



2023

## Representation Counts: Intern Teachers of Color and Their Perspectives of Teaching in a California County

Girlye M. Hale  
*University of the Pacific*

Follow this and additional works at: [https://scholarlycommons.pacific.edu/uop\\_etds](https://scholarlycommons.pacific.edu/uop_etds)

 Part of the [Accessibility Commons](#), [Higher Education Administration Commons](#), [Higher Education and Teaching Commons](#), [Other Education Commons](#), [Other Educational Administration and Supervision Commons](#), [Other Teacher Education and Professional Development Commons](#), [Quantitative, Qualitative, Comparative, and Historical Methodologies Commons](#), and the [Race and Ethnicity Commons](#)

---

### Recommended Citation

Hale, Girlye M.. (2023). *Representation Counts: Intern Teachers of Color and Their Perspectives of Teaching in a California County*. University of the Pacific, Dissertation.  
[https://scholarlycommons.pacific.edu/uop\\_etds/3866](https://scholarlycommons.pacific.edu/uop_etds/3866)

This Dissertation is brought to you for free and open access by the University Libraries at Scholarly Commons. It has been accepted for inclusion in University of the Pacific Theses and Dissertations by an authorized administrator of Scholarly Commons. For more information, please contact [mgibney@pacific.edu](mailto:mgibney@pacific.edu).

REPRESENTATION COUNTS: INTERN TEACHERS OF COLOR  
AND THEIR PERSPECTIVES OF TEACHING IN A CALIFORNIA COUNTY

By

Girlie Hale

A Dissertation Submitted  
In Partial Fulfillment of the  
Requirements for the Degree of  
DOCTOR OF EDUCATION

Benerd College  
Transformative Action in Education

University of the Pacific  
Stockton, California

2023

REPRESENTATION COUNTS: INTERN TEACHERS OF COLOR  
AND THEIR PERSPECTIVES OF TEACHING IN A CALIFORNIA COUNTY

By

Girlie Hale

APPROVED BY:

Dissertation Co-Advisor: Anne Zeman, Ed.D.

Dissertation Co-Advisor: Laura Hallberg, Ed.D.

Committee Member: Richard Tapia, Ed.D.

REPRESENTATION COUNTS: INTERN TEACHERS OF COLOR  
AND THEIR PERSPECTIVES OF TEACHING IN A CALIFORNIA COUNTY

Copyright 2023

By

Girlie Hale

## Dedication

This dissertation is dedicated to my family. To my parents, the late Pablo Alcantara and the late Jean Pardo, for the sacrifices they made to provide our family with a better life. To my bonus parents, the late Raymond Hale and Rebecca Hale, for their never-ending love and support in the absence of my parents. They raised me and my siblings as if we were their own, and for that, I am eternally grateful for them. To my siblings, Michael, Jason, and Stacey, for always having my back and being so understanding while I missed many family events to finish my doctoral program. To my children, Sean, Sarah, and Emily, you are the reason I push myself to do better and be better. I love you all and I hope I make you proud. And finally, to my husband, Randy. You have always been supportive of everything I do. I could not be “Dr. Hale” without your love and support. Thank you for the gift of making my dream come true. I love you.

## Acknowledgements

I am eternally grateful for the people who have supported me through my dissertation journey, helping me accomplish my lifelong dream of earning my doctoral degree. I would like to thank my dissertation cochairs, Drs. Anne Zeman and Laura Hallberg, and my dissertation committee member, Dr. Richard Tapia. I appreciate the guidance, feedback, and encouragement you provided me while I wrote my dissertation. I could not have done it without you all!

To my Transformative Action in Education (TAE) cohort, instructors, program staff, and friends for the camaraderie and support during our doctoral program. A special thanks to my doctoral buddy, Dr. Aisha Brice, for keeping me motivated and focused on my goals throughout our program . . . we did it!

I would also like to thank my TCSJ and SJCOE families for your help and understanding as I attended my doctoral classes and worked on my research and dissertation. A special shout out to my research participants who were courageously willing to participate in this study and share their stories with others.

Finally, I would like to acknowledge my wonderful friends who supported me throughout my educational journey, sharing words of motivation and encouragement. I am finally ready to enjoy some much-needed time with you all.

REPRESENTATION COUNTS: INTERN TEACHERS OF COLOR  
AND THEIR PERSPECTIVES OF TEACHING IN A CALIFORNIA COUNTY

Abstract

By Girlie Hale

University of the Pacific  
2023

Intern teachers are more likely to be placed in hard-to-fill content areas, such as math, science, and special education, which exacerbates their initial teaching experiences as teachers of record. For new teachers in their intern credential program, these factors compound the stress of attending coursework while managing their experience as a novice in the classroom. Without proper mentoring and support in these placements, teachers of color may perceive themselves as feeling less successful in the classroom. In this mixed methods study, the researcher investigated the types of support intern teachers of color need in successfully completing their teacher preparation program. Quantitative data were collected using archival research to determine perceived levels of preparedness by intern teachers of color. In alignment with explanatory sequential method, interviews were conducted to gather qualitative context to explain the quantitative data. Three themes emerged from the data analyses that formed these theories: (a) as a new teacher, it is common to feel overwhelmed, confused, or frustrated while trying to balance multiple demands; (b) teaching racially diverse students presents unique challenges; and (c) to thrive as a teacher, it is crucial to seek support from colleagues, mentors, and support networks. Implications for practice include systematizing strong mentorships, implementing teacher team models, and training intern support networks on cultural awareness. These findings

provide information to intern programs about the types of support needed to be culturally responsive to the needs of both diverse teachers and the students they serve.

*Keywords:* intern teachers, alternative teacher preparation pathway, support, culturally responsive, diverse students, diverse teachers

## Table of Contents

List of Tables .....	13
List of Figures .....	14
List of Abbreviations .....	15
Glossary .....	16
Chapter 1: Introduction .....	20
Background .....	21
Factors Driving Teacher Demand .....	21
Factors Influencing Teacher Supply .....	22
Problem Statement .....	24
Purpose Statement .....	25
Research Questions .....	26
Theoretical Framework .....	26
Methodology .....	27
Quantitative Research .....	27
Qualitative Research .....	28
Significance of the Study .....	28
Delimitations .....	29
Chapter Summary .....	30
Chapter 2: Review of Literature .....	31
Background .....	31
Factors Driving Teacher Demand .....	32
Student Enrollment .....	32
Class Size .....	33

	9
Teacher Attrition.....	34
Factors Influencing Teacher Supply .....	37
Recruitment.....	39
Teacher Preparation Programs and Their Role in Addressing Teacher Shortage .....	41
Preliminary Credential Route .....	42
Intern Credential Route.....	43
Waiver/Emergency Permit Route .....	44
Recruitment of Teachers of Color.....	45
Current Diversity of the Teacher Workforce .....	48
Race and Ethnicity of Teachers and K–12 Students.....	48
Disparity Between White and Ethnically Diverse Groups .....	50
The Impact of Diverse Teachers and Student Representation .....	51
Teacher Preparation Programs’ Role in Diversifying the Teacher Workforce.....	52
Traditional Teacher Preparation Program.....	52
Alternative Teacher Preparation Program .....	53
Theoretical Frameworks .....	55
Vygotsky and Social Constructivism.....	55
Kolb and Experiential Learning Cycle .....	56
Bandura and Social Cognitive Theory.....	57
Critical Race Theory.....	59
Applying Theory to This Study .....	60
Supporting Teacher Preparation .....	61
Preparing for the Challenges of Teaching .....	61
Effective Clinical Practice .....	63
Rigorous and Relevant Coursework .....	64

	10
The Gap in Literature.....	65
Conclusion .....	66
Chapter Summary .....	66
Chapter 3: Methodology .....	68
Purpose of Study.....	68
Research Questions.....	69
Inquiry Approach.....	69
Methodology.....	70
Method.....	73
Positionality of Researcher .....	75
Researcher Bias.....	75
Data Collection/Instrumentation/Measures .....	76
Research Participants.....	76
Instrumentation.....	76
Data Analysis .....	78
Quantitative Data Collection.....	78
Analysis and Re-Presentation of the Quantitative Data.....	78
Qualitative Data Collection.....	79
Analysis and Re-Presentation of the Qualitative Data.....	79
Ethical Considerations .....	80
Limitations .....	80
Chapter Summary .....	82
Chapter 4: Findings.....	83
Quantitative Data and Analysis .....	84
Quantitative Sample.....	85

	11
Quantitative Analysis.....	87
Qualitative Data and Analysis .....	91
Qualitative Sample.....	92
Qualitative Data Collection.....	93
Qualitative Data Analysis .....	94
CGT Summary of Results.....	117
Balancing Multiple Demands as a New Teacher.....	117
Teaching Racially Diverse Students Presents Unique Challenges .....	118
Seeking Support Networks and Learning Experiences.....	118
Conclusion .....	119
Chapter 5: Discussion .....	121
Interpretation of the Findings.....	122
Balancing Multiple Demands as a New Teacher.....	122
Teaching Racially Diverse Students Presents Unique Challenges .....	123
Seeking Support Networks and Learning Experiences.....	123
Findings Related to Research Questions.....	124
Research Question 1: What Is the Level of Perceived Preparedness of Teacher Candidates of Color in Their Teacher Intern Preparation Program? (Quantitative).....	124
Research Question 2: What Support Do Teacher Candidates of Color Perceive They Need While in Their Intern Program to Increase Their Level of Preparedness? (Qualitative) .....	126
Implications for Practice .....	128
Systematizing Strong Mentorships .....	128
Teacher Team Model .....	129
Cultural Awareness Training for Intern Support Networks.....	130
Limitations .....	131

	12
Recommendations for Future Research .....	132
Conclusion .....	134
References .....	136
Appendices	
A. Email Invitation to Participate in Interview .....	148
B. Informed Consent Form .....	149
C. Interview Questions Alignment to Theoretical Frameworks and Research Questions .....	152
D. Teaching Beliefs and Mindset Survey .....	153
E. Histogram Example for Scale 1 .....	158
F. Histogram Example for Scale 2 .....	159
G. Participant Interview Protocol .....	160
H. Fieldnotes .....	163
I. Open Codes .....	166
J. Axial Codes* .....	167

## List of Tables

### Table

1. Projected Public K–12 Graded Enrollment, X County.....	33
2. X County Teachers Who Were Teaching in 2013–2014 and Who Are Projected to Retire Over 2014–2023, by Teaching Field.....	35
3. Changes in the Characteristics of New Teachers.....	47
4. Demographic Comparison Between Students and Teachers in X County, California	50
5. Race/Ethnicity of 1st Year Interns, as of May 2022.....	85
6. Race/Ethnicity of TBMS Completers.....	86
7. Target Population for Study, as of January 2023.....	87
8. Scale 1 Teachers’ Sense of Self-Efficacy Test Statistics.....	88
9. Scale 2 Culturally Responsive Teaching Self-Efficacy Test Statistics.....	90
10. Demographic Information of Interview Participants.....	93
11. Axial Coding Results Based on Theoretical Frameworks.....	98
12. Selective Coding Results Based on Theoretical Frameworks.....	98

## List of Figures

### Figure

1. California Licensure Routes to Teacher of Record..... 42
2. Kolb’s Experiential Learning Cycle ..... 57
3. CGT Methodology ..... 95
4. Analyzing Qualitative Data Using Grounded Theory Methodology ..... 97

### List of Abbreviations

CBEST	California Basic Educational Skills Test
CCTC	California Commission on Teacher Credentialing
CGT	Constructivist Grounded Theory
CoP	Communities of Practice
COVID-19	Coronavirus disease 2019
CRT	Critical Race Theory
EL	English learner
IEP	Individualized Education Plan
IHE	Institution of Higher Education
MKO	More Knowledgeable Other
TBMS	Teaching Beliefs and Mindset Survey
ZPD	Zone of Proximal Development

## Glossary

**Alternative Teacher Preparation Program** – A teacher preparation program that primarily serves candidates who are the teacher of record in a classroom while still completing their pedagogical preparation for the preliminary credential. In California, this term also refers to an intern program (California Commission on Teacher Credentialing [CCTC], 2016).

**California Teaching Performance Assessment** – The CCTC (2018) sponsors this teaching assessment to evaluate teacher candidates' performance against the Teaching Performance Expectations.

**Clinical Practice** – The experiences that a candidate has in school. Clinical practice allows the candidate to apply theories and concepts they are learning about in coursework (CCTC, 2016).

**Clinical Practice Placement** – The school or district in which a candidate conducts clinical practice (CCTC, 2016).

**Critical Race Theory (CRT)** – CRT is an intellectual movement and a framework of legal analysis according to which (a) race is a culturally invented category used to oppress people of color and (b) the law and legal institutions in the United States are inherently racist insofar as they function to create and maintain social, political, and economic inequalities between white and nonwhite people (Encyclopaedia Britannica, 2021).

**Culturally Responsive Teaching** – According to Gay (2018), “Using the cultural knowledge, prior experiences, frames of reference, and performance styles of ethnically diverse students to make learning encounters more relevant to and effective for them” (p. 31).

**District Intern Program** – An educator preparation program approved by the commission that is developed and implemented by a school district or county office of education (CCTC, 2016).

**Field Work** – Field work refers to student teaching, internships, and/or clinical practice that provide candidates with an intensive and extensive culminating activity. Synonymous with clinical practice (CCTC, 2016).

**Institution of Higher Education (IHE)** – An IHE is a college or university (CCTC, 2016).

**Intern Credentials** – Teaching intern credentials are issued to participating candidates to serve as the teacher of record while still completing pedagogical preparation for the preliminary credential (CCTC, 2016).

**Intern Program** – A teacher preparation program offering an alternative route to earning a preliminary teaching credential in which participating candidates serve as the teacher of record while still completing pedagogical preparation for the preliminary credential (CCTC, 2016).

**Intern Teacher** – A teacher of record who holds a district or university intern credential but who is still completing pedagogical preparation for the preliminary teaching credential (CCTC, 2016).

**Master Teacher** – The cooperating teacher whose classroom the candidate is assigned to while completing clinical practice and the independent student teaching and who models teaching practices, helps, and guides the candidate in learning to teach (CCTC, 2016).

**Pathway** – Pathway describes how a candidate will complete the required clinical practice (CCTC, 2016).

**Preliminary Credential** – A preliminary credential is a teaching or services credential that is valid for 5 years (CCTC, 2016).

**Preparation Pathway** – The different pathway options that a candidate can enroll in such as traditional or intern (CCTC, 2016).

**Preparation Pathway-Intern** – The candidate is the teacher of record while completing the preparation program (CCTC, 2016).

**Preparation Pathway-Traditional** – A student teaching model where the candidate works with a master teacher learning how to teach (CCTC, 2016).

**Preparation Program** – The set of courses and assignments, clinical practice, and assessments that comprise the preparation provided to a candidate by a commission-approved educator preparation entity (CCTC, 2016).

**Site-Based Supervisor** – The individual from the employing district who observes, visits, counsels, and/or guides candidates during clinical practice. Synonymous with peer mentor (CCTC, 2016).

**Student Teaching** – A program pathway where a candidate is assigned to a master teacher's classroom for observation, individual tutoring, small group instruction, remediation, or extension teaching, through whole class instruction (CCTC, 2016). Student teachers do not earn a salary while they are completing their credential program.

**Teacher Candidate** – A student who is enrolled in a teacher preparation program (CCTC, 2016).

**Teacher Preparation Program** – The organized commission-approved set of courses and assignments, clinical practice, and assessments that comprise the preparation provided to a candidate for a preliminary teaching credential by an entity approved by the commission to offer educator preparation (CCTC, 2016).

**Teacher Residency** – Clinical experience developed between a school district and an institution of higher education (IHE). Residency means the candidate is in the classroom with a mentor teacher at least 50% of the time across a minimum of 1 full school year. Residency programs usually offer candidates financial support including but not limited to, a living stipend, health benefits, and tuition remission, and often results in an employment offer in the district in which

the residency was completed (Guha et al., 2017). Resident teachers do not earn a salary while they are completing their credential program.

**Traditional Teacher Preparation Program** – A teacher preparation program that primarily serves undergraduate students without prior teaching or work experience and leads at least to a bachelor's degree (CCTC, 2016).

**Type of Preparation** – Type of preparation is the grouping of similar types of educator preparation programs (CCTC, 2016).

**University Supervisor** – The individual from the preparation program who observes, visits, counsels, and/or guides candidates during clinical practice (CCTC, 2016).

## CHAPTER 1: INTRODUCTION

It is the end of the first quarter and an English teacher at an urban middle school has 160 final essay assignments to read, grade, and record for report cards. Parent–teacher conferences are scheduled for these next 2 weeks, which require his contractual time outside of teaching to be used for these meetings. Hosting parent–teacher conferences requires a high level of time management and preparation to effectively present students’ progress to their families. Being bilingual in Spanish, he does not have to worry about a translator but will need to navigate between two languages as he presents academic data and student work samples to families who do not speak English. His day does not end after teacher–parent conferences. He has an evening course to attend in his teacher intern program at the local college. For that course, he has a final written assignment to submit and a culminating project to present. He is anxious, as he has prioritized preparing for parent–teacher conferences and grading final essays over completing his course assignments. Aware of how ill-prepared he is, this level of stress and embarrassment is affecting his physical and mental health as his stomach begins to ache and his ability to focus is clouded by thoughts of doubt and anxiety. Instead of being mindfully present during course discussion, his mind wanders as he realizes he has not submitted his lesson plan to his clinical practice supervisor, who is scheduled to come and observe his lesson tomorrow during third period. He quickly begins to email his clinical practice supervisor as his course instructor calls on him to present his project. He is not ready and is feeling defeated. These are the days in which he feels he should quit, as he is already failing at juggling both his personal and professional obligations.

Unfortunately, this vignette captures an experience representative of teacher candidates in alternative teacher preparation programs, also referred to as intern programs, in California. Teachers in intern programs serve as teachers of record while simultaneously completing credentialing coursework. With the pressures of both teaching and learning, intern teachers often find themselves overwhelmed, under extreme stress, and have difficulty balancing their professional and personal lives.

