study.

Further, the findings suggest a critical component of the study is the team-based service-learning experience. The qualitative data indicate the teams and site have a strong effect on PSTs' understanding of culturally and linguistically responsive teaching. I find there is great value in purposefully grouping the preservice teachers based on their assets (language, culture and classroom experience as, or with, CLD students). Team members benefit from each other's backgrounds and experiences as they are learning to work with CLD students. In addition, pairing the teams with culturally responsive in-service teachers affords them opportunities to apply classroom theory to classroom practice. Moreover, with guided reflection activities, the teams collectively overcome some of the challenges they face as they grapple with how to use theory in practice to support CLD students. As a result, a CoP emerges which contributes to their understanding of CRP and also shapes how they view themselves as developing culturally and linguistically responsive PSTs.



## **Implications for Future Research**

As a result of this action research study, there appear to be several implications for future research. When I first began my doctoral program, this introductory course was a requirement for teacher certification. It is now an elective and PSTs have several other course options. Nevertheless, given the outcomes of this study, I would recommend other teacher preparation programs build on this by exploring how an introductory course based on CRLT could prepare better PSTs for working with CLD students.

In addition, I suggest collecting longitudinal data about the influence of the CRLT framework on PSTs as they progress through their coursework. As indicated by the findings in this study, PSTs rate the usefulness of CRP as highly relevant in terms of their future practices. Despite the favorable indications about PSTs' intent to use CRP, this study has limitations. Specifically, the study occurs over a 16-week semester and it only requires a limited amount of time with CLD students in the in-service classroom. For these reasons, I would extend this study by collecting data as the PSTs continue through their program to determine how their understanding about culturally and linguistically responsive teaching influences them as critically conscious teachers.

Finally, I also suggest collecting more in-depth data about the effectiveness of the team-based, service-learning experience. In this study, qualitative data are collected about the team-based, service-learning experience through the semi-structured interviews and photovoice digital diaries. In future research, I would also recommend collecting quantitative data about how the influence of a CoP affects the team members' knowledge, skills and dispositions about teaching CLD students. I also recommend collecting data

about their experience as CoP using a team-based approach in comparison to the current individual-based model.

### **Personal Lessons Learned**

As I began this scholarly journey four years ago, I thought that I knew myself and that I had it all figured out. Nevertheless, because of this process, I now realize how little I actually knew. Moreover, I will be forever grateful as I stand before you today, humbled by my experience.

When I first began the program, I entered as a “technician” proficient and confident in my ability to design lessons based on pedagogy and technology. At that point of my career, I was a ‘machine’ who mechanically defined teaching lessons based on second language acquisition theory. Moreover, I was intent on bridging the pedagogical world with that of a technological vision. However, because I participated in the Leadership and Innovation Doctoral Program, I emerged not as a technician but, as a change agent reflective and critical in practice.

As I write these concluding comments, I know this signifies the end, but in my mind’s eye this only seems to be the beginning. After four years of research and literature reviews, I feel it would be contradictory to close the chapter. Instead, I realize learning is the process of becoming as it emerges through cycles of action research. With each iteration, the story unfolds as the situational context and the participants shed light upon theory as applied to practice. Unlike when I entered, I know now that teaching is far more than a finite set of skills. Although I do not profess to know all there is about CRLT, I realize the importance of developing future teachers who understand the importance of

advocating for a more equitable and quality education for CLD students. Finally, with that, the story persists as we continue to learn from each other.

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APPENDIX A  
RECRUITMENT AND CONSENT FORM



## Teacher Recruitment and Consent Form

### A Culturally Responsive and Linguistic Framework to Prepare Preservice Teachers

Dear Preservice Teachers,

I am a student in Leadership & Innovation Doctoral Program in the Mary Lou Fulton Teachers College at Arizona State University. Under the direction of Dr. Ray Buss, an Associate Professor at ASU, I am conducting a research study this semester.

#### Study Purpose

The purpose of the study is to determine the extent to which a course designed based on culturally responsive pedagogy prepares preservice teachers to teach culturally linguistically and diverse learners.