### **Background**

California K–12 public school teachers have become less experienced over the past 30 years, as a large generation of teachers are retiring (Redding & Nguyen, 2021). Baby boomers who have selected teaching as their career are retiring at a faster rate than teacher preparation programs can replace. New teachers are becoming the larger share of the teaching profession, which means California’s school systems are struggling with recruitment and retention of new teachers. Teacher demand is outpacing the current teacher supply chain. Factors such as student enrollment, class size, and teacher attrition drive teacher demand; while economic factors influence teacher supply (Carver-Thomas & Darling-Hammond, 2019).

### **Factors Driving Teacher Demand**

Factors affecting teacher demand in California include student enrollment, class size, and teacher attrition (Podolsky et al., 2016). School districts consider these factors when calculating the number of teachers needed to staff classrooms. According to California’s Department of Finance Public K–12 Graded 2021 Enrollment Projections Table (State of California, 2022), there are 10 counties projected to have an increase in student enrollment of at least 5% over the next 10 years. These counties will need to prepare to serve more students within their regions. An increase in student enrollment means additional classes and teachers. Depending on the

counties' teacher recruitment efforts, school districts may have difficulty staffing their classrooms.

California also has large class sizes in comparison to the nation, averaging a 24:1 student–teacher ratio. During the Great Recession in 2007–2009, teachers with the least amount of teaching experience were laid off as a reduction in force effort. School districts decreased their teaching staff to save costs, causing class sizes to increase. As districts transition to prerecession ratios, they struggle to rehire laid off teachers as many of them have pursued other means of income.

Higher than usual rates of teacher attrition exacerbate the demands put upon the teaching profession. The 2019 Learning Policy Institute's interactive map showed 54% of California teachers were of retirement age. A 2016 study by Fong et al. found 25% of California's teachers in 2013–2014 will be retiring between 2014–2024. Additionally, the effects of the Coronavirus disease 2019 (COVID-19) global pandemic contributed to higher-than-usual rates of attrition among teachers from 2019–2022. The increase in the state's K–12 student enrollment, class size reduction efforts, and high teacher attrition rates are demand factors contributing to California's teacher shortage. Unfortunately, the increased demand for teachers is occurring during a time when teacher supply is at an all-time, 12-year low (Podolsky et al., 2016).

### **Factors Influencing Teacher Supply**

Teacher supply in California is influenced by the economy, recruitment efforts, and barriers to entering teacher preparation programs. The staffing trends in education are reflected in the economic trends of the state. During upturns in the economy, school districts maintain and staff average class sizes. When there are downturns, school districts perform reduction in force measures to maintain economic solvency. This results in a reduction in staff, which includes

laying off teachers with the least district seniority. As the economy recovers, school districts recover as well. However, rehiring or replacing displaced teachers is more difficult with a decrease in teacher preparation program enrollments (Carver-Thomas, 2018).

Recruitment efforts are a priority for teacher preparation programs, especially during a time of declining enrollment. The 2016 Learning Policy Institute report, based on research conducted by Podolsky et al. (2016), found enrollment in teacher preparation programs has declined since the early 2000s, declining 76% from 2001 to 2014. Simultaneously, the number of preliminary teaching credentials granted over the same period decreased by 58%. In 2012–2013, the number of teacher hires surpassed the number of preliminary teaching credentials granted. Since 2013, there have been more teachers hired than those earning a new preliminary teaching credential. Recruitment efforts include nontraditional strategies and resources. Seeking grants that specifically target the recruitment of racially underrepresented candidates, grow-your-own programs, teacher residency labs, and high school partnership pathways are a few ways teacher preparation programs are mitigating the teacher shortage (Carver-Thomas, 2018).

Contributing to the decline in enrollment are preentrance assessments, licensure requirements, and lack of financial support. Before entering a teacher credentialing program, candidates must pass their basic skills requirement and meet subject matter competency in the credential area they are pursuing. Peebles's (2021) article stated that about two thirds of aspiring teachers pass their preentrance assessments on the first try. Additionally, Taylor and Mendoza (2021) found that there was a gap between the passage rates of Whites and marginalized groups. Preentrance assessments may be a barrier to enrolling into a teacher preparation program, especially for marginalized groups.

When candidates are accepted into a teacher preparation program, there are additional licensure requirements to complete prior to earning their preliminary teaching credential (Goldhaber & Holden, 2021). Along with attending credentialing courses, teacher candidates are to complete Teaching Performance Assessments (i.e., California Teaching Performance Assessment, Educative Teaching Performance Assessment, or Fresno Assessment of Student Teachers). Depending on the type of credential the candidate is pursuing, additional competency assessments may be required. The cost of these assessments is incurred by the teacher candidates. For those with multiple assessments, or having difficulty passing the assessments, this cost multiplies creating a financial burden for teacher candidates (Hood et al., 2022). The rising cost of teacher preparation programs, preentrance assessments, and licensure requirements compound the supply chain issue and contributes to the teacher shortage in California.

With such a growing need for teachers, teacher preparation programs are struggling to keep up with the demand of preparing teachers for credentialing using the traditional pathway of student teaching. To mitigate the teacher shortage in California, alternative certification continues to be a popular option.

### **Problem Statement**

According to the research Ong et al. (2021) conducted for their California Teacher Education Research and Improvement Network policy brief, initial findings revealed differences in selecting credential licensure routes by race/ethnicity. New teachers who identified as Hispanic or Black had a higher tendency in selecting an alternative pathway to teaching than White, with 33% Hispanic and 45% Black teachers starting off their first job as interns (Ong et al., 2021). An alternative pathway to teaching is also the route that has the financial benefit of

earning a salary while teaching, which is attractive to candidates who financially cannot afford to attend teacher preparation programs as full-time students.

According to Redding and Nguyen's (2020) research, new teachers are more likely to begin their careers in underserved schools with high percentages of racial/ethnic groups. Tenured, more experienced teachers are more likely to transfer out of schools deemed to have difficult working conditions. These conditions are characterized by schools that "enroll children from low-income families and traditionally underserved racial/ethnic groups" (Redding & Nguyen, 2020, p. 5). Tenured teachers transfer to more affluent schools using seniority-based practices, leaving vacancies at hard-to-staff schools. When districts struggle to recruit and retain experienced teachers at hard-to-staff schools, they hire underprepared teachers (on emergency permits or intern credentials) to fill anticipated and acute staffing needs.

Inexperienced teachers are more likely to be placed in hard-to-fill content areas, such as math, science, and special education, which exacerbates their initial teaching experiences as teachers of record (Carver-Thomas & Darling-Hammond, 2019). For new teachers in their intern credential program, these factors compound the stress of attending coursework while managing their experience as a novice in the classroom. Without proper mentoring and support in these placements, teachers of color may perceive themselves as feeling less successful in the classroom (Darling-Hammond et al., 2016). Investigating the types of support teachers of color need in successfully completing their intern program is the focus of this research study.

### **Purpose Statement**

The purpose of this study was to examine the level of perceived preparedness of teacher candidates of color in their intern program. Using a mixed methods approach, quantitative and qualitative data were collected and analyzed. For the quantitative data collection and analysis,

the researcher employed a descriptive research design regarding teacher candidates' self-efficacy. Quantitative data collection and analysis were in the form of a cross-sectional survey design, collecting teacher candidates' 1st year experiences regarding the level of support they received and additionally needed to feel better prepared for teaching. Qualitative data collection and analysis were conducted through informal, semistructured interviews with those who participated in the survey.

### **Research Questions**

1. What is the level of perceived preparedness of teacher candidates of color in their teacher intern preparation program? (Quantitative)
2. What support do teacher candidates of color perceive they need while in their intern program to increase their level of preparedness? (Qualitative)

### **Theoretical Framework**

The theoretical frameworks that guided this study were constructivism and critical race theory (CRT). Constructivist theories from Vygotsky (1978), Bandura (1997), and Kolb (1984), along with CRT are further explored in Chapter 2. Constructivism supports how novice teachers of color coconstruct their learning in teacher preparation programs. CRT is used to analyze social inequity that is covertly demonstrated through racist practices with academic institutions (Ladson-Billings & Tate, 1995). CRT provides the educational framework of the important role teachers of color have in educating diverse students using culturally responsive teaching. Through a CRT lens, the researcher used this theory to bring attention to the effects of racism affecting teacher candidates of color. Using constructivism and CRT theoretical frameworks supported the methodology of a mixed methods approach to this research study.

## **Methodology**

Explanatory sequential design was used for this mixed method study. This design initiates the study by the collection and analysis of quantitative data, which then leads to qualitative data collection and analysis. According to Creswell and Guetterman (2019), “In this way, the researcher follows up on quantitative findings with qualitative explorations” (p. 569). This study used quantitative research through archival data collected from a cross-sectional survey and qualitative research through interviews as the mixed methods approach.

### **Quantitative Research**

The quantitative research method used archival data from a cross-sectional survey design. This survey design collected attitudes and practices regarding self-efficacy and culturally responsive teaching practices as self-reported by respondents. The results of the survey were used to identify areas in which teachers of color need additional support within the scope of their intern program.

Quantitative research included collecting demographic data regarding program pathways and race. Quantitative data were collected from the Teaching Beliefs and Mindset Survey (TBMS), which is administered to 1st year teaching candidates in October and May of each year. The TBMS is a survey that includes the short forms of the Teachers’ Sense of Self-Efficacy Scale (Tschannen-Moran & Woolfolk Hoy, 2001) and the Culturally Responsive Teaching Self-Efficacy Scale (Siawatu, 2007). Descriptive analysis measuring central tendencies was conducted to determine the perceived level of preparedness of teacher intern candidates of color along these scales. Disaggregated quantitative data were used to identify the potential participants for the qualitative interview portion of this study.

## **Qualitative Research**

According to Mackenzie and Knipe (2006), “The constructivist paradigm traditionally follows qualitative research methods, although quantitative methods may also be used in support of qualitative data” (p. 7). Constructivist researchers use participants’ stories for inductive research. This type of research tends to be interview-based and relies on an interpretivist framework. Conducting interviews provided contextual knowledge regarding candidates’ experiences within their respective teacher preparation programs. The qualitative research method solicited voluntary participation in an informal, semistructured interview.

The purpose of the interviews was to authentically capture the participants’ experiences within the intern program. Participants were recorded with their prior knowledge and permission. Questions were descriptive, grand tour, task-related, and structural in nature. Interviews were recorded and transcribed using Zoom, a videoconferencing computer application. Re-presentation of these interviews was in the form of fieldnotes, with approval by the participants.

### **Significance of the Study**

The teacher shortage is greatly affecting school districts, creating equity gaps in students’ access to quality education. According to Kaput (2019), “Nationally, 19% of teachers of color move schools or leave the profession annually, as compared to 15% of white teachers” (p. 1). In California, a 2019 Learning Policy Institute report stated that 9% of public-school teachers left the profession, with an additional 3% of public-school teachers moving to different schools and/or districts. In total, the state experienced a 12% attrition rate that negatively impacted student achievement efforts.

When considering how to meet California's need for teachers to reflect the student population in which it serves, one must take into consideration how to best prepare teacher candidates—regardless of the type of preparation program. The purpose of this study was to examine the level of perceived preparedness of teacher candidates of color in their intern program. The results of the survey can be used to identify areas in which teachers of color need additional support within the scope of their intern program. Interviews collected students' voice regarding their personal experiences as teachers of record while in the intern program. This provided supplemental qualitative information for the survey data collected. Knowledge gained from this research can benefit institutions of higher education and county offices of education that provide teacher preparation programs, as well as policy makers that describe program requirements. Through this study, insights into the applicability of the findings for future research were gained and solutions to the critical need of preparing large numbers of teachers who represent the diversity of California K–12 students are presented.

### **Delimitations**

The research for this study focused on summarizing the level of preparedness of teacher candidates of color within an intern teacher preparation program. The research focused on identified ethnic groups, as quantified by demographic data with numerical significance. Thus, not all existing ethnic groups were included in the research. The sample size of the study was the number of 1st year interns who identified as a race other than White. This study sample focused on and was limited to intern teachers within the school districts represented in one California county in which the teacher preparation program is located. This research was further delimited by intern teachers within one large intern teacher preparation program.

## Chapter Summary

This chapter discussed the increasing diversity of students of color in the California school system and the disparity in comparison to the number of teachers of color. Along with the teacher shortage, California's alternative teacher preparation programs are placing interns in vacant positions that are often difficult placements for even the most experienced teachers. Compounded with the high demands of the profession, inadequate support, and pressures of coursework, these factors lead to a negative effect on the retention of teachers of color in the teaching profession (Carver-Thomas et al., 2020; Cummins, 2020; DiNapoli, 2022; Nguyen & Gold, 2020). This research focused on the extent intern teachers are being prepared for the teacher workforce and what districts and institutions of higher education can do to bridge the gaps in support for teachers of color.

The next chapter is a review of literature related to the need for this study. The literature review addresses the support gap that exists in supporting teacher interns through the analysis of how this support gap affects teachers of color. The following chapter also discusses how alternative teacher preparation programs are diversifying the teacher workforce to close the diversity gap between teachers of color in comparison to students of color in California.

## CHAPTER 2: REVIEW OF LITERATURE

Racial and ethnic diversity is growing in California, especially in X County (pseudonym), which is primarily agricultural in industry and draws a high number of migrant families into the region. However, the teacher workforce does not reflect the growing diversity of the county and state. The student diversity rate is more than double the teacher diversity rate in the California education system (California Department of Education, 2019). From 1993 to 2023, there has been a steady increase in teacher diversity, with some racial and ethnic groups showing more growth than others. But the growth in teacher diversity does not match the growth rate of student diversity. Considering the teacher shortage, districts and institutions of higher education are working to mitigate the issue. Alternative certification programs provide expeditious solutions to placing new teachers into classrooms. However, there is a disparity in which teachers of color are being hired to fill hard-to-place, hard-to-fill positions—which affects both their level of preparedness and self-efficacy. Understanding the teacher preparation model that increases teacher diversity and addresses equity gaps in candidates’ level of preparedness benefits public school students.

### **Background**

Since the early 1990s, K–12 public school teachers have become less and less experienced. With a generation of baby boomers gradually retiring and a decrease in teacher preparation program enrollments, new teachers are becoming the larger share of the teacher workforce. According to Redding and Nguyen (2021), “In 2007, first-year teachers became the largest cohort in the profession, outnumbering those who’d been teaching for any number of years” (p. 8). These factors influence the long-term supply and demand of teachers in California.

## **Factors Driving Teacher Demand**

In California, factors affecting demand include student enrollment, class size, and teacher attrition (Podolsky et al., 2016). School districts consider these factors when calculating the number of teachers needed to staff classrooms. California has 58 counties with demographic and geographic differences. Demographically, California is the most diverse state, ranking first in cultural diversity and linguistic diversity, and second in racial/ethnic diversity behind Hawaii (McCann, 2022). Geographically, California has the greatest variety of regional landscapes, climate zones, and flora and fauna in North America (Pennybaker, 2019). There are metropolitan areas containing urban and inner-city school districts, along with agricultural areas that are more rural or suburban. Depending on where school districts are located within California, factors such as student enrollment, class size, and teacher attrition may vary based on these demographic and geographic factors. An intern teacher preparation program located in one California county (i.e., X County) was used for this study. The specific county name was not used to protect the anonymity of the intern teacher preparation program and its students.

### **Student Enrollment**

X County is one of 58 counties in California. According to the most recent U.S. Census data (available from World Population Review, n.d.), it is the 16th most populous county in California, with a population of 791,119 and an annual growth rate of 1.26%. There are eight cities in X County. Within the county, there are 14 school districts and 239 schools, serving approximately 144,000 students (X County Schools, 2020). Of the 152,350 K–12 public school students in X County, 82.7% identified as students of color, with Latinx students composing over 50% of this total.

According to California’s Department of Finance Public 2021 K–12 Graded Enrollment Projections Table (State of California, 2022), 10 counties are projected to have an increase in student enrollment of at least 5% over the next 10 years. X County, in which this teacher preparation program is located, is anticipated to have the largest numeric growth in student enrollment compared to the rest of the counties in California (see Table 1). The teacher shortage will be further exacerbated with such a large influx of K–12 students in X county.

**Table 1**

*Projected Public K–12 Graded Enrollment, X County*

Year	% of state’s enrollment	Numeric change	% change
2021–2022	2.6	1,843	1.22
2030–2031	2.9	6,069	4.01

*Note.* This data are based on tables provided by the State of California (2022), which shows X County will have the highest increase in student enrollment within the next decade.

**Class Size**

California has the largest student–teacher ratio in the nation. According to Carver-Thomas et al. (2020), “While the national [student]-teacher ratio averaged 16:1, California’s led the nation at 24:1, fully 50% higher than the national norm” (p. 8). During the Great Recession from 2007–2009, state and federal funding were affected and class sizes increased to 30–40 students in classrooms as districts laid off teachers (Aragon, 2016). As districts returned to prerecession ratios, “California districts would [have needed] to hire 60,000 teachers – more than three times the number actually hired” (Darling-Hammond et al., 2016, p. 2). Hiring to attain prerecession ratios contributes to the need for more teachers.

## **Teacher Attrition**

Teacher attrition is defined as the rate at which teachers leave the profession (Steinke & Bryan, 2013) and a component of teacher turnover, which describes changes in teacher status from year to year (Croasmun et al., 1999). Teacher turnover may include teachers exiting the profession but may also include teachers who change fields or schools. Two areas to explore contributing to teacher attrition are retirements and the effects of the COVID-19 global pandemic on the teaching profession.

### ***Retirement***

According to the Learning Policy Institute's (2019) interactive map, 54% of the teaching force are aged 50 years and older. This percentage is higher than 5 years prior, 2014–2015, in which one third of the teaching force were of retirement age, an average 1 in 10 California teachers nearing retirement. To compound accurate projections of these numbers, teachers are working longer into their 60s.

Projected retirement rates also vary by county, from 19%–61%, which means California will face a variety of staffing projections based on the rate in which county retirements occur (Fong et al., 2016). This study also found a quarter of California teachers who were teaching in 2013–2014 are projected to retire within the decade between 2014–2024. The counties' projected retirements are further identified into quartiles, reflecting the percentage of retirements for counties.

- Quartile 1: 19.0%–23.0% projected retirements
- Quartile 2: 23.1%–27.1% projected retirements
- Quartile 3: 27.1%–36.1% projected retirements
- Quartile 4: 36.3%–60.5% projected retirements

In X County, 1,864 teachers who were teaching in 2013–2014 are projected to retire through 2023–2024, which is 28.4% of its teaching force. Table 2 illustrates X County data for retirements by teaching fields and ranks within Quartile 3 of projected retirements for the state. Currently, these projections are fairly accurate, if not under projected, based on the local and state demands for teachers in classrooms (Fong et al., 2016).

**Table 2**

*X County Teachers Who Were Teaching in 2013–2014 and Who Are Projected to Retire Over 2014–2023, by Teaching Field*

Teaching area	% of teachers projected to retire	County rank by % of teachers projected to retire	Number of teachers projected to retire	County rank by number of teachers projected to retire
General education	28.2	26th	1,703	11th
Special education	29.7	23rd	175	9th
Elementary	28.8	29th	787	13th
Middle	27.9	22nd	390	12th
High school	26.6	24th	520	12th
Math	24.4	30th	162	13th
Science	25.8	33rd	132	13th
English language arts	27.9	21st	249	11th
History	25.1	30th	147	13th

*Note.* This table was created based on supplemental data tables from the research of Fong et al. (2016).

### ***COVID-19 Global Pandemic***

In March 2020, California public schools closed in response to the global pandemic caused by COVID-19. COVID-19 was defined by the World Health Organization (n.d.) as “an infectious disease caused by the SARS-CoV-2 virus” (para. 1). Within a couple of days of

World Health Organization declaring COVID-19 as a pandemic, the U.S. President declared a national emergency. In response, California was the first to issue a statewide stay-at-home order on March 19, 2020, mandating all residents to remain at home apart from essential work and prioritized emergency medical care.

Initially, this order was scheduled for 3 weeks. However, as COVID-19 cases continued to rise with uncertainties regarding its mitigation, public schools continued to be closed. Educational institutions across the nation were forced to pivot from in-person instruction to remote learning. School districts reorganized to ensure students were continuing their education by creating learning packets, providing online instruction options, and distributing much needed instructional technology and materials to students' families. In the meantime, teachers across the nation were recreating lessons to accommodate the remote learning options for their students. In the face of a pandemic, educators provided instruction to students away from their physical classrooms for over a year until districts gradually moved into hybrid classroom models, eventually easing back to in-person instruction in 2021 (Carver-Thomas et al., 2022).

Before the COVID-19 global pandemic, school districts were faced with teacher shortages due to barriers to entry into teacher preparation programs (Carver-Thomas et al., 2022). However, "many district leaders [were] worried about future shortages given the considerable uncertainty about the long-term impacts of the pandemic" (Carver-Thomas et al., 2022, p. 7). Teacher workload and burnout were among the major concerns district leaders have been contending with as they continued to see a higher level of resignations and retirements during the pandemic. The transition of shifting to an online teaching model tremendously increased the workload for teachers. Not only were lessons to be redesigned, the platform in which teachers used to teach introduced a steep learning curve (Carver-Thomas et al., 2022).

Teachers, regardless of their years of experience, had to collectively learn how to navigate a myriad of instructional online programs and apps to provide virtual instruction to their students. The increase in workload and new learning of virtual instruction were additional stressors to teachers, which negatively affected teachers' mental health. Managing these stressors over the duration of the pandemic has contributed to a growing number of retirements and resignations, aggravating an already dire teacher shortage. Under those conditions, retirements and resignations have been on the rise. According to a 2022 report written by Carver-Thomas et al., five of the districts that participated in their research noticed more teacher resignations and retirements in 2020 than 2 years ago. Factors contributing to these decisions included inability to manage and maintain changes, the increased workload, and the mental exhaustion related to pandemic related changes in instruction.

### **Factors Influencing Teacher Supply**

The teacher workforce has aligned with California's economic trends. In the late 1990s and early 2000s, the number of teachers grew due to the reduction in class sizes in K–3 classrooms (Podolsky et al., 2016). These numbers remained fairly steady until the Great Recession of 2008, in which districts experienced extended periods of budget reductions. With increasing budget deficits and spending cuts, districts were forced to increase class sizes again, creating a massive layoff of teachers from 2008–2012. According to Darling-Hammond et al. (2016), “By March 2012 . . . the teaching workforce in California had shrunk by 26,525 positions, or nearly 9%, through a combination of layoffs and attrition” (p. 5). Since 2013, as the economy recovered from the Great Recession, districts saw an increase in demand for teachers. With better economic conditions, school districts were able to reduce class sizes again. An

increase in the number of baby boomer-aged teachers retiring over these years contributed to this demand as well.

The Learning Policy Institute estimated a national shortage of 60,000 teachers during the 2015–2016 school year (Will, 2016). Shortages were more acute in the areas of special education, mathematics, and science (Aragon, 2016; Carver-Thomas, 2022; Will, 2016). In 2016, Grenot-Scheyer’s research portrayed a need to hire 21,500 teachers in California. However, credential programs in California had prepared 13,300 teacher candidates the previous year, falling short of the educational demands for teacher staffing.

Unfortunately, the increased demand for teachers has been occurring during a time when teacher supply has been at an all-time 12-year low (Darling-Hammond et al., 2016). In 2012–2013, the number of teacher hires surpassed the number of preliminary teaching credentials granted. Since 2013, there have been more teachers hired than those earning a new preliminary teaching credential. The 2016 Learning Policy Institute report, based on research conducted by Darling-Hammond et al. found enrollment in teacher preparation programs has declined since the early 2000s, declining 76% from 2001–2014. Simultaneously, the number of preliminary teaching credentials granted over the same period decreased 58%. In 2020–2021, the trend of declining enrollment in teacher preparation programs continued (Darling-Hammond et al., 2016). With such a growing need for teachers, teacher preparation programs are struggling to keep up with the demand of preparing teachers for credentialing using the traditional pathway of student teaching. To mitigate the teacher shortage in California, alternative certification continues to be a popular option.

## **Recruitment**

As California endures a teacher shortage, alternative teacher preparation programs have provided an efficient solution to placing teachers into vacant positions. Alternative teacher preparation programs, also referred to as teacher intern programs in California, offer an alternative route to earning a preliminary teaching credential in which participating candidates serve as teacher of record while still completing pedagogical preparation for a preliminary teaching credential (California Commission on Teacher Credentialing [CCTC], 2016). The intern pathway is an alternative to traditional certification in which interns only need to have a 4-year degree and complete preentrance assessments to enter the profession as teacher of record. According to Rowland Woods (2016), “Alternative programs allow individuals who already obtained a bachelor’s degree to bypass the time and expense involved in attaining a teaching degree” (p. 2). However, there are teacher pipeline problems due to preentrance examinations and inadequate financial support for potential candidates interested in completing teacher preparation.

### ***Preentrance and Teacher Licensure Examinations***

The CCTC (2016) requires teacher candidates to pass a series of examinations to earn their preliminary teaching credentials. Before entering a teacher credentialing program, basic skills requirement and subject matter competency need to be met and submitted. Teacher candidates can satisfy their basic skills requirement in the form of the California Basic Educational Skills Test (CBEST) or coursework equivalencies, and subject matter competency through the California Subject Examinations for Teachers or coursework equivalencies. For intern teachers, along with these two requirements, they will also need to complete preservice coursework in preparation of becoming teacher of record to establish their intern-eligibility status

with hiring districts. These requirements must be met prior to the start of their teacher preparation program.

According to research by Peebles (2021), CCTC cites that nearly half of aspiring teachers have trouble passing their credentialing assessments “with 66% passing the CBEST on the first attempt in 2019-2020 and 67% passing the CSET [California Subject Examinations for Teachers] on the first try” (para. 5). These passage rates increase to 83% and 81% respectively after multiple attempts (Lambert, 2021; Peebles, 2021). In the Annual Report on Passing Rates Between 2015–2020 (Taylor & Mendoza, 2021), there is nearly a 24% gap between CBEST passing rates of Whites (91.4%) and African Americans (67.8%). The gap between Whites and Latinx (74.4%) is 17%. These assessments become a barrier for prospective teacher candidates, especially for teacher candidates of color.

As candidates progress through their teacher preparation program, there are additional licensure examinations to complete prior to earning their preliminary teaching credential. Teacher candidates are to complete two cycles of the Teaching Performance Assessments (i.e., California Teaching Performance Assessment, Educative Teaching Performance Assessment, or Fresno Assessment of Student Teachers) and the Reading Instruction Competence Assessment. The cost of these assessments becomes a financial burden for teacher candidates. One district reported “at least 40% of those interested in teaching in California are waylaid by licensure testing” (Carver-Thomas, 2018, p. 11).

### ***Financial Implications***

Research has stated the cost of teacher preparation programs is another barrier in recruiting teachers of color (Carver-Thomas, 2018; Machado, 2013). Research by Reininger (2012) found teachers were more likely to live locally within the community, with 60% living

within 20 miles of where they attended high school. Additional research conducted by Ingersoll et al. (2019) found teachers of color were “overwhelmingly working in high-poverty, high-minority, urban communities” (p. 17). Teachers of color remain close to the communities in which they were raised, which tend to be in areas of high teacher demand. The cost of adding a teaching credential to their college degree has potential candidates considering ways to do so without increasing their financial burden with student loan debt. The teacher intern program is desirable to teacher candidates of color as they earn a salary as teachers of record. Having an income while pursuing their teaching credential allows them to be financially independent and pay for their teacher preparation program without incurring additional student loan debt (Nguyen & Gold, 2020).

Colleges and universities play an important role in increasing diversity in teacher preparation programs. With the increasing costs of tuition, recruitment of underrepresented ethnic groups should be strategized and prioritized. Offering financial aid, scholarships, grant opportunities, and other financial incentives provides more equitable access for all students to consider a traditional certification model (Kee, 2012). Programs offering the alternative certification route could prepare intern teachers to be better matched to the needs of school districts.

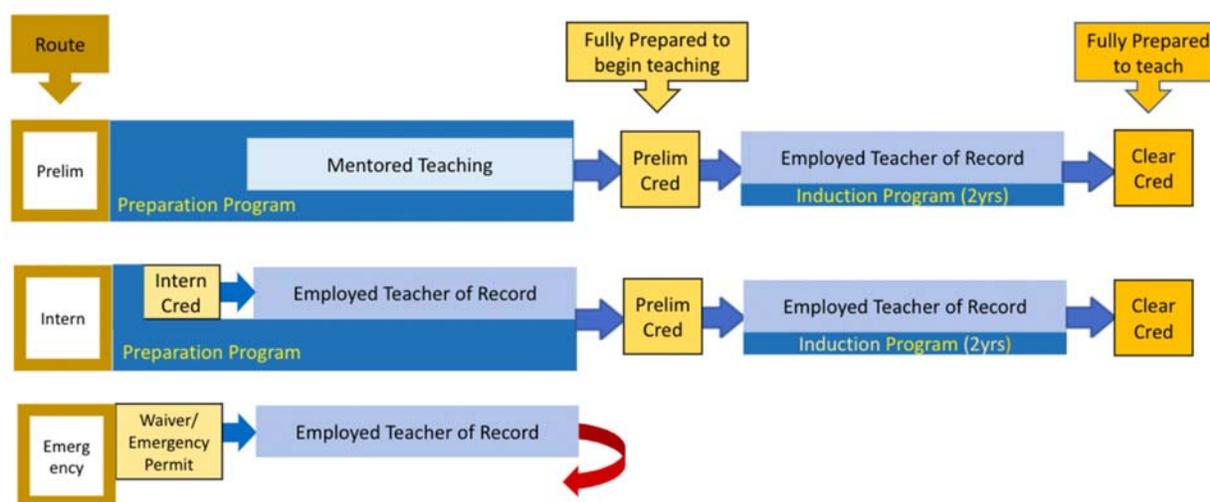
### **Teacher Preparation Programs and Their Role in Addressing Teacher Shortage**

To meet the need to hire more teachers and address the growing diversity of the state, there are issues that need to be considered and intentionally addressed. Factors to consider are types of preparation programs, their level of effectiveness in preparing teacher candidates, and collaborative efforts of both districts and institutions of higher education to increase teacher diversity. There are three main teaching routes to becoming the teacher of record: (a)

preliminary credential route (i.e., traditional pathway), (b) intern credential route (i.e., alternative pathway), and (c) waiver/emergency permit route. Figure 2 illustrates the licensure routes and the level of preparation needed to become a teacher of record. The figure also illustrates the pathways toward becoming fully credentialed in California.

**Figure 1**

*California Licensure Routes to Teacher of Record*



*Note.* This figure shows the pathways in which California teacher candidates may earn their status as teacher of record. Reprinted from *California Teacher Education Research and Improvement Network Policy Brief, Diversifying California's Teaching Workforce: How Teachers Enter the Classroom, Who They Serve, and If They Stay*, by Ong et al., 2021, California Teacher Education Research & Improvement Network (<https://cterin.ucop.edu/resources/>).

### **Preliminary Credential Route**

Traditional teacher preparation programs involve completing standards and requirements outlined by the CCTC, as well as clinical practice under the supervision of an expert teacher

(Tseng & Clark, 2016). Candidates in a traditional teacher preparation program participate in student teaching and are referred to as student-teachers. Student teaching is a program pathway where a candidate is assigned to an experienced teacher's classroom for observation, individual tutoring, small group instruction, remediation, or extension teaching, through whole class instruction (CCTC, 2016). Student teachers engage in 600 hours of mentored student teaching as part of their preparation in their traditional program. Teachers completing this pathway are considered fully prepared to begin teaching (Ong et al., 2021). Research by Darling-Hammond et al. (2002) concluded student-teachers felt their level of preparedness correlated with their self-efficacy, their responsibility for student learning, and their retention within the teaching profession. Additional research by Kee (2012) posited teachers who followed the traditional pathway perceived themselves as being better prepared than teachers who followed the alternative pathway.

### **Intern Credential Route**

An alternative pathway to student teaching is the intern pathway. Alternative teacher preparation programs serve candidates who are the teacher of record in a classroom while participating in coursework that leads to a preliminary credential (CCTC, 2016; Tseng & Clark, 2016). This type of program is also referred to as an intern program, and candidates enrolled are considered interns. Research states alternative teacher preparation programs diversify the teacher workforce more than traditional teacher preparation programs (Darling-Hammond et al., 2002). Data collected from Shaw's (2008) research indicated intern programs increase the number of teachers in hard-to-fill subject areas and/or in hard-to-staff schools, which helps to increase the diversity of the workforce. However, these types of placements create difficult working conditions even for experienced teachers. Yet, intern teachers are being placed in these

types of placements without the same mentorship as student teachers. As teachers of record, intern teachers are expected to provide quality instruction and maintain classroom management equivalent to their more experienced and better-prepared colleagues. Other researchers identified significant differences between traditional and alternatively prepared teachers in the areas of (a) short- and long-term lesson planning, (b) differentiating instruction, (c) inclusive education, (d) teaching English learners (ELs), (e) literacy, (f) critical thinking, and (g) assessments (Isaacs et al., 2007). Kee (2012) confirmed that teacher candidates who had fewer types of coursework and/or shorter clinical practice were less prepared than teacher candidates who participated in a traditional course of study. These findings concluded that teacher preparation programs need to ensure intern teachers are effectively prepared and supported.

### **Waiver/Emergency Permit Route**

The waiver/emergency permit route allows aspiring teachers to enter the educational workforce without enrolling in a teacher preparation program. Although there are four different teaching permits in California, aspiring teachers pursuing this route will apply for a Provisional Internship Permit or a Short-Term Staff Permit. By applying for either permit, aspiring teachers “address a school district’s ‘anticipated’ or ‘acute’ staffing need to fill a classroom immediately based on an unforeseen need” (Ong et al., 2021, p. 3). Once aspiring teachers exhaust the conditions of waiver/emergency teaching permits, they need to enroll in a teacher preparation program to continue teaching.

Regardless of the route for teacher preparation, there is a need to diversify the teacher workforce to better represent the student population in which they serve. Research has suggested that the learning increases for students of color taught by same-raced teachers who share their social identity (Eddy & Easton-Brooks, 2011; Lindsay & Hart, 2017; Ouazad, 2008). According

to Carver-Thomas (2018), “Teachers of color boost the academic performance of students of color, including improved reading and math test scores, improved graduation rates, and increases in aspirations to attend college” (p. 4). Students are 13% more likely to enroll in college if they have had a teacher of their own ethnicity by Grade 3 (Rosen, 2018).

### **Recruitment of Teachers of Color**

According to Rowland Woods (2016) at the time of her research, about 20% of new teachers entered through an alternative pathway. Intern programs directly fill the teaching workforce needs of their local districts, and as such, are less selective than traditional pathways. Strategizing how to select and place teacher candidates is a way to ensure hiring both effective and diverse teachers. A report highlighted in Carver-Thomas’s (2018) study expressed the importance of how “initiating hiring timelines earlier in the year resulted in more racially diverse teacher hires” (p. 26), contending that applicants of color were more likely to be available for hire earlier in the year. Additionally, the pressure of student loan debt on applicants of color may motivate them to secure a teaching job prior to being credentialed (Carver-Thomas, 2018). Securing a teaching job provides candidates with a livable wage, which allows them more financial freedom instead of going into financial debt.

Intern programs tend to attract a broader applicant pool, including more teachers of color and mid-career professionals interested in changing to a teaching career. According to Rowland Woods (2016), “By attracting a broader pool of applicants, alternative programs may not only increase the supply of teachers but contribute to the diversity of the teacher pool” (p. 3). Intern teachers also attract more ethnicities and male candidates who are likely to work in urban or high-needs schools (Rowland Woods, 2016).

Once hired, intern teachers are most often placed in hard-to-fill positions or hard-to-staff schools. Along with the high demands of their intern responsibilities are the pressures of attending coursework and participating in supervised clinical practice. Without adequate support and training, intern teachers of color may struggle to retain their careers in education.