#### Description of the Study

If you say, YES, then your participation will be to complete the following items and agree to sharing your class assignments (surveys, questionnaires and photovoice). The only item listed that is not a required class assignment is the interview. Participation requirements consist of the completion of the following:

1. **Post/Pre-Retrospective Survey:** I will disseminate and collect the first survey in class, post intervention, in November 2018. The second survey will be administered in class one week after the first survey. They will take about 10-15 minutes to complete.
2. **Photovoice:** Using Class Dojo, digital diary entries will be collected eight times throughout the semester. The diary entries are assignments that summarize what you are learning in your coursework and service-learning experience. They should take approximately thirty minutes to an hour to complete.
  - a. **Digital Diary: Photos.** For each unit, you will post pictures related to the coursework topics as to what you see and experience in your service-learning classroom. Photos could include class layout, bulletin boards, graphic organizers, etc. Photos cannot include students in the P-12 classroom.
  - b. **Digital Diary: Reflective Questionnaires.** In addition to photos, you will respond to open-ended questions posted in Class Dojo intended for you to reflect about theory and how it connects to practice. The responses should be based on the unit topics presented and your service-learning experience.
3. **Interviews:** I will randomly select participants to be interviewed after posting final grades. The interview will last approximately 25-30 minutes. The interviews will be recorded but, not without your permission. If you do not want to be recorded, please, let the interviewee know. You must be 18 years of age to participate.

#### Benefits of the Study

There is not a direct benefit for your participation. Possible benefits from your participation in the study, may include future course revisions as well as informing the MCC faculty about how to enhance the teacher preparation program. There are no foreseeable risks or discomforts to your participation.

#### Confidentiality

All information collected in this study will be strictly confidential. The results of this research study may be included papers, reports, presentations and publications. However, your identity

will remain anonymous in which your identity will not be revealed. To ensure this, pseudonyms will be used to identify each participant. Further, for data collection, I will ask for you to use a unique identifier code that consists of letter and numbers known only to you. To create the code, you will record the first three letters of your mother's first name and the last four digits of your phone number. [First 3 letters of mother's name Sally (ex. sal); last four digits of your phone number (602)-509-6345 (ex. 6345)].

To maintain confidentiality of all data collected, digital data collection and results will be stored on a password-protected computer in which only I will have access. The interview responses will be recorded and transcribed. The responses will remain confidential and the audiotapes will be destroyed upon transcription of the tapes. The transcriptions will be shared with me after the course has concluded and grades have been submitted. No one other than myself will be able to identify any responses to individual participants in the study. After three years, all documentation will be destroyed.

**Withdrawal Privilege**

Your participation in this study is completely voluntary. Even if you choose to participate in the study now, you can withdraw at any given point during the semester without penalty or loss of support by myself, your instructor. It is important to note that there will not be any effect on your course grade by withdrawing from the study.

**Cost and Payments**

Compensation is not available for this study. However, you may receive refreshments during the interview session, as a token of appreciation for your time and participation.

**Voluntary Consent**

If you have any questions concerning the research study, please contact the research team: Dr. Ray Buss at [ray.buss@asu.edu](mailto:ray.buss@asu.edu) or (602)-543-6343 or Beth Alsen at [balsen@asu.edu](mailto:balsen@asu.edu) or (480)-461-7506.

If you have questions or concerns regarding your rights as a participant in this research, or if you feel as if you have been placed at risk; you can contact the Chair of the Human Subjects Institutional Review Board, through the ASU Office of Research Integrity and Assurance, at 480-965 6788.

By signing below, you are agreeing to participate in the study including completing two surveys and an interview and granting permission to provide class assignments for the purpose of research to the researcher.

\_\_\_\_\_  
Subject's Signature

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Date

APPENDIX B

KNOWLEDGE, SELF-EFFICACY AND USE SURVEY

## Knowledge, Self-Efficacy and Use Survey Training PSTs with a CRLT Framework

### Participation Confidentiality

All information in this survey will remain confidential. First, you will create a reproducible ID to protect your confidentiality. Please, use the following to create your ID: write the first three letters of your mother's first name and the last four digits of your phone number {For example, Jane and 123-4567 = JAN4567}. The results of this survey may be used in my dissertation, reports, presentations, or publications. Your identity will remain anonymous and not used. Results will be shared in the aggregate form only.

**Date Completed:** \_\_\_\_\_

**Time Frame:**  Pre  Post

*Please complete the demographic profile using the criteria provided.*

### Demographics

1.	<b>ID#:</b> Write the first three letters of your mother's first name and the last four digits of your phone number. For example, Jane and 123-4567 = JAN4567
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2. Gender:

- a. Female
- b. Male
- c. Other

3. Age Range:

- a. 18-22
- b. 23-27
- c. 28-32
- d. 33 and older

4. Major:

- a. Early Childhood Education
- b. Elementary Education
- c. Secondary Education
- d. Special Education
- e. Other: \_\_\_\_\_

For Early Childhood, Elementary or Special Education, what is your preferred grade level?

\_\_\_\_\_

For secondary, what is your preferred grade level? And, what is your specialization (Math, English, History, etc.)?