Racial and ethnic diversity is growing in California at a much higher rate than that of its teacher workforce. The student diversity rate is more than double the teacher diversity rate in the education system (California Department of Education, 2019). Based on 2017–2018 data collected by the Learning Policy Institute (2019), out of 306,261 teachers in California, 10% are teachers who are in their 1st year of service to their district and 34% of these new hires are not fully credentialed. Teachers of color consist of 34% of the California teacher workforce (Learning Policy Institute, 2019), while students of color enrolled in the public-school system as of 2018 was 75.9%, showing a racial disparity of 41.9% (California Department of Education, 2019). In comparison, 20% of the teacher workforce nationwide is comprised of teachers of color (Carver-Thomas, 2018). Although California’s teacher diversity is better than the nation by 14%, the growth rate of teachers of color is much slower than the growth rate of students of color.

In 2021, Redding and Nguyen investigated changes in the characteristics of new teachers, comparing their previous research from 1988 to the most recent calculations in 2018 (see Table 3). Since 1988, there has not been much change in the gender balance among new teachers. However, there have been significant changes to the racial composition of new teachers entering the workforce. This finding suggested that “since 1988, new teachers have only become more likely to work with historically underserved students” (Redding & Nguyen, 2021, p. 10) and in

general, all public-school teachers regardless of level of experience now are more likely to work in more racially diverse schools.

**Table 3**

*Changes in the Characteristics of New Teachers*

Demographic characteristics	1988 (%)	2018 (%)
Female	77	77
White	87	73
Black	6	10
Hispanic	4	10
Other race	3	7
No certification	8	5
Alternatively certified	-	29

*Note.* Data from 1988 is drawn from Redding and Nguyen (2020). Data from 2018 is from the authors' calculations from the National Teacher and Principal Survey, National Center for Education Statistics, U.S. Department of Education (Redding & Nguyen, 2021).

Based on the research conducted by Ong et al. (2021), Black and Hispanic teachers were more likely to teach students who matched their race or ethnicity. Previous research (Carver-Thomas, 2018; Redding & Nguyen, 2021; Rosen, 2018) corroborated the importance of matched-race teachers to students of color, noting positive outcomes to student achievement and well-being. Egalite and Kisida (2016) posited that representation is important, in that students of color benefit from seeing same-raced teachers as role-models. This influence increases students' cultural value on educational success, maintains high expectations regarding student ability and behavior, and creates meaningful interpersonal connections (Egalite & Kisida, 2016).

### **Current Diversity of the Teacher Workforce**

Based on November 2019 data collected by the Learning Policy Institute, of the 306,261 teachers in California, 10% are teachers who are in their 1st year of service to their district. Of that 10%, one third have not met all California teacher certification requirements for at least one of the subjects they are authorized to teach. According to research Shaw (2008) conducted, approximately half of the teachers in alternative certification programs were underrepresented minorities in the teaching workforce. Teachers of color consisted of 34% of the California teacher workforce (Learning Policy Institute, 2019), while students of color enrolled in the public-school system as of 2018 was 75.9%, showing a racial disparity of 41.9% (California Department of Education, 2019). In comparison to the nation, 20% of the teacher workforce was comprised of teachers of color, increasing from 12% of the workforce 30 years ago (Carver-Thomas, 2018).

X County has 24% teachers of color, which is 5% fewer teachers of color than the state (Learning Policy Institute, 2019). With 76.7% of students of color enrolled in the county's public-school system, there is a racial disparity of 47.7% (California Department of Education, 2019). This county's statistics project an even greater diversity gap than the state.

### **Race and Ethnicity of Teachers and K–12 Students**

California Department of Education (2019) report showed Latinx students comprise of more than 50% of the students enrolled in the public-school system in both the state and X County. Based on the research of Carver-Thomas (2018), “the gap between the percentage of Latinx teachers and students is larger than any other racial or ethnic group” (p. 2). According to her 2014 study, more than 25% of students were Latinx, compared to 9% of Latinx teachers. Multiple sources contend Latinx teachers and students are the largest and growing at a faster rate

than any other racial or ethnic group. The population of Latinx teachers has increased by 245% and Latinx students have increased 159% over the past 30 years (Carver-Thomas, 2018).

Despite the growth in Latinx teachers and students, there is still a disparity in representation.

There is a need to diversify the teacher workforce to better represent the student population in which they serve. According to Ingersoll et al. (2019), there are three arguments regarding the benefits for increasing racial diversity in the teacher workforce: (a) demographic parity, (b) cultural synchronicity, and (c) addressing teacher shortages in disadvantaged schools. Demographic parity states that teachers of color are important role models for students of color and White students. Representation counts, so students who see their racial identities reflected in their teachers provide them with role models in schools. Cultural synchronicity states that students of color benefit from being taught by teachers of color because they will relate to one another based on similar life experiences and cultural backgrounds. In addressing teacher shortages in disadvantaged schools, teachers of color are more likely to be motivated by a “humanistic commitment to making a difference in the lives of [students at disadvantaged schools]” (Ingersoll et al., 2019, p. 3).

Schools serving predominantly students of color are often in low-income, urban, or inner-city areas, which tend to disproportionately suffer from teacher shortages. With more teachers of color being placed at these schools, their students benefit from demographic parity and cultural synchronicity. According to Carver-Thomas (2018), “Teachers of color boost the academic performance of students of color, including improved reading and math test scores, improved graduation rates, and increases in aspirations to attend college” (para. 5). Students are 13% more likely to enroll in college if they have had a teacher of their own ethnicity by Grade 3 (Rosen, 2018). These findings supported the need for both districts and teacher preparation programs to

work collaboratively to ensure alternatively credentialed teachers are effectively prepared and supported.

### **Disparity Between White and Ethnically Diverse Groups**

Despite the slight decline in a couple of racial or ethnic teacher groups, there has been evidence that showed new teachers entering the field are more diverse. According to Carver-Thomas (2018), “White teachers made up 90% of first-year teachers in 1987 but 75% of first-year teachers in 2015-16” (p. 3), with a decline of 15%. The statistically closest racial group to Latinx is White (Ed-Data, n.d.). However, with 23.2% of California students and 17.9% of X County students being of White race, there has been an overrepresentation of teachers to students in this racial group. Table 4 shows the disproportionality of student demographics to teacher demographics in X County and the critical need to have diverse teachers in this region.

**Table 4**

*Demographic Comparison Between Students and Teachers in X County, California*

Demographic area	Students (%)	Teachers (%)
American Indian or Alaska Native	0.7	0.7
Asian	11.5	6.2
Black or African American	7.7	3.3
Filipino	4.1	2.1
Latinx	52.8	14.6
Native Hawaiian or Pacific Islander	0.7	0.2
None reported	0.7	4.7
Two or more races	3.8	1.2
White	17.9	66.9

*Note.* Data for Table 4 originated from the 2018–2019 Ed-Data (n.d.) census day enrollment by ethnicity report for students and teachers by ethnicity report for teachers.

The racial change in the United States is reflected in the public school system. According to Easton-Brooks et al.'s (2018) research, the White student population declined from 59% to 50% in a span of a decade between 2003 through 2013. The same research also showed that less than 1% of the student population was White at schools that had at least 15% African American and Latinx students. The conclusions made regarding this finding suggested either White students leave the public school system to attend private school, which typically has a racially homogenous student population, or White families are moving to neighborhoods in which the schools are predominantly White (Easton-Brooks, 2021).

The challenge continues that while the demographics of the public-school system are evolving, there are still generational problems regarding schools with a higher number of students of color. The California Department of Education's (2019) findings showed students of color performing lower than their White counterparts, except for some Asian student populations. Based on the review of literature, hiring more diverse educators representing the students in whom they serve may be beneficial in closing this racially centered academic gap.

### **The Impact of Diverse Teachers and Student Representation**

Previous research demonstrated how student achievement significantly increased when students of color interacted with teachers of color (Easton-Brooks et al., 2018; Easton-Brooks, 2019, 2021; Eddy & Easton-Brooks, 2011). Studies also indicated that when taught by at least one matched-race teacher, reading (Easton-Brooks, 2019) and mathematics (Eddy & Easton-Brooks, 2011) scores of African American students increased. According to Easton-Brooks et al. (2018), "In addition, given the similarities in culture, teachers of color may have an understanding of the culture of students of color and be better able to bridge the gap between home and school cultures for these students" (p. 3). These research findings supported the need

to recruit and retain teachers of color, especially in schools with a high number of underrepresented student groups.

### **Teacher Preparation Programs' Role in Diversifying the Teacher Workforce**

When these statistics are considered, there is a need to diversify the teacher workforce to better represent the student population in which they serve. One area to consider addressing the diversity gap is through teacher preparation programs. In California, there are two delivery models to pursue a teaching credential: (a) a traditional postgraduate teacher preparation program and (b) an alternate route to a teaching credential (Darling-Hammond et al., 2002).

#### **Traditional Teacher Preparation Program**

Traditional teacher preparation programs involve completing standards and requirements outlined by the CCTC (n.d.), as well as clinical practice under the supervision of an experienced teacher (Tseng & Clark, 2016). Candidates in a traditional teacher preparation program typically participate in student teaching and are referred to as student-teachers. Researchers Darling-Hammond and Youngs (2002) conducted their study in response to the U.S. Secretary of Education's 2002 Annual Report on Teacher Quality. Proposition 4 of the annual report posited that alternative certification programs have academically stronger recruits, high rates of teacher retention, and produce more successful teachers. However, further statistical analysis of the data collected for the study found that 53% of teacher candidates in the largest intern program in California left their respective districts within the first 5 years. According to Darling-Hammond et al. (2002):

These less well-prepared entrants to teaching reported that they felt significantly less efficacious in their teaching and less satisfied with their training, less likely to stay in

teaching, and less likely to say they would come into teaching through the same pathway again. (p. 22)

Their study concluded that student-teachers felt their level of preparedness correlated with their self-efficacy, their responsibility for student learning, and their retention within the teaching profession.

Kee's (2012) research found teachers who followed the traditional pathway perceived themselves as being better prepared than teachers who followed the alternative pathway. Additionally, teachers who received training from traditional certification programs perceived themselves to be better prepared, but that varied across dimensions of teaching. Their level of preparedness correlated to their sense of self-efficacy, sense of responsibility for student learning, and their retention rate, compared to their counterparts who participated in alternative certification programs (Darling-Hammond et al., 2002). Podolsky et al. (2016) supported this claim, stating new teachers leave the profession at more than double the rate when they do not receive adequate training. Traditional programs tend to have higher retention rates; thus, reducing the future need for more teachers.

### **Alternative Teacher Preparation Program**

Alternative teacher preparation programs serve candidates who are the teacher of record in a classroom while participating in coursework that leads to a preliminary credential (Tseng & Clark, 2016). This type of program has also been referred to as an intern program, and candidates enrolled are considered interns. Although there is financial benefit to earning a teacher's salary as an intern, previous research has shown that this pathway is the most challenging (Darling-Hammond et al., 2002; Ong et al., 2021; Tseng & Clark, 2016). Data collected from Shaw's (2008) research indicated intern programs increase the number of teachers

in hard-to-fill subject areas and/or in hard-to-staff schools, which helps to increase the diversity of the workforce. However, these types of placements are difficult working conditions for teachers who are learning course content as they conduct clinical practice as teachers of record. Other researchers identified significant differences in short- and long-term lesson planning, differentiating instruction, inclusive education, teaching ELs, literacy, critical thinking, and assessments between traditional and alternatively prepared teachers (Darling-Hammond et al., 2016; Isaacs et al., 2007). Kee (2012) confirmed that teacher candidates who had less coursework and/or shorter clinical practice were less prepared than teacher candidates who participated in a traditional course of study.

Based on previous research, candidates from traditional certification teacher preparation programs felt better prepared for the workforce than candidates from alternative teacher preparation programs (Beare et al., 2012; Kee, 2012; Reichwein Zientek, 2006). Additional findings concluded that traditionally prepared teachers felt their level of preparedness correlated with their self-efficacy, their responsibility for student learning, and their retention within the teaching profession (Darling-Hammond et al., 2002). Past studies on teacher preparation programs and their effect on diversifying the workforce showed that alternative certification programs provide more opportunities for minorities to complete the requirements to obtain a credential (Heineke et al., 2010; Schmitz et al., 2013). Retention rates for intern programs are lower than those of traditional programs, due to the lack of robust support and consistent mentoring received in comparison to student teaching (Podolsky et al., 2016; Rowland Woods, 2016). Intern programs quickly fill teacher vacancies and assist in meeting the demands of the workforce. However, without adequate support, the intern pathway may not meet the long-term demands if there is a high rate of attrition, exacerbating the teacher supply chain.

## Theoretical Frameworks

There are several theories regarding the way people learn. In terms of preparing teachers for the workforce, teacher preparation programs tend to be constructivist in nature. The learner brings prior experiences to current situations, with consideration of social and cultural factors. Each theorist supports how knowledge is acquired and processed by teacher candidates.

### Vygotsky and Social Constructivism

Founded on Piaget's theory of constructivism, Lev Vygotsky's (1978) main application to constructivism comes from his theories about how individuals' experiences are socially constructed and mediated by others through interactions. According to Amineh and Asl (2015), "Vygotsky states that the process of knowing is affected by other people and is mediated by community and culture" (p. 1). According to Vygotsky's theory, there are three major tenets to social constructivism.

The first tenet is how social interaction plays a fundamental role in the process of cognitive development. Vygotsky (1978) believed social learning precedes development. In teacher preparation programs, social interaction comes in the form of engaging in collaboration with other teachers and their district mentor or program supervisor. Collaborative discourse regarding best teaching practices, implementing new strategies, and solving day-to-day problems provide the social interaction teachers need to process their learning and deepen their understanding.

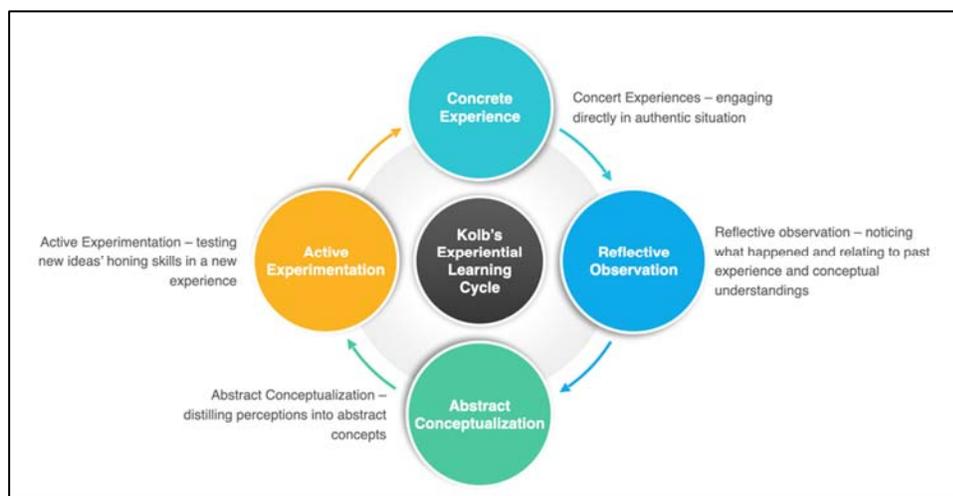
The more knowledgeable other (MKO) is the second tenet that refers to anyone who has a higher level of expertise than the learner (Vygotsky, 1978). For teacher preparation programs, the MKO is typically a program coordinator, instructor, university supervisor, site-based supervisor, master teacher, or peer mentor. An MKO can also be a fellow teacher with more

experiences or cultural considerations, which makes the MKO knowledgeable about the specific content, concept, or situation. The role of the MKO is to impart knowledge to the teacher, based on their knowledge and experiences related to the teacher's learning.

The final tenet is the zone of proximal development (ZPD). The ZPD is the distance between a learner's ability to perform a task with assistance and their ability to solve a problem or do a task independently (Vygotsky, 1978). The goal is to provide instruction at their "instructional level" rather than their "frustration level." When given the appropriate level of guidance and assistance, the learner will be able to increase the level of their ability to do tasks independently. Within teacher preparation pathways, support provided to teachers within their ZPD occurs during their supervised clinical practice. Assessing and developing the teacher's knowledge through targeted observation feedback and reflective conversation during supervised clinical practice incorporates the tenets of Vygotsky's (1978) social constructivist theory.

### **Kolb and Experiential Learning Cycle**

In conjunction with the constructivist theories of developing new teachers, applying experiential learning for ongoing professional development and growth completes the teacher preparation model. Experiential learning is about individuals experiencing events and tasks for themselves and learning from them (Kolb, 1984). This theory is a four-stage model known as the experiential learning cycle, which is a way for individuals to learn and understand their experience through reflection (Kolb, 1984). As a result, one can continually reflect and modify their learning to improve and refine their practice. The experiential learning cycle is continuous, with no limitations on the number of cycles (see Figure 2).

**Figure 2***Kolb's Experiential Learning Cycle*

*Note.* This figure shows the four stages of the experiential learning cycle with a brief description of each stage. From “Kolb’s Experiential Learning Cycle PowerPoint” by SlideSalad at <https://www.slidesalad.com/>.

The first stage is concrete experience, in which one carries out the task. This is considered the “doing” stage. The practice of observation and reflection is the second stage, which involves stepping back and conducting a self-review of how the task was accomplished. This is the “thinking” stage. Abstract conceptualization involves interpreting and analyzing the task. This is the “planning” stage on how to do it differently and better next time. Active experimentation is taking the new learning and predicting what the intended outcome may be. This is the “redoing” stage based upon the experience and reflection (Kolb, 1984).

### **Bandura and Social Cognitive Theory**

Another theory related to supporting teachers through teacher preparation is Bandura’s (1997) social cognitive theory (SCT) and the idea of self-efficacy. Self-efficacy refers to the

belief one has regarding their capability to successfully execute a task (Bandura, 1997). Based on SCT, beliefs develop in response to four sources: experience, vicarious experience, verbal persuasion, and physiological state (Bandura, 1997). Experience is the individual's prior encounters with the task and whether they perceived themselves as being confident or successful. Vicarious experience is observing another individual to learn new skills or knowledge. Verbal persuasion is where individuals are told how to do a task. The physiological state is how one interprets their understanding of the task and if there is either stress or confusion (Bandura, 1997).

Applying Bandura's (1997) theory, when preparing teacher candidates for the workforce, the ideal model would be to provide training and mentorship in developing their instructional practices and self-efficacy. It is recommended to improve training for all new teachers and to focus on intern teachers' mentoring support to increase their level of confidence similar to their traditionally prepared colleagues (Isaacs et al., 2007; Kee, 2012). According to the review of literature by Emerson et al. (2018), they suggested rigorous support and training in differentiated instruction and universal design for learning as evidence-based approaches to developing teachers' competencies. Scaffolded and structured support in developing new teachers' skills and competencies is considered essential in effectively preparing teacher candidates. Based on previous research, student-teachers felt better prepared for teaching than intern teachers (Beare et al., 2012; Kee, 2012; Reichwein Zientek, 2006). Additional findings concluded that student-teachers felt their level of preparedness correlated with their self-efficacy (Darling-Hammond et al., 2002).

Taking all three constructivist theories into consideration, there is a solid foundation in developing appropriate support for teacher candidates—regardless of preparation pathway.

When preparing teachers of color for the workforce, it is important to consider the theories within this framework to provide explicit support in their professional development as a teacher.

### **Critical Race Theory**

Critical race theory (CRT) is the study and transformation of the relationship among race, racism, and power (Delgado et al., 2021). According to Delgado et al. (2021), CRT “questions the very foundations of the liberal order, including equality theory, legal reasoning, Enlightenment rationalism, and neutral principles of constitutional law” (p. 3). CRT has morphed beyond a legal movement in which CRT has transitioned to the understanding of issues within the educational system and its effects on marginalized students. CRT contains an activist focus on investigating the current state of the educational system and how to change it. Delgado et al. posited there are general propositions around race and racism which have been identified as the CRT basic tenets. Of the five tenets, this study focused on the second and third tenets of social construction of race and how it is a product of individual social beliefs and collective interactions.

Using these tenets is the foundation for scrutinizing the system in which a teacher candidate’s race may be a factor in their level of success and retention. Previous research by Carver-Thomas (2018), Lambert (2021), and Peebles (2021) stated that approximately 20% of the teacher workforce was comprised of teachers of color. In X County in 2019, 28.3% were teachers of color, which is disproportionate to the percentage of White teachers in the same county of nearly 67% (Ed-Data, n.d.). Of potential teacher candidates, there are barriers to entering teacher preparation programs due to preentrance assessments, which have shown evidence of racial bias. In the Annual Report on Passing Rates for the CBEST between 2015–

2020 (Taylor & Mendoza, 2021), there was a 17%–24% gap between the passage rates of Whites compared to African Americans and Latinx.

When candidates are enrolled in a teacher preparation program, teacher licensure requirements become another barrier. Although the Commission on Teacher Credentialing has processes to avoid bias in examination development, passage rates of the Reading Instruction Competence Assessment are nearly 20% lower for African American and Latinx candidates than White candidates (State Trends, n.d.). Barriers in obtaining licensure may affect the number of teachers of color entering and remaining in the teaching profession. Systemically, demographic parity and cultural synchronicity between teachers and students are not proportionate, which affects schools that have higher populations of marginalized students.

### **Applying Theory to This Study**

Constructivist theories from Vygotsky (1978), Bandura (1997), and Kolb (1984) supported how new teachers create learning experiences as they interact with their teacher preparation programs, coconstructing new knowledge from one another in coursework and applying those skills within their classrooms as they teach their K–12 students. CRT provided the framework of scrutinizing the structural, cultural, and interpersonal aspects of education that perpetuates the marginalization of students. Through a CRT lens, the researcher investigated and analyzed if new teachers were applying culturally responsive teaching practices in teaching diverse students. The application of constructivism and CRT created the contextual framework to this study, providing the researcher with the inquiry approach to use in conducting this research.

## **Supporting Teacher Preparation**

Effective, high-quality teacher preparation is important. If teacher preparedness is efficient, then student achievement will be impacted. Suggestions by Marszalek et al. (2010) to address teacher preparedness, regardless of teacher preparation route, are to prepare teachers for the challenges of teaching, provide effective clinical practice, and rigorous and relevant coursework. By ensuring these components are supported through alternative certification routes, all teacher candidates can be effectively prepared—regardless of race and ethnicity.

### **Preparing for the Challenges of Teaching**

Various research (Hollins & Warner, 2021; Marszalek et al., 2010; Podolsky et al., 2016; Ronfeldt, 2021; Wilson & Kelley, 2022) cited challenges contributing to teachers leaving the profession other than for retirement purposes. Marszalek et al. (2010) stated teacher candidates may consider an alternative credentialing pathway with less support because they cannot afford to be in their program without earning a salary. Podolsky et al. (2016) concurred that lack of support for new teachers is a challenge, with teachers not receiving support leaving at more than twice the rate than those who do receive the support they need. Additionally, inadequate preparation has been cited by Darling-Hammond et al. (2002, 2019) as another challenge for new teachers entering the profession. According to Marszalek et al. (2010), “The support of strong mentoring programs and professional development will enable teachers to continue to grow as professionals” (p. 25). The following are two models of teacher preparation programs discovered by the review of literature in addressing the teacher shortage and in increasing racial diversity of teacher candidates.

### ***Internships***

One response to the teacher shortage has been to pursue the alternative route to teacher credentialing option of an internship. Internships allow districts to quickly place teachers into classrooms, which helps to reduce teacher shortages (Isaacs et al., 2007). As previously stated in Shaw's (2008) research, intern programs contribute to diversifying the workforce. Districts supporting alternative teacher preparation programs by hiring interns not only help fill vacant positions, but simultaneously address the diversity gap. In support of teacher interns, it is recommended for districts to improve training for all new teachers and to focus on intern teachers' mentoring support to increase their level of confidence like their traditionally certified colleagues (Isaacs et al., 2007; Kee, 2012). By providing this type of support, districts will increase the retention of intern teachers and promote racial diversity reflective of the students they serve.

### ***Teacher Residency***

Another response to addressing the teacher shortage is the teacher residency model. Modeled after residencies in the medical field, teacher residency was "developed as a university-school partnership with reciprocal benefit, shared purpose, and shared responsibility for preservice teacher preparation" (Hollins & Warner, 2021, p. 18). According to Guha et al. (2017), teacher residency means the candidate is in the classroom with an experienced teacher at least 50% of the time across a minimum of 1 full school year. The first teacher residency program began in 2001 in Chicago and has since expanded to more than 50 locations across the country in mostly urban school districts (Guha et al., 2017). Teacher residency is a promising approach to addressing the teacher shortage through targeted recruitment of teachers of color, placing candidates in high-needs schools and hard-to-staff subject areas, and increasing retention

rates within same school district placements. Teacher candidates in this model demonstrated an 80%–90% retention rate in the same partnership district within 3 years and 70% retention within 5 years (Nava-Landeros et al., 2020). Effective residency programs connect theory with practice in a model in which intensive mentoring support is consistently present.

### **Effective Clinical Practice**

According to Hollins and Warner (2021), clinical experience in teacher preparation programs refers to the “application of academic knowledge to practice in classrooms, schools, communities, where candidates learn to contextualize the curriculum, learning experiences, and other teaching practices for specific individuals and groups of students” (p. 2). Based on past studies (Dinsmore & Wenger, 2006; Isaacs et al., 2007), the level of effectiveness of the preparation program determines the level of success interns have in clinical fieldwork. A study by the National Council for Accreditation of Teacher Education (NCATE, 2010) reported “a clinically based approach to teacher education will give aspiring teachers the opportunity to integrate theory with practice . . . and to understand and integrate the standards of their professional community” (p. 27). Another study discovered the relationship within the field experience affected learning; negative field experiences stifled learning while positive field experiences enriched learning (Dinsmore & Wenger, 2006).

In support of Dinsmore and Wenger’s (2006) study, the NCATE (2010) report stated to be prepared for 21st-century classrooms, teacher preparation programs not only need to strengthen their coursework, but they also need to create a robust, clinically based approach to fieldwork. New teachers view their clinical practice as the most valuable and beneficial part of their teaching preparation (Emerson et al., 2018). Clinical practice should not just focus on initial teacher preparation, but on their ongoing professional development as they enter an

induction program. This will positively affect teachers' ability to teach in hard-to-staff, low-performing schools. Emerson et al. (2018) suggested redesigning teacher preparation models to align with research findings from this report, which include exploring new roles, incentives, and rewards for teachers and faculty. This may include developing alternative models to provide ongoing support to novice teachers.

### **Rigorous and Relevant Coursework**

With the increase in student diversity, it is imperative for teachers to be actively and intentionally prepared to meet the academic and socioemotional needs of the students. According to Moore et al. (2018), "It has become clear that physical access to the classroom is not enough to ensure fair and equitable access to learning for diverse populations, providing access to materials in isolation is also a shortcoming" (p. 40). Properly preparing teacher candidates through rigorous coursework while meeting CCTC credentialing requirements is the best support a college or university can give their teacher candidates. Structured support is considered essential for teacher preparation programs to effectively prepare their teacher candidates for teaching, especially with teaching the diverse learner in mind.

Another consideration for teacher preparation programs is to design learning environments based on building communities of learners—or cohorts (Dinsmore & Wenger, 2006; Wenger-Trayner & Wenger-Trayner, 2015). The cohort model is based on communities of practice (CoP). According to Wenger-Trayner and Wenger-Trayner (2015), "Communities of practice are groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly" (p. 1). CoP has three distinguishing characteristics that differentiate it from a regular community: (a) shared identity, (b) sense of community, and (c) developing and sharing instructional practices (Wenger-Trayner & Wenger-Trayner, 2015).

A CoP has a shared identity, or domain of interest. In teacher preparation programs, the domain is teaching. A sense of community is developed through collaboration on coursework and attaining common goals as novice teachers. Developing and sharing instructional practices is the third characteristic in a cohort model. These characteristics exist and are practiced interdependently, creating a strong sense of community within the cohort of teachers. First-year teachers who participated in cohorts made significant efforts at building relationships within their own schools, which was beneficial to all students—especially for underrepresented students (Wenger-Trayner & Wenger-Trayner, 2015).

Serving as “connectors,” colleges and universities can help districts recruit teachers of color by helping them connect with communities of color (Carver-Thomas, 2018). Connecting districts with racially and ethnically diverse college clubs, fraternities/sororities, organizations, churches, agencies, veterans, and alumni would also provide more access to human capital, especially during the current teacher shortage.

### **The Gap in Literature**

When considering how to diversify the teacher workforce to reflect the student population in which it serves, one must take into consideration how to best prepare teacher candidates—regardless of the type of preparation program. However, with the growing popularity of teacher intern programs, it is imperative that adequate and appropriate support be provided. The purpose of this study was to examine the level of perceived preparedness of teacher candidates of color in their intern program and identify approaches to support alternatively prepared teachers. The results and recommendations from this study provide better understanding of supporting teachers of color in teacher intern programs to a level at which they perceive themselves as being effectively prepared for their teaching assignments.

## **Conclusion**

State data has shown that enrollment in both traditional and alternative certification programs have been in steady decline over the past decade, but “candidates of color were 44% more likely to enroll in an alternative certification program” (Carver-Thomas, 2018, p. 12). This is equivalent to 1 in 5 candidates of color enrolling in an alternative certification program, compared to 1 in 10 White candidates. With these statistics, not only is there a sense of urgency to increase teacher diversity, but to also support them as they prepare to become teachers of record. Through understanding the different methods to teacher certification, their roles in increasing diversity and preparing teacher candidates, districts and institutions of higher learning can work collaboratively to address this gap in teacher diversity. The considerations within this literature review can provide insight to local decision makers on how to close the gap between the racial diversity of teachers and students.

## **Chapter Summary**

This chapter presented a review of literature regarding the purpose of this study. The literature review addressed a gap in research in supporting teacher interns as compared to student–teachers, through the analysis of how this gap in support affects teachers of color in California’s X County. This chapter addressed how teacher intern programs are diversifying the teacher workforce in an effort of closing the racial diversity gap between teachers of color in comparison to students of color in X County. By providing students of color with well-prepared, same race-matched teachers of color, teacher preparation programs become a part of the solution in racially diversifying the teacher profession to benefit the students they serve.

The next chapter discusses the inquiry approach, method and methodology, instrumentation, and data analysis of the research study. Using a mixed method approach, the

researcher collected participants' demographic data and then used the disaggregated data to specifically analyze the level of support 1st-year teachers of color receive and measure their perception of its effectiveness.

## CHAPTER 3: METHODOLOGY

As California endures a teacher shortage, alternative teacher preparation programs have provided an efficient solution to placing teachers into vacant positions. Alternative teacher preparation programs, also referred to as teacher intern programs in California, offer an alternative pathway to earning a preliminary teaching credential. In this pathway, participating candidates serve as teachers of record while completing pedagogical preparation for a preliminary teaching credential (California Commission on Teacher Credentialing [CCTC], 2016). This type of program is financially desirable to teacher candidates of color as they will earn a salary while completing their program. Partnering school districts place intern teachers most often in hard-to-fill positions or hard-to-staff schools. Along with the high demands of their intern positions and responsibilities are the pressures of attending coursework and participating in supervised clinical practice. Without adequate support, intern teachers of color are struggling to complete their teacher preparation program.

### **Purpose of Study**

The purpose of this study was to examine the level of perceived preparedness of teacher candidates of color in their intern program. When considering how to diversify the teacher workforce to reflect the student population in which it serves, a teacher preparation program should prepare teacher candidates with self-confidence and to be culturally responsive in their practice. Supporting teachers of color in completing their intern program is the focus of this research study.

### **Research Questions**

1. What is the level of perceived preparedness of teacher candidates of color in their teacher intern preparation program? (Quantitative)
2. What support do teacher candidates of color perceive they need while in their intern program to increase their level of preparedness? (Qualitative)

Sections in the chapter describe the inquiry approach, method and methodology, data collection, instrumentation, and data analysis. The researcher's positionality is expressed in this chapter. Also included in the chapter are ethical considerations regarding assumptions and limitations. The chapter concludes with a summarization of the methodology used for this study and a preview of the next chapter.

### **Inquiry Approach**

The inquiry approach for this study included the interpretivist/constructivist paradigm. As stated by multiple researchers (Creswell & Guetterman, 2019; Eichelberger, 1989; Mackenzie & Knipe, 2006; Mertens, 2005), the interpretivist/constructivist paradigm focuses on people's understanding of the world in which they live and creating socially constructed learning experiences. Researchers following the interpretivist/constructivist paradigm consider their own positionality as they study findings from the participants' viewpoint of the topic being explored. Using the interpretivist/constructivist paradigm provided the framework in which the researcher's theory was tested. This study employed a mixed method inquiry approach. Based on this paradigm, constructivism and critical race theory (CRT) were the theoretical frameworks used for this study and employed mixed methods data collection and analyses.

The theoretical framework of constructivism is "as an educational theory whereby learners construct their own knowledge by a natural ability to think, by learning from the

environment, or by combination of both natural ability and environmental influences, where the result is an autonomous, intellectual learner” (Cunanan-Cruz, 2002, p. 1). Constructivist theories from Vygotsky (1978), Bandura (1997), and Kolb (1984) supported how new teachers create learning experiences as they interact with their teacher preparation programs, coconstructing new knowledge from each other and applying those skills within their classrooms as they teach their K–12 students.

CRT is defined as “a framework or set of basic perspectives, methods, and pedagogy that seeks to identify, analyze, and transform the structural, cultural, and interpersonal aspects of education that maintain the marginal position and subordination of [Black and Latinx] students” (Solorzano et al., 2000, p. 25). Originally founded on critical legal studies, CRT has evolved to include the storytelling of the experiences of those who are underrepresented, oppressed, and/or forgotten. According to Bhattacharya (2017), “CRT studies is a systematic inquiry about how racial inequities are created and sustained in the lives of ethnic minorities” (p. 75).

Interpretivist/constructivist in nature, CRT focuses on building new knowledge developed around the concept of people recounting their lived experiences and truths. Their current reality may be different from those who are privileged members of the dominant culture (Bhattacharya, 2017). Investigating this through CRT provides additional information regarding how this phenomenon is experienced by non-White teachers and their role in using culturally responsive teaching practices to support the PK–12 diverse students in whom they serve.

### **Methodology**

Supporting the interpretivist/constructivist framework, the researcher referred to constructivist grounded theory (CGT) for the design of this study. According to Bhattacharya (2017), “Researchers who use constructivist grounded theory usually develop a theory grounded

in a deep, systematic, structured form of data analysis” (p. 27). In CGT, researchers construct their own meanings based on participant interactions and other types of data. The researcher examined the experiences of teachers of color within their intern program and investigated the current structure and system of the intern program at an institution of higher education (IHE). By using a constructivist approach to grounded theory, the researcher made meaning of what is involved in preparing teachers through minimally involved observation, or peripheral membership. The researcher does not engage in activities involving participants; rather, the researcher documented observations as an outsider through one-on-one interviews (Bhattacharya, 2017).

According to Creswell and Guetterman (2019), “Moreover, a grounded theory procedure does not minimize the role of the researcher in the process” (p. 441). Charmaz (2006) described this process as the researcher focusing on the meanings ascribed by participants in a study . . . more interested in the views, values, beliefs, feelings, assumptions, and ideologies of individuals than in gathering facts and describing acts. The researcher constructed categories during the study that are meaningful to both researcher and participant. The essence of this study was to understand what teachers of color need to feel confident in their ability to teach, be culturally responsive, and persevere in the first years of their teaching profession.

Exploration of how race may be a factor in effective teacher intern preparation is done through the lens of CRT. According to Bhattacharya (2017), “The primary premise of CRT is that racism is a pervasive part of American culture, and it is not an aberrant occurrence” (p. 74). Therefore, the researcher interrogated and challenged how programs prepare teachers of color. This may manifest itself by analyzing existing policies, procedures, and practices within the intern program. By examining these areas, the researcher examined the existing system within

the institution's intern preparation program for potentially oppressive practices and recommended viable solutions in rectifying social and racial injustices.