\_\_\_\_\_

*grade level*

\_\_\_\_\_

*specialization*

5. Year in College:
- Freshman
  - Sophomore
6. What EDU classes have you had prior to this class?
- EDU221: Introduction to Education
  - EDU222: Introduction to the Exceptional Learner
  - EDU230: Cultural Diversity in Education
  - EDU291: Children’s Literature
  - EDU292: The Art of Storytelling
  - Other: \_\_\_\_\_
7. Experience working with English Language Learners in a P-12 setting:
- None
  - One semester
  - Two semesters
  - More than three semesters
8. Do you speak a second language other than English?
- Yes
  - No
  - If yes, what language? \_\_\_\_\_
9. What language did you speak first?
- English
  - Spanish
  - Arabic
  - Chinese
  - Other: \_\_\_\_\_
9. In your P-12 education, check all of the programs you have participated within.
- I have been in a bilingual program (Spanish or Chinese and English)
  - I have been in an English Development Program (SEI or ESL) learning English as my second language.
  - I have taken mainstreamed classes only.

The following sections are divided into three parts. Please, rate the concepts from the Culturally Responsive and Linguistic Teaching Framework listed below using the criteria provided. First, decide how **knowledgeable** you are about each concept. Then, rate how **certain** you are in your ability to use or implement each concept. Finally, rate how **useful** you believe this will be in your future practice. Mark only one indicator per response.

**Part 1: Knowledge about Being a CRP Teacher.**

*Please rate how knowledgeable you are about each concept or strategy.*

<b>I have the knowledge to...</b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>Slightly Agree</b>	<b>Slightly Disagree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
use a warm-demand approach to create a respectful						

learning environment.						
develop norms to foster a learning environment where students feel safe and valued.						
use the classroom environment (walls, layout, etc.) to reflect my students' interests and cultural identities.						
create a classroom culture that promotes using language resourcefully.						
include instructional materials that value students' culture and backgrounds.						
work with families to learn about their child and their culture.						
write measurable objectives to develop language proficiency and content knowledge.						
use language proficiency stages to scaffold learning opportunities for all learners.						
adjust instructional practices based on the students' linguistic and academic needs.						
use background and cultural experiences to make content relevant and meaningful.						
use prior knowledge to link what students already know to what they are learning.						
teach key academic vocabulary to reinforce language and build concepts.						
design lessons that develop social (BICs) and academic (CALP) language through meaningful activities.						
design lessons that incorporate reading, writing, speaking and listening opportunities.						
use language functions and stems to develop academic discourse.						
make content meaningful by using visuals, demonstrations, graphic organizers, etc.						
use group configurations (pairs, small groups, etc.) to practice and apply content knowledge and academic discourse.						
provide sufficient wait-time for students to respond.						
provide relevant, timely and meaningful feedback.						
use frequent formative assessments to check content						

understanding.						
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**Part 2: Confidence in Becoming a CRP Teacher.**

*Please rate how confident you are in your ability to use each concept or strategy.*

<b>I am certain I can...</b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>Slightly Agree</b>	<b>Slightly Disagree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
use a warm-demand approach to create a safe and positive learning environment.						
develop norms to foster a learning environment where students feel safe and valued.						
use the classroom environment (walls, layout, etc.) to reflect my students' interests and cultural identities.						
create a classroom culture that promotes using language resourcefully.						
include instructional materials that value students' culture and backgrounds.						
work with families to learn about their child and their culture.						
write measurable objectives to develop language proficiency and content knowledge.						
use language proficiency stages to scaffold learning opportunities for all learners.						
adjust instructional practices based on the students' linguistic and academic needs.						
access background experiences to make content culturally relevant and meaningful.						
use prior knowledge to link what students already know to what they are learning.						
teach key academic vocabulary to reinforce language and build concepts.						
design lessons that develop social (BICs) and academic (CALP) language through meaningful activities.						
design lessons that incorporate reading, writing, speaking and listening opportunities.						
use language functions and stems to develop academic discourse.						
make content meaningful by using visuals,						

demonstrations, graphic organizers, etc.						
use group configurations (pairs, small groups, etc.) to practice and apply content knowledge and academic discourse.						
provide sufficient wait-time for students to respond.						
provide relevant, timely and meaningful feedback.						
use frequent formative assessments to check content understanding.						