Interview questions were guided by these theoretical frameworks in the construction of the types of questions asked. Questions were focused on intern teachers' experiences in learning from mentors as more knowledgeable others (MKO), as well as from interactions with colleagues. Other questions explored intern teachers of color experiences of racism, focusing on CRT and the perception of normalized, racist practices that may deter their ability to meet their personal learning needs and the instructional needs of their students.

Data from the survey used for this study was archival data that had been previously collected in Tableau, which is an online data management system software. The survey instrument, Teaching Beliefs and Mindset Survey (TBMS) was uploaded into Tableau, which generated a URL link survey administrators to share with participants via email. Participants accessed the survey using the URL link, and responses were collected in Tableau. At the end of the survey window, Tableau collected and aggregated the data for automatic or manual analyses. This survey was distributed to all 1st-year teacher candidates in the teacher preparation program. The researcher used aggregate data from Tableau to disaggregate racial demographics by program and geographic location. Though other program coordinators interacted with Tableau and its data, the researcher was the sole person collecting, analyzing, and re-presenting the archival data for this study. The archival data were analyzed to identify racial demographics represented within the intern teacher program. The researcher used this information to identify and seek potential interview participants for the qualitative portion of this study.

The quantitative data analysis identified participants who (a) were 1st year intern teachers, (b) were assigned to teach in an X County school, and (c) represented a race other than

White. This target population then received an email for participation in this study (see Appendix A). Intern teachers interested in participating in the interview received a follow-up email containing the Informed Consent Form (see Appendix B) confirming their consent to participate in this research. In preparation for the interview, participants received further instructions as to using a pseudonym and selecting a link to the date/time of the interview, which already contained the active link to the videoconference. The video component of the videoconference was disabled to not disclose the participants' identity.

## **Method**

This study employed an explanatory sequential mixed method design. Also referred to as a two-phase model in 2018 by Creswell and Plano Clark, an explanatory sequential mixed methods design “consists of first collecting quantitative data and then gathering qualitative data to help explain or elaborate on the quantitative results” (Creswell & Guetterman, 2019, p. 553). The researcher collected quantitative data first in the study. Quantitative research included collecting demographic data regarding the intern program and race from the TBMS, which was administered to 1st year teaching candidates in May. The TBMS is a survey that includes the short forms of the Teachers' Sense of Self-Efficacy Scale (Tschannen-Moran & Woolfolk Hoy, 2001) and the Culturally Responsive Teaching Self-Efficacy Scale (Siawatu, 2007). Descriptive analysis measuring central tendencies was conducted to determine the perceived level of preparedness of teacher intern candidates of color along these scales. The TBMS survey format used a cross-sectional design that collected participants' attitudes regarding self-efficacy as self-reported by respondents. The results of the survey were used to identify areas in which teachers of color need additional support within the scope of their intern program.

### *Cross-Sectional Survey*

For the purpose of this study, the researcher used archival results from a survey with an analytical cross-sectional design to “compare two or more educational groups in terms of attitudes, beliefs, opinions, or practices” (Creswell & Guetterman, 2019, p. 387). The statistical data this type of cross-sectional survey collected provide comparison data to determine similarities and differences among intern teachers. The data collection findings for this study were used for further consideration in improving the current practices within the intern teacher program. The researcher used the findings to propose recommendations for the intern teacher preparation program and IHE leadership to consider as they evaluate their clinical practice support, faculty professional development, and/or policies and procedures through an equity lens.

### *Interview*

According to Mojtahed et al. (2014), “The [interpretivist/constructivist] paradigm traditionally follows qualitative research methods, although quantitative methods may also be used in support of qualitative data” (p. 87). Constructivist researchers use participants’ stories for inductive research. This type of research tends to be interview-based and relies on an interpretivist/constructivist framework. Conducting interviews provided contextual knowledge regarding candidates’ experiences within their intern teacher preparation program, while augmenting the value of the quantitative data.

A stratified random sample of the research participants was identified for further study through an informal, semistructured interview. The purpose of the interviews was to authentically capture the participants’ experiences within the program. The questions were descriptive, grand tour, task-related, and structural in nature. Appendix C provides a table identifying the interview questions aligned to the research questions and the corresponding

theoretical frameworks. Re-presentation of these interviews was in the form of fieldnotes, with approval by the participants.

### **Positionality of Researcher**

At the time of the study, the researcher was the president of the institution where the study was conducted. As the president, the researcher had influence over decisions that may either positively or negatively affect students who may be selected for this study. For example, grade change petitions and complaints may include input from the president, which creates a power dynamic that may affect the researcher's relationship and credibility with the study participants. However, less than 2% of these instances are addressed by the Office of the President, with student concerns and issues mostly handled within their respective programs and resolved by the program directors. Therefore, the risk of bias or undue influence due to positionality is minimal.

Prior to the presidency, the researcher was the clinical practice coordinator in the institution's teacher intern program and served as the lead support supervisor who managed the university supervisors. They, in turn, work directly with intern teachers in fulfilling the clinical practice requirement of their credential program. This provided the researcher with direct institutional access to the research participants. Therefore, all interactions with the study participants followed the approved Institutional Review Board (IRB) protocol.

### **Researcher Bias**

Despite peripheral membership as an observer, the researcher's status as the president and former clinical practice coordinator, along with prior and/or ongoing interactions with participants, may have influenced interpretation and re-presentation of the findings. Qualitative study participants were asked to read, review, and make corrections to the researcher's

interpretation of their interviews to ensure trustworthiness. It was important for the researcher to follow IRB protocols to ensure objectivity in the collection and interpretation of the data, while keeping participants' responses and narratives authentically represented. The goal of this research was to continually refine and sustain a teacher preparation program that supports the relevant needs of its teacher candidates of color. Gathering genuine perspectives from teacher candidates were in the best interest of the researcher.

### **Data Collection/Instrumentation/Measures**

#### **Research Participants**

A teacher preparation program at an accredited college in X County was selected for this study. Based on Spring 2022 data, there were 528 intern teachers attending the institution, of which 286 were 1st-year interns. Of the population of 286 1st-year intern teachers, a target population for this study was identified. The target population was comprised of intern teachers, who identify as a race other than White, were placed for clinical practice within X County, and who participated in and completed the TBMS in May 2022. Clinical practice placement for the intern program was the school in which intern teachers were employed as teachers of record. There were 128 teacher candidates in the quantitative portion and six in the qualitative portion of the study. These groups were the target population in which a stratified sample emerged for interview.

#### **Instrumentation**

The quantitative instrument that was used is the TBMS. Two scales comprise the TBMS: (a) Teachers' Sense of Efficacy Scale and (b) Culturally Responsive Teaching Self-Efficacy Scale. Appendix D contains a copy of the TBMS instrument.

- The Teachers' Sense of Efficacy Scale measures teachers' perceptions of their ability to engage students, classroom management skills, and instructional practices. There are 12 statements in which respondents rate themselves numerically between 1 (*nothing*) to 9 (*a great deal*; Tschannen-Moran & Woolfolk Hoy, 2001).
- The Culturally Responsive Teaching Self-Efficacy Scale measures teachers' confidence level in their ability to integrate culturally responsive teaching practices. There are 26 statements in which respondents rate themselves from 1 (*not confident at all*) to 9 (*completely confident*; Siawatu, 2007).

The TBMS is administered to teacher candidates at the end of their 1st year (i.e., May). The delivery of the TBMS is online, and the time to complete the survey is integrated into current courses offered during the test administration periods. This survey was used in its entirety with no modifications. For the purpose of this study, the researcher used archival data from the May 2022 TBMS administration and filtered demographic and geographic data. Good representation of the target population was desired for comparison and to draw a sample for the interview portion of the study.

The scales used for the TBMS were reliable and valid measures, based on statistical evidence. The Teachers' Sense of Efficacy Scale has high internal consistency ( $\alpha = 0.90$ ) and moderate levels of validity ( $r = 0.64, p < 0.01$ ; Tschannen-Moran & Woolfolk Hoy, 2001). The Culturally Responsive Teaching Self-Efficacy Scale has high levels of internal consistency ( $\alpha = 0.98$ ; Siawatu, 2007).

## **Data Analysis**

### **Quantitative Data Collection**

There is an assumption that data collected using archival TBMS results was accurate as responses are self-reported. Based on the TBMS data collected through Tableau, analysis was conducted based on participants in the May 2022 administration of the online survey. The TBMS was administered to 286 1st-year intern candidates and served as the total population for this study. The target population was drawn from this population, based on their race/ethnicity being other than White or declined to state, in which case there were 128 TBMS participants eligible for the qualitative portion of this study.

In this cross-sectional survey, the researcher analyzed variables within the sample of subjects. Filters for this analysis compared intern teacher participants based on race/ethnicity. Statistical analysis was used to establish noncausal relationships between them. Descriptive analysis measuring central tendencies was conducted to determine the perceived level of preparedness of intern teacher candidates of color along the TBMS scales of self-efficacy and culturally responsive teaching.

### **Analysis and Re-Presentation of the Quantitative Data**

The researcher used IBM® SPSS® Statistics, a statistical software platform, to enter raw survey scores from Tableau to generate descriptive data test analysis for this portion of the study. Descriptive data analysis included the demographic data of the survey completers and the target population. The data were presented in the form of data tables, featuring race/ethnicity, the number, and percentage of interns represented. Descriptive data analysis expressing the central tendencies of intern teachers of color and their perceived level of self-efficacy was also presented in the form of data tables.

## **Qualitative Data Collection**

Based on the scales measured by TBMS, data analysis was conducted on self-efficacy and culturally relevant teaching practices. Tableau filters for this analysis included the data collected from participants based on their race/ethnicity. From the total population surveyed by TBMS, the target population was identified for the qualitative portion of this study. From the target population, a sampling was collected through voluntary interest in interview participation. A group from the target population was interviewed. Six candidates participated in an informal, semistructured interview to discuss their individual experiences within their intern teacher preparation pathway. Interview questions collected responses to the research questions of this study and aligned with the theoretical frameworks of constructivism and CRT.

Due to my positionality as a researcher conducting this study and as the president of the college in which the participants are attending, interview participants voluntarily consented, and the process was anonymized. Further protections of participants' identity were to disable the video feature of the videoconference software, assign pseudonyms to participants, and select a date/time link that directly connected them with the researcher without the exchange of emails.

## **Analysis and Re-Presentation of the Qualitative Data**

The researcher coded interviewees' responses using Atlas.ti and analyzed trends and patterns. Atlas.ti is a software program that analyzes unstructured data (i.e., codes), such as text from interviews, for the purpose of qualitative and mixed methods research. Using constructivist grounded theory (CGT) methodology, qualitative data analysis went through three steps: (a) open coding, (b) axial coding, and (c) selective coding, before themes emerge. Once the data were analyzed and synthesized, the researcher re-presented the participants' stories through illustrative quotes from the transcripts and fieldnotes to enhance the research findings.

### **Ethical Considerations**

There were assumptions made by the researcher prior to conducting the study. The researcher assumed that all potential participants honestly responded to the survey and/or interview. Self-reported responses may contain response bias, providing answers they perceive as desirable to the researcher.

There was an assumption that Tableau accurately collected and recorded data and categorized those responses accordingly based on preidentified filters. Another assumption was that TBMS was administered during the identified survey administration periods, and all course instructors during the administration period allotted the required amount of time for participants to take the survey. This also assumed participants were able to complete the survey within the allotted time provided. No anomalies during the survey administration were reported to the researcher.

Another assumption was that race was a factor for further consideration in planning support for intern teachers. After analyzing the data, initial findings showed race did not contribute to significant differences in results.

There was also an assumption about data analysis. The researcher, through the coding of the data, was assuming themes, trends, and patterns emerged. Through CGT coding, categories and themes emerged that supported the findings to the research questions. There were outliers or inconsistencies in the responses; however, they did not make it difficult to identify relevant themes.

### **Limitations**

There were limitations to consider when conducting this study. Research participants were selected from one IHE within one California county and provided a narrow geographic area

of study. This study used an explanatory sequential mixed methods design, in which quantitative data were collected first, and then qualitative data were collected to help explain the quantitative results. Quantitative data included the collection of archival data from a cross-sectional survey. Limitations of conducting archival research were the timeliness of when the data were originally collected, the data source, bias that may occur during data collection, and the accessibility of the information being sought for the study. In conducting the archival research for this study, the limitation was the timeliness of when the data were originally collected. Archival research used May 2022 survey results from the TBMS. Results recorded self-reported responses from interns at the end of the 1st year of their intern program. The qualitative portion of the study was conducted in Spring 2023, approximately 10 months after their survey. Survey participants who volunteered for the interview may not have recalled how they responded previously, and mindsets may have changed since the administration of the survey to their participation in the interview.

Following the explanatory sequential design, the qualitative data collected and analyzed provided additional context to the quantitative data. Limitations of conducting qualitative research using CGT include difficulty in recruiting, the amount of time spent in collecting data, and the extensive amount of coding analysis involved. Despite a target population of 128 1st-year intern teacher candidates of color, only six participants volunteered to participate in the interviews despite two additional efforts to solicit interview participants in underrepresented ethnic groups.

Another limitation was response bias, in which participants may not have honestly answered questions for a particular reason or set of reasons. In this instance, the positionality of the researcher may have affected the participants' responses to interview questions. The

researcher is the president of the college in which the intern program is located. Although the consent form stated there were no foreseeable risks or benefits to participating in the interviews, participants may have felt compelled to respond to the interview questions in a certain manner because the college president was asking the questions. To help neutralize this dynamic, questions were phrased to be open-ended and to represent both possible dichotomies of their level of support and self-efficacy.

### **Chapter Summary**

This chapter presented the inquiry approach, method and methodology, instrumentation, and data analysis of the research study. Using a mixed method approach, the researcher collected participants' demographic data and then used the disaggregated data to specifically analyze the level of support intern teachers of color received and measured their perception of its effectiveness.

The next chapter discusses the findings of the study based on the analysis of the data collected from this chapter. The findings provided the researcher with participants' perceptions of the level of support they received. These perceptions will be analyzed based on the target populations identified in this chapter.

## CHAPTER 4: FINDINGS

This chapter contains the findings resulting from the research conducted. Data were collected with the methodology of constructivist grounded theory (CGT) and used the theoretical frameworks of constructivism and critical race theory (CRT). Through these lenses, the findings answer the following research questions:

1. What is the level of perceived preparedness of teacher candidates of color in their teacher intern preparation program? (Quantitative)
2. What support do teacher candidates of color perceive they need while in their intern program to increase their level of preparedness? (Qualitative)

Sections in the chapter overview described the collection, analyses, and findings for the quantitative and qualitative data for this two-phase, explanatory sequential mixed method design. The chapter will conclude with a summary of the constructivist grounded theory (CGT) results and a preview of the final chapter.

Quantitative data included the collection of archival data from an analytical cross-sectional survey design. The survey data are collected via Tableau, an online data management system. Descriptive data were collected to provide the researcher with demographic information about the population, focusing on race/ethnicity. Additional data were analyzed to collect results from the identified study sample regarding their sense of self-efficacy.

In line with the explanatory sequential mixed method design, the researcher then conducted qualitative research in the form of interviews to collect participants' attitudes regarding self-efficacy. Interview questions addressed principles of the constructivist and CRT frameworks, and transcripts of the interviews were analyzed using CGT methodology. This

chapter includes discussion about how the analyses conducted were consistent with the previously identified methodologies and how the analyses connected to the research questions. The researcher's positionality was considered during the collection and analyses of the data. Included in this chapter are tables that present descriptive quantitative data, figures to represent the open, axial, and selective coding of the qualitative data, and direct quotes from the interviews to accentuate the identified themes and overall findings.

### **Quantitative Data and Analysis**

The Teaching Belief and Mindset Survey (TBMS) was the cross-sectional survey used for quantitative data collection. In the original design of this study, the TBMS was scheduled to be administered in October 2022. Tableau would have been the online data management system that would collect and aggregate the data for institutional use. However, in August 2022, the organization that provided the institution of higher education (IHE) with access to Tableau made an announcement to its users that it would no longer be available for data collection and analysis purposes. To pivot, the researcher decided to use archival data from the previously administered TBMS, which was conducted at the end of the spring semester in May 2022. The TBMS was distributed to all 1st-year interns who were enrolled in the intern program. Interns completed the online survey during a spring course and were provided with the time needed to complete the survey during class instructional time. The cross-sectional survey collected self-reported information from interns regarding their perceptions of their self-efficacy across two subscales: (a) Teacher's Sense of Efficacy Scale and (b) the Culturally Responsive Teaching Self-Efficacy Scale. This survey was used in its entirety with no modifications. Data analysis was conducted to collect demographic data of survey participants who served as interns in X County. A

descriptive analysis measuring central tendencies of the mean was conducted to determine the perceived level of preparedness of intern teachers of color.

### Quantitative Sample

At the time the Teaching Beliefs and Mindset Survey (TBMS) was administered in May 2022, there were 286 1st-year intern teachers attending the teacher preparation program. The demographic constitution of this group is represented in Table 5. Approximately 41% of the intern teachers in the program were White and 55.6% were intern teachers of color, with 3.5% declining to state their race/ethnicity. Of the intern teachers of color, 31.8% identified as Hispanic or Latino, 11.5% as Asian, 7% as Two or More Races, and 4.2% as Black or African American (see Table 5).

**Table 5**

*Race/Ethnicity of 1st Year Interns, as of May 2022*

Race/ethnicity	<i>n</i>	%
American Indian or Alaska Native	2	0.7
Asian	33	11.5
Black or African American	12	4.2
Decline to state	10	3.5
Hispanic or Latino	91	31.8
Native Hawaiian or Pacific Islander	1	0.3
Two or more races	20	7
White	117	40.9

*Note.*  $N = 286$ .

Of these interns, 265 completed the TBMS. There were 21 interns who either did not take the survey and/or did not complete it. Only those who completed the survey were considered for this table. The racial composition of survey completers is represented in Table 6.

The decline to state and Native Hawaiian or Pacific Islander racial groups had all interns complete the survey, while the rest of the demographic groups had some interns who did not. However, this did not significantly alter the racial composition between participants and completers.

**Table 6**

*Race/Ethnicity of TBMS Completers*

Race/ethnicity	<i>n</i>	%
American Indian or Alaska Native	0	0
Asian	30	11.3
Black or African American	10	3.8
Decline to State	10	3.8
Hispanic or Latino	85	32.1
Native Hawaiian or Pacific Islander	1	0.4
Two or More Races	18	6.8
White	111	41.9

*Note.*  $N = 265$ .

From this table, the target population was generated. Of the 265 survey completers, there were 197 completers who worked at a school within X County. From that sample, 128 intern teachers of color were identified as the target population for this study. The target population was the number of 1st-year intern teachers of color who taught at an X County school and completed the May 2022 TBMS survey. Intern teachers of color exclude those counted in the White and decline to state categories. The American Indian or Alaska Native column was excluded due to no participants in that category. Also excluded were interns who were no longer enrolled in the intern program as of January 2023. Table 7 represents the target population for the quantitative study.

**Table 7***Target Population for Study, as of January 2023*

Race/ethnicity	<i>n</i>	%
Asian	28	21.9
Black or African American	7	5.5
Hispanic or Latino	80	62.5
Native Hawaiian or Pacific Islander	1	0.7
Two or more races	12	9.4

*Note.* *N* = 128.

### **Quantitative Analysis**

Archival research was conducted using the May 2022 TBMS results that were archived in Tableau. Survey responses were downloaded into a Google Sheet, in which data were filtered for respondents who met the study criteria: (a) intern teacher candidates, (b) teach at a school located within X County, and (c) self-identified as a race/ethnicity other than White. An additional filter was conducted to eliminate any respondents who selected decline to state for their race/ethnicity. The results of this filtering yielded 128 respondents as the target population for the quantitative data analysis.

Data on the Google Sheet contained respondent results for both scales of the TBMS, which are the Teachers' Sense of Self-Efficacy and Culturally Responsive Teaching Self-Efficacy Scales. Using IBM® SPSS®, these data were uploaded as two separate data sets. One data set was labeled, Scale 1, and the other, Scale 2. In Scale 1, the Likert scaled scores ranged from 1 (*None at all*) to 9 (*A great deal*). In Scale 2, the Likert scaled scores ranged from 1 (*Not confident at all*) to 9 (*Completely confident*). Descriptive data analyses were conducted for each scale, determining the central tendencies and frequencies of the data. The mean scores and standard deviations were recorded in the forms of tables and further analyzed by the researcher.

Table 8 re-presents the data analysis of Scale 1, which are the results from the Teachers' Sense of Self-Efficacy portion, and Table 9 re-presents the data analysis of Scale 2, which are the results from the Culturally Responsive Teaching portion of the TBMS. Additionally, Table 8 represents the three subscales of how respondents' skills in student engagement, instructional strategies, and classroom management are measured based on their responses to preidentified survey questions.

**Table 8**

*Scale 1 Teachers' Sense of Self-Efficacy Test Statistics*

#	Question	<i>M</i>	<i>SD</i>
Subscale 1: Student Engagement			
2	How much can you do to motivate students who show low interest in schoolwork?	6.77	1.635
4	How much can you do to help your students value learning?	7.01	1.588
7	How much can you do to get students to believe they can do well in schoolwork?	7.29	1.378
11	How much can you assist families in helping their children do well in school?	6.61	1.707
Subscale 2: Instructional Strategies			
5	To what extent can you craft good questions for your students?	6.91	1.398
9	To what extent can you use a variety of assessment strategies?	6.95	1.387
10	To what extent can you provide an alternative explanation or example when students are confused?	7.11	1.436
12	How well can you implement alternative strategies in your classroom?	6.89	1.631
Subscale 3: Classroom Management			
1	How much can you do to prevent and respond to disruptive behavior in the classroom?	7.09	1.505
3	How much can you do to calm a student who is disruptive or noisy?	6.90	1.489
6	How much can you do to get children to follow classroom rules?	7.26	1.276
8	How well can you establish a classroom management system with each group of students?	7.14	1.542

*Note.*  $N = 128$ .

Table 8 shows a mean range of 6.61 to 7.29, ranging from Likert scale responses of *Some degree* to *Quite a bit* when considering the combination of respondents' current ability, resources, and opportunity to do what is being asked in the survey. In general, 1st-year intern teachers of color, to some degree, feel confident about their skillsets in the areas of student engagement, the use of instructional strategies, and classroom management. In analyzing the standard deviation and range of Likert scale responses, there was high standard deviation, indicating that data responses are more spread out. For example, there were Likert scale responses of 3 and 9, which account for the wide distribution of the data along a normal curve. A histogram example of this distribution along a normal curve is in Appendix E. Based on mean scores, the central tendencies showed that respondents perceived as having more confidence and self-efficacy in the area of classroom management, with a mean subscale score of 7.10, which is in the *quite confident* range. However, respondents perceived as having less confidence and self-efficacy in engaging students had a mean subscale score of 6.92.

Table 9 re-presents the second portion of the TBMS, in which respondents rated themselves on their confidence in their ability to successfully serve culturally and linguistically diverse learners through each of the tasks listed. Mean data from Table 9 shows a range of 6.33 to 7.85, representing Likert scale responses of *Somewhat confident* to *Quite confident*. Two areas with the lowest mean scores are associated with Questions 1 (i.e., Identify ways that the school culture is different from my students' home culture) and 2 (i.e., Implement strategies to minimize the effects of the mismatch between my students' home culture and the school culture).

**Table 9***Scale 2 Culturally Responsive Teaching Self-Efficacy Test Statistics*

#	Questions	<i>M</i>	<i>SD</i>
1	Identify ways that the school culture (e.g., values, norms, and practices) is different from my students' home culture	6.54	1.583
2	Implement strategies to minimize the effects of the mismatch between my students' home culture and the school culture	6.33	1.574
3	Assess student learning using various types of assessments	6.79	1.478
4	Obtain information about my students' home life	6.67	1.563
5	Build a sense of trust in my students	7.84	1.358
6	Establish positive home-school relations	7.12	1.600
7	Develop a community of learners when my class consists of students from diverse backgrounds	7.22	1.467
8	Use my students' cultural background to help make learning meaningful	7.02	1.483
9	Use my students' prior knowledge to help them make sense of new information	7.18	1.383
10	Identify ways how students communicate at home may differ from the school norms	6.84	1.570
11	Obtain information about my students' cultural background	6.92	1.654
12	Greet English Language Learners with a phrase in their native language	6.51	2.366
13	Design a classroom environment using displays that reflects a variety of cultures	6.87	1.805
14	Develop a personal relationship with my students	7.85	1.458
15	Praise English Language Learners for their accomplishments using a phrase in their native language	6.79	2.363
16	Identify ways that standardized tests may be biased toward linguistically diverse students	6.67	1.603
17	Communicate with parents regarding their child's educational progress	7.05	1.796
18	Structure parent-teacher conferences so that the meeting is not intimidating for parents	7.05	1.823
19	Revise instructional material to include a better representation of cultural groups	6.66	1.827
20	Critically examine the curriculum to determine whether it reinforces negative stereotypes	6.68	1.884
21	Model classroom tasks to enhance English Language Learners' understanding	6.96	1.646
22	Communicate with the parents of English Language Learners regarding their child's achievement	6.53	2.044
23	Identify ways that standardized tests may be biased toward culturally diverse students	6.55	1.720
24	Use examples that are familiar to students from diverse cultural backgrounds	6.85	1.764
25	Explain new concepts using examples that are taken from my students' everyday lives	6.94	1.658
26	Teach students about their culture's contributions to society	6.79	1.743

*Note.*  $N = 128$ .

Generally speaking, 1st-year intern teachers of color perceived themselves as somewhat confident in bridging the school and home cultures of students. Two areas with the highest mean scores were associated with Questions 5 (i.e., Build a sense of trust in my students) and 14 (i.e., Develop a personal relationship with my students). Based on this data, 1st-year intern teachers of color perceived they were quite confident in building trust and personal relationships with their culturally and linguistically diverse learners.

Similar to the standard deviation scores in Scale 1, Scale 2 showed evidence of a wide distribution of data collected, meaning Scale 2 had high standard deviation due to data being more spread out along the normal curve. A histogram example of this distribution along a normal curve is in Appendix F. However, it is interesting to note the standard deviation scores greater than 2 were in the areas of supporting English learners (ELs). Questions 12 (i.e., Greet English Language Learners with a phrase in their native language), 15 (i.e., Praise English Language Learners for their accomplishments using a phrase in their native language), and 22 (i.e., Communicate with the parents of English Language Learners regarding their child's achievement) focused on the intern teachers' ability to communicate in the students' home language. This is where literature has supported demographic parity and cultural synchronicity as being of benefit to racially diverse students.

### **Qualitative Data and Analysis**

The target population for the qualitative portion of the study used the same 128 intern teachers of color identified in the quantitative data collection and analysis. Past completers of the May 2022 TBMS were sent invitations (see Appendix A) via email inviting them to participate in follow-up interviews. In the body of the email was a link to an interest form for potential participants to complete. For those respondents who expressed interest in participating

in the interviews, a second email was sent to confirm their scheduled interview appointment with a Zoom link to access their interview. The interview invitation was emailed three different times during a 3-week period. Despite efforts to gain more participants from underrepresented groups, a total of six respondents volunteered to participate. Prior to their interview date, the Informed Consent Form (see Appendix B) was sent to participants to sign and return.

The Participant Interview Protocol (see Appendix G) was used to collect interview information. A script was used to ensure that participants received the same welcome and context of the interviews. Once the interview recording started, the participant was asked six interview questions in a grand tour, semistructured manner. During the interview, notes were collected in the form of fieldnotes to capture key points and nuances in responses. Video recording via Zoom provided the necessary audio for future transcription of the entirety of the interview for comparison of fieldnotes and data analysis.

### **Qualitative Sample**

Six participants were interviewed for this portion of the study, who are identified in numeric order from Intern 01 through Intern 06. In Table 10, demographic information about each intern is listed. All six participants are identified as teachers of color enrolled in an intern teacher preparation program. The six participants represent interns at six different schools in different school districts within X County. Additionally, their self-identified race/ethnicity and teaching assignment are included in the table. For data collection purposes, the ethnic category “Hispanic/Latinx” is used. However, in Table 10, two interns self-identified as Latinx while one intern self-identified as Hispanic. To respect participants’ self-identification, their preferred ethnicities are listed. Of the six participants, one was male and five were female. The pronouns

“they/their/them” were used throughout the chapter to anonymize responses shared by participants.

**Table 10**

*Demographic Information of Interview Participants*

Intern	Race/ethnicity	Teaching assignment
Intern 01	Asian	Elementary
Intern 02	Asian	Elementary
Intern 03	Latinx	High school/math
Intern 04	Latinx	High school/special education
Intern 05	Asian Indian	Elementary
Intern 06	Hispanic	Elementary

Four of the six participants, or 67% of the sample size, represented the elementary level of teaching assignments. The other two participants, or 33% of the sample size, represented the high school or secondary level. One of the participants, or 17% of the sample size, represented a special education teaching assignment. Racially, 50% of the sample size identified as Asian and the other half identified as Hispanic/Latinx. No other races/ethnicities volunteered to participate in this study.

**Qualitative Data Collection**

The six interviews were conducted via Zoom, a videoconferencing software program. Interviews were scheduled over a 2-week period after the regular school day. Appointments were set for an hour to ensure there was enough time to conduct the interview session. For each session, participants were welcomed to the interview, confirmed they submitted their consent form, and were given instructions regarding the video recording of their interview. To ensure anonymity for the recording, participants were instructed to rename themselves based on their

assigned pseudonym (i.e., Intern 01–06) and to turn off their video camera to conceal their identity. Interview sessions ranged between 15–28 minutes in length.

After each interview, the audio file was downloaded from Zoom and entered into Temi, an online transcription service. Once the transcript was produced, it was reviewed for accuracy by correcting any transcription errors and eliminating filler language such as “um” and “uh.” After a transcript was reviewed and prepared for analysis, it was then sent back to the participant for their review. If there were any suggested corrections and/or changes, those were made and sent back to the participant for final review. Once the participant approved the transcription of their interview, the transcript was analyzed. All interview transcripts were manually coded using Atlas.ti, which is an online data analysis software specifically used for coding qualitative data. Once this coding, also referred to as open coding, was completed, additional functions in Atlas.ti allowed for further distillation of the codes until themes emerged.

### ***Fieldnotes***

During the interviews, the researcher collected responses in the form of fieldnotes in the form of jottings, using the Participant Interview Protocol (see Appendix G). This was performed in tandem with the video recording so the researcher could manually record key points during the dialogue and, in reflection, capture the essence of the participants’ experiences. Appendix H captured the researcher’s reflections upon the participants’ experiences as new intern teachers, by summarizing the fieldnotes and providing a vignette.

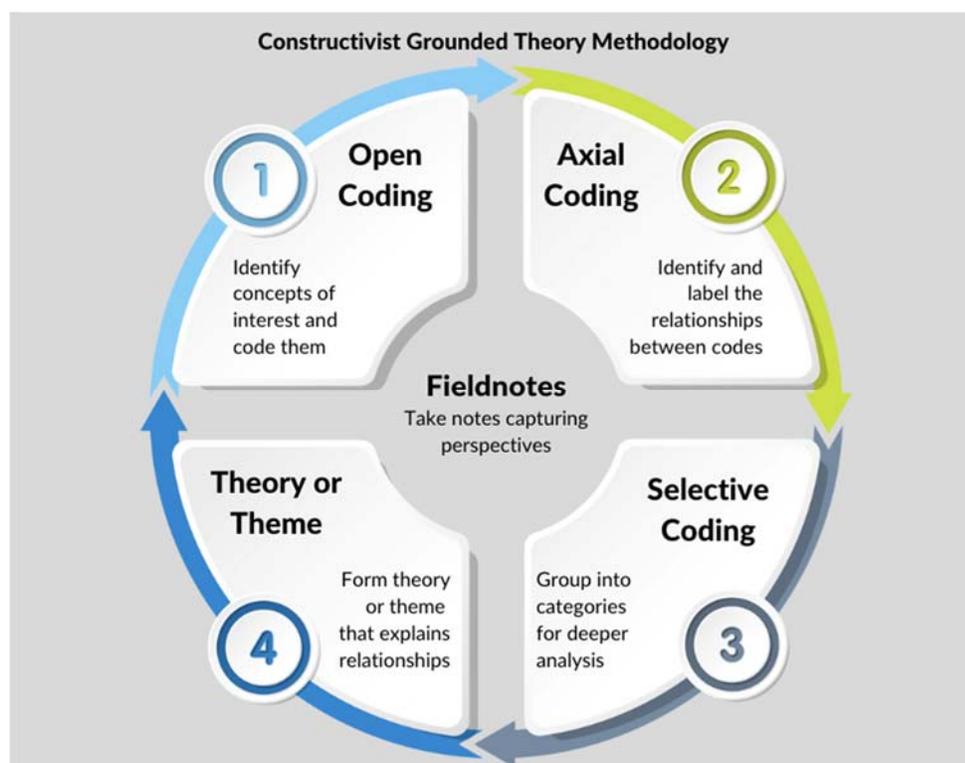
### **Qualitative Data Analysis**

The methodology for the qualitative portion of this study is CGT, in which the first step is open coding. This step is when the researcher takes participants’ transcripts and identifies key words, text, and/or phrases that can be used as code. A code is a discrete part of collected data

that is given a label for future and deeper analysis. The second step of CGT analysis is to begin axial coding, which categorizes open codes together based on similarities or connections. In the final step, selective coding brings the categories identified in axial coding into larger core categories. Themes emerge from the core categories, which can be used to support previously collected quantitative data to form findings of the study. Figure 3 represents the methodology of CGT.

**Figure 3**

*CGT Methodology*



*Note.* This figure was created by the researcher using Canva, a graphic design tool.

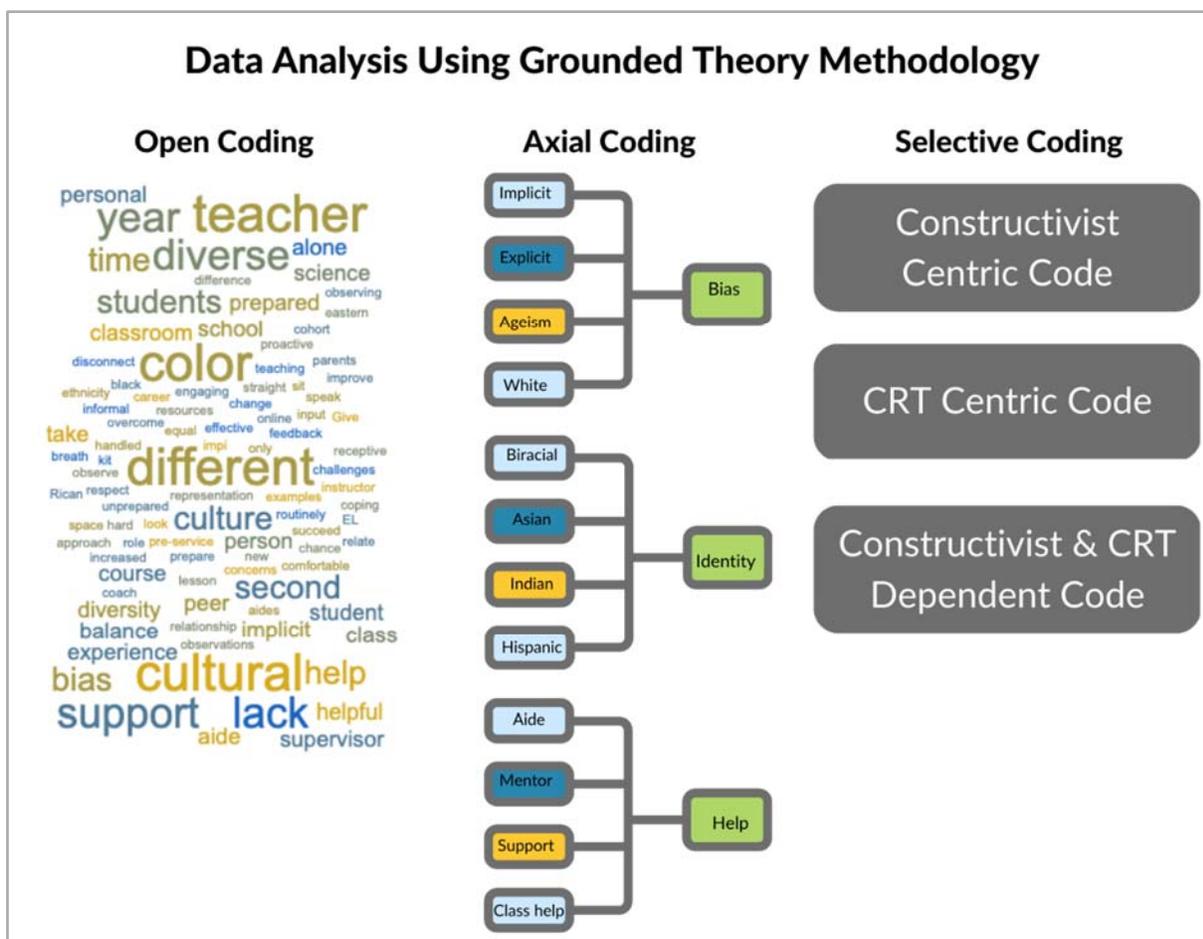
The interviews were conducted in batches of two participants, allowing for initial data analysis to occur. Originally, open and axial coding were conducted after the first batch of

interviews. After the second batch of interviews, more open codes emerged, which significantly altered the axial code categories. This occurred again after the third batch of interviews, in which commonalities were more apparent with enough differences to consider either broadening or narrowing axial categories. After all interview transcripts were open coded and axial coded, selective coding was conducted to connect similar categories and to strengthen their relationship. Using this study's theoretical frameworks, categories were further distilled until they were aligned with either constructivism or CRT. The final step was to develop themes from these selective categories, which answered the research questions. Figure 4 represents the process taken in analyzing the qualitative data collected from the interviews.