### Part 3: Usefulness of Becoming a CRP Teacher.

*Please rate how useful or relevant each concept or strategy will be to use in your future teaching practice.*

<b>I my future teaching practice, I will</b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>Slightly Agree</b>	<b>Slightly Disagree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
use a warm-demand approach to create a safe and positive learning environment.						
develop norms to foster a learning environment where students feel safe and valued.						
use the classroom environment (walls, layout, etc.) to reflect my students' interests and cultural identities.						
create a classroom culture that promotes using language resourcefully.						
include instructional materials that value students' culture and backgrounds.						
work with families to learn about their child and their culture.						
write measurable objectives to develop language proficiency and content knowledge.						
use language proficiency stages to scaffold learning opportunities for all learners.						
adjust instructional practices based on the students' linguistic and academic needs.						
use background and cultural experiences to make content relevant and meaningful.						
use prior knowledge to link what students already know to what they are learning.						
teach key academic vocabulary to reinforce language						



and build concepts.						
design lessons that develop social (BICs) and academic (CALP) language through meaningful activities.						
design lessons that incorporate reading, writing, speaking and listening opportunities.						
use language functions and stems to develop academic discourse.						
make content meaningful by using visuals, demonstrations, graphic organizers, etc.						
use group configurations (pairs, small groups, etc.) to practice and apply content knowledge and academic discourse.						
provide sufficient wait-time for students to respond.						
provide relevant, timely and meaningful feedback.						
use frequent formative assessments to check content understanding.						

APPENDIX C

PHOTOVOICE: DIGITAL DIARY

## Photovoice: Digital Diary

### Digital Diary Purpose:

The participants in the study will reflect about their learning experiences eight times throughout the semester. They will respond to the following prompts to capture how the course (readings, activities and videos) and service learning influences their knowledge about teaching culturally linguistically and diverse students.

### *Dear Scholars,*

Welcome! This past unit, we have been studying about <name of the unit> to learn how to teach culturally and linguistically diverse students.

**Part 1: Reflection Prompts.** In your blog in Class Dojo, tell me how your experiences in the course relate to practice in your service-learning classroom. Consider some of the topics and prompts to help you get started in your writing:

My in-service teacher:

- My in-service teacher taught...
- My in-service teacher connected...
- A strategy I noticed was...

The CLD students in class:

- The CLD students reacted by...
- The CLD students seemed...
- I could tell that the CLD students ...because...

Theory in my course:

- I can connect this to...
- I remember when we discussed...
- I thought...but, now I understand...

My thoughts about teaching CLD students:

- I was <emotion: surprised, confused, frustrated, etc.> by...
- If I was teaching this lesson, I would...
- In the future, I will...

My teammates:

- My teammates <emotion: supported me, clarified, confused me, etc.> when...
- I noticed that working with a team...
- I first thought...but, now my team helped me understand...

**Part 2: Photos.** In your blog in Class Dojo, take pictures related to <Unit topic> and add a caption explaining why you chose them. You can use pictures, handouts or even video clips. Remember, do not take pictures of the students in the P-12 classroom.

I look forward to reading all about your experiences in your posts!

*Sincerely,  
Your teacher*

APPENDIX D  
SEMI-STRUCTURED INTERVIEW

## **Preservice Teacher Interview**

### **Introduction (1 minute)**

Thank you for volunteering and taking the time to participate in *<instructor's name>* study. I am, *<First and Last Name>*, and will be conducting the interview. The interview will be recorded and take about 25-30 minutes.

### **Norms and Protocol Procedures (1 minute)**

I am going to ask a few questions about your course. Please, answer the questions and prompts to the best of your knowledge and feel free to discuss and respond about any related concepts or ideas you have. You can use your Class Dojo as a reference. At any point, you have the option to refuse answering any question.

Do you have any questions or concerns? *<wait for their response; if they agree proceed to the next section; Warm Up followed by Interview Questions. If they do not, skip to the closing remarks>*

### **Warm Up Questions (2 minutes)**

1. Tell me about yourself.
2. Choose 3 adjectives to describe yourself as a CRP teacher and explain why you chose them.

### **Interview Questions (15-20 minutes)**

Use your knowledge gained from the course (readings, activities, videos, and service learning) to answer the following questions.

1. Tell me about your perception of CLD students. How have these perceptions changed throughout the course? Can you give an example(s)?
2. Describe what you have learned about teaching CLD students from your coursework.
3. What have you learned about teaching CLD students from your service-learning experience?
4. How has working with your peers as a team for service learning influenced your understanding of teaching CLD students?
5. In your opinion, what are the two most useful strategies to teach CLD students?
6. Describe a memorable learning experience that has influenced your knowledge about teaching CLD students. Why did you choose it?
7. How confident are you teaching CLD students? Why or why not?
8. How prepared do you feel about teaching CLD students in your future classroom? Why or why not?

### **Closing (1 minute)**

It was a pleasure to meet you today. Thank you for your time to discuss your experiences in the course. Your feedback will provide invaluable information about how to continuously improve the course to prepare preservice teachers. Again, thanks for your time.