Open coding was conducted after each batch of interviews until all interviews were completed. From this process, a total of 248 open codes were manually coded from six transcripts. Appendix I contains the entire open code list. This open code list was then entered into Atlas.ti for recommendations of possible axial codes. There were 25 recommended axial codes generated by Atlas.ti, which were further reviewed for congruence. After reviewing the recommended codes, a few were modified by the researcher. One axial code was divided and renamed into two categories. Another change made was to eliminate eight suggested axial codes because they were too individualized and more appropriate to add to another axial category. For example, "ageism" was a suggested axial category, with "ageism" as an open code added under this category. However, it made more sense to add it to the axial category of "bias" and to eliminate "ageism" as an axial category. After conducting axial coding, there were 18 axial categories created.

Figure 4

*Analyzing Qualitative Data Using Grounded Theory Methodology*



*Note.* This figure was created by the researcher using Canva, a graphic design tool.

Appendix J contains the axial categories with their associated open codes.

Prior to advancing to the next step in the process, theoretical frameworks were applied, and axial categories were assigned as either constructivist or connected to tenets of CRT. Of the 18 axial categories, nine were categorized as constructivist, and the other nine were categorized as being connected to CRT tenets, as represented in Table 11.

**Table 11***Axial Coding Results Based on Theoretical Frameworks*

Constructivist centric codes	CRT centric codes
Work	Accent
Intern program	Awareness
Challenges	Background
Communication	Bias
Education	Community
Experience	Culture
Feelings	Diversity
Help	Equity
Learning	Identity

The next step in CGT methodology is to conduct selective coding, which further connects common axial codes and their open codes. In preparing for this analysis, the theoretical frameworks for this study were considered as the frame of reference in selective coding. Axial codes were selectively coded to fall within the following selective codes: (a) constructivist centric, (b) CRT centric, or (c) constructivist and CRT dependent. Table 12 shows a total of nine selective codes, identified into three core categories.

**Table 12***Selective Coding Results Based on Theoretical Frameworks*

Constructivist centric codes	CRT centric codes	Constructivist and CRT dependent codes
Network of support	Building relationships with racially diverse students	Emotional experiences of a new teacher
Learning experiences	Strategies to accommodate students' needs	Coping strategies
Building relationships with colleagues and mentors	Unique challenges to teaching students	Balancing multiple demands

### *Constructivist Centric Codes*

**Network of Support.** Network of support is a constructivist centric code to describe the type of support intern teachers of color seek from colleagues and mentors. A network of support describes the people who, individually or collectively, provide mentoring-type support to the intern. This network includes, but is not limited to, administrators, classroom peers, colleagues, coordinators, instructors, site-based mentors, and university supervisors. One hundred percent of participants mentioned at least three people who formed their network of support. Work-related networks of support, which include administrators, colleagues, and site-based mentors, were mentioned by all participants as direct support to their day-to-day work performance as intern teachers. Program-related networks of support, which include classroom peers, coordinators, instructors, and university supervisors, referred to the content-based knowledge and socioemotional support of coping as a new teacher while attending intern credential courses in the evenings.

Interns shared examples of how their networks of support assisted them in moments of need. Intern 04 provided an example of on-demand support received, saying:

If I need examples on how to word things, like she'll just block out all her students' names and send me an [individualized education plan (IEP)] example, then I can reference because I'm the type that I just like to see an example and then I know where to kick off from there. So, I feel like that kind of support has helped me a lot with feeling confident in running [IEP] meetings and completing paperwork.

Intern 02 shared, in general, how supportive their work team is, especially in times when they question themselves and their self-efficacy. They said:

I have a team who, for every small thing that I think is not the reaction that I wanted, I go to them. Or if I get any email from parents, or if I see something happening which I have reacted to, or I did it in one way, I go to them and ask, “Did I do [it] the right way? Or “What other way can I do it?” Or “Am I thinking it correctly?” And they are my support system. They help me a lot.

Intern 05 described how the network of support through their teacher preparation program was helpful and accessible when needed. They shared:

Whenever we want any help or any support, we can contact our coordinator or course instructors, and then they are always ready. They’ll allot the time and the office hours to help us. Some of the instructors that I have had, I feel very fortunate to have had their support.

Intern 01 expressed how their network of support spanned across both work and program, confirming how this level of wrap-around support develops a sense of self-efficacy. They said:

I have support systems from [my]school, from the college I go to, and from my administration. I was fortunate enough to have supportive administrators. And aside from my work when I come [to college], I have a really good support system within my peers, my classmates, my teachers, and the coordinator of this program. And I feel that there’s any occasion where I need someone to gimme guidance or just hear what I’m going through, I’m definitely supported by various outlets.

Intern 03 shared how fortunate they were to have had the opportunity to work with two people in their network of support whom they had a previous connection with, saying:

I just have a tremendous support network. [She’s] my coteacher. She’s right next door. I knew her before I got into teaching. Her kids knew my kids. And, for whatever reason,

she just really connected with me and just really guided me. And she's been like my go-to. You know, my site [mentor], she's a good friend. And, you know, she definitely helps me out. We share lessons cause we teach common courses. Then, my [university] supervisor is a retired teacher that was at [the high school] when I first got there. And he's just a cool dude that talks about different things and gives me different perspectives.

**Learning Experiences.** Learning experiences was another constructivist centric code to describe how intern teachers of color learned from various experiences both at work and in their intern program. According to Kolb's (1984) experiential learning cycle, people experience events and tasks and learn from them. Intern teachers serve as teachers of record and provide instruction to their students as they, themselves, are learning to become more knowledgeable in teaching. The experiential learning cycle allows intern teachers to reflect upon their thoughts and actions and plan modifications to increase their effectiveness to have better success.

During interviews, all participants answered questions regarding their experiences through their perspective of being an intern of color. As they answered, reflective language was present in their responses. Intern 03 expressed how, despite the best intentions with lesson planning, not all lessons go as well as planned, sharing:

When I look at my students' eyes and I have this wonderful lesson planned and I'm into it, and I look at them and they're not into it. I'm like, "Holy cow. Am I doing the right things? Am I approaching it the right way?" I get frustrated at times when you, whether they're informal or formal assessments, and I don't feel that my expectations of how they were gonna perform coincide with their actual performance.

Intern 06, who previously worked as a paraprofessional, described how different the two jobs are—which is not what they had expected. They thought the transition from being a

paraprofessional to teaching would have been easy. However, after much reflection, they realized that additional experience on what that transition would have looked like would have been valuable. They said:

I think also what would've really helped me is if they would've given me time to go observe another class . . . I worked as an aide, but I guess it was some years ago. And I felt like it wasn't kind of applicable. Where now that I'm teaching, I would've liked to have had that time.

Reflecting as a teacher of color, Intern 05 acknowledged their implicit bias, and how they are part of a greater system that needs to recognize their role in it. According to their interview, the intern is constantly challenging themselves on how to become better in working with diverse people.

Like me, I need to reflect upon my implicit bias. How can I overcome that, and how can I become better? How can I improve myself? Similarly, it also applies to my students and to my peers, and to my supervisors or everyone who are of diverse backgrounds. So, I would say that I think it is evolving. Everyone is evolving to overcome all those barriers and become truly like a universally culturally appealing society, right? Like a society where people of diverse backgrounds are equally valued and respected, and their thoughts are also valued. Their opinions are valued. So, the system is evolving, and I'm a part of that.

In general, reflective language regarding their experiences allows interns to constantly self-evaluate their learning experiences, comparing if their outcomes matched their intentions. As they progress iteratively through the experiential learning cycle, interns strengthen their self-

efficacy by learning to evaluate their performance and planning on how to improve for the next opportunity. Intern 06 said:

Like there were times that I thought, “Okay, did I answer correctly? Did I not? Do you have a good choice?” How, in a situation like this, what should I do? Just certain things that you don’t think come up, and [then] they do, and you go, “Oh gosh, what do I say to that?”

Learning experiences were further enhanced when processed with others, in alignment with constructivist theories. All participants shared how interacting, venting, discussing, and processing with others, especially with what Vygotsky (1978) referred to as the more knowledgeable other (MKO), offered profound insights to their own learning. Intern 04 who was an educational specialist, serving students with extensive support needs, stated how important it was for them to learn from others’ experiences, saying:

I feel like I do feel definitely more prepared from, from trial and error, from my 1st year, and building relationships also with my classmates and hearing their inputs, their stories, how they handled situations, and also different stories from instructors.

Another principle of constructivist theories is the sense of belonging and community and the higher levels of learning generated from this. Constructivism posits that learning is coconstructed experiences through social interactions. Intern 05 captured this sentiment in one of their responses, saying:

Peer interactions with my [college], you know, my evening classes, my classmates, those are very valuable for me. Because I now know that I am not the only person who is facing all this. Everyone else also faces the same kind of problems that I face. So, I’m

not alone in this. So, when they share their own experiences, then I feel more included.

And so that community has helped me a lot.

**Building Relationships With Colleagues and Mentors.** The last constructivist centric code is building relationships with colleagues and mentors. This selective code is different from the network of support code, meaning that this code focuses on the relationships created with other educators regardless of support provided. Statements shared by all participants supported Vygotsky's (1978) theory on social constructivism, in which learning is comprised of individual experiences and moderated by social interactions. As new teachers entering the profession, all interns interviewed shared their experiences in building relationships with others. Intern 04 simply stated, "I like talking to people that I know will understand." Intern 01 connected with other educators through common purpose, saying:

And then within my peers, fortunately it's nice to be able to connect with other educators.

Even if we are within different grade levels, I do feel connection at the simple fact that we are educators and we do serve a similar purpose.

Through a common purpose, educators have common experiences. Interns interviewed recognized the value of collaborating with other educators. Despite the differences in schools, grade levels, content areas, and years of experience, educators can be a resource to one another in providing information and resources. Vygotsky's (1978) principle of MKO was reflected in this Intern 03's comment, as they were seeking out those who have more knowledge and experience for guidance and reassurance. They said:

I reach out to people that have more experience because I don't want to be on an island, you know. I'm not trying to reinvent the wheel. So, I'm a [department] chair, so I'll reach out and ask questions and talk to people. And, for the most part, what I find is that

my experiences are common. They're not unique to me. I'm not a bad teacher; just that we all have our days.

One example shared by Intern 06 was how their university supervisor provided comfort during observations as they worked on increasing their instructional capacity. This intern was grateful to have another educator believe in their ability to grow as a teacher. They said:

My [university] supervisor from the college, she's come in to observe me. She says she'll work with me. She says she has seen a lot of improvement. She comes in and sits down and watches me. And I feel comfortable with her; I do well. She believes that I've made progress and she likes the way I progress.

Four participants did not feel being an intern teacher of color affected their ability to build relationships with colleagues and mentors. Their experiences have been favorable and did not hinder their ability to teach or participate in coursework. Intern 05 shared:

I feel quite prepared because I get a lot of support from [the college], and me being a person of color has not really come in the way of getting any kind of support from my teachers, from my course instructors, you know? So, I don't really feel anything out of the way there.

Building relationships with colleagues and mentors have not all been positive. Two interns spoke extensively about how their administrators have treated them differently than others. An administrator had decided to nonreelect one intern, despite the intern's requests for additional instructional support. The intern felt that despite the administrator saying, "We're all a family," the intern felt the administrator was "a bunch of bologna" because of the way they were being treated. Another intern expressed how their administrators made them feel as a teacher of color. The intern perceived the administrators were biased against their ability to teach due to their

cultural differences and perspectives. They felt that administrators favored White teachers over teachers of color because they have similar beliefs and values when it comes to what teaching practices should look like. Intern 02 stated:

I feel they [administrators] address us, teachers of color, in a different way than with others. Just because they are not teachers of color, that doesn't mean that they will do it in a more perfect way than us, right? And that is something that I see in most admins and I feel to respect a person by their quality and not by the color. Very few admins I had seen who respect people by their quality. Just because we're doing it in a different way, that doesn't mean we're doing it wrong.

### *CRT Centric Codes*

**Building Relationships With Racially Diverse Students.** The first CRT centric code is the importance of building relationships with racially diverse students. CRT is the understanding of issues within the educational system and its effects on marginalized students (Solorzano et al., 2000). This study focused on the second and third tenets of CRT, which is the social construction of race and how it is a product of individual social beliefs and collective interactions.

According to previously stated research (Ingersoll et al., 2019), demographic parity states that teachers of color are important role models for students of color, as well as White students. When asked about their role as teachers of color for their diverse students, all participants willingly disclosed their ethnicity and how that factored into building relationships with their students. Intern 02 shared how coursework supported their ability to connect with students, despite their ethnicity, saying:

You connect with the student only when you use your empathy and sympathy and try to build up relation with them. Just because you are of color doesn't mean you are going to have a good relationship, good chemistry with your students. And this idea of how important student relationship with the teacher is, wouldn't have hit me if I wouldn't have joined this program.

Intern 06 felt that all students want to have a sense of belonging. It does not matter what race or ethnicity the teacher or students are. They believed setting the right environment conducive to learning and creating a safe space would help them build strong relationships with their diverse students. They said:

And as for the students, you know, they're students, they're kids. No matter what situation, what color, what culture they're in, they're still students. You know, they wanna do well.

A Latinx intern expressed the importance of demographic parity and representation in the classroom. But they are not limiting themselves to only supporting Latinx students. It is equally important for all students, regardless of ethnicity, to get the best education they can provide.

Intern 03 shared:

You know, and just trying to make my teaching accessible to everybody. So, not like blindly, this is what I wanna focus on. I wanna focus on Latinos. You know, that's where I'm at. I'm Puerto Rican. That's not just it. I want every ethnicity that's represented in my classroom to feel like they're getting a fair shot at what I'm teaching.

An Indian intern expressed some self-doubt in connecting with students due to their linguistic accent, which may affect their ability to connect with students. This intern felt that because of

their cultural background, there was self-doubt about whether the students would still value them. Intern 05 shared:

There are days that I have felt overwhelmed, and actually I would say, sometimes I feel like, are my students really listening to me? Is it because of the way I look, or the way I speak? Or is it because of my accent or certain very small and minor things, which might be overlooked by others, which I might feel is really like very super important to me? Others might not think that way, but it's because I am from a racially diverse background. I might have those feelings, because of the way I look, because of the way I speak. Because of my cultural background, are my opinions really valued?

**Strategies to Accommodate Students' Diverse Needs.** The next CRT centric code focuses on the knowledge and ability to accommodate students' diverse needs. The third tenet of CRT addresses how the differential treatment of individuals is based on race and ingrained in social systems. When interviewing the interns, two of the interns spoke specifically about how working with students of color may need additional skill sets. A Latinx intern shared how working with ELs requires skills sets that may be different from their own background and experiences. They shared how working with a Pakistan student, of whom they do not share the same language or culture, was different because there were no materials or resources for ELs whose primary language is not Spanish. Intern 06 said:

I have quite a few EL students and the majority are Spanish speaking. But I do have one gal, and she is smart as can be, from Pakistan. Just a lot of visuals. And I'm very, speak with gestures and hands and visuals.

The intern felt that their Pakistan student was already at a disadvantage because, as the teacher, they were not equipped to work with a non-Spanish speaking EL and the curriculum was not

accessible to ELs whose primary language was not Spanish. The EL curricular materials were biased toward Spanish-speaking cultures and experiences.

Intern 04, who served students with extensive needs, shared how difficult it was to work with families who may have a different cultural background. They would like the students' parents to feel more comfortable sharing their cultural needs. The intern was aware they need to ask questions, so parents have that space to respond. Intern 04 said:

I feel semiprepared only because even though there's different races, there are many more different cultures, so I feel like that's a little different. But I'd say mildly prepared because I'm the minority in the classroom I'm serving right now. For example, certain races/cultures don't eat certain foods and I had to learn that because sometimes parents don't speak up right away because they're like, oh, well they must not understand, you know? But as a teacher and a big part of the day for the students, I feel like I should understand.

When asked about what would have been helpful in serving racially diverse students with extensive needs, Intern 04 relayed having a starter kit of resources would have been useful along with being provided examples on how to properly word sections of the students' IEP. They said:

What I got from my colleague was kind of what I would've liked. At least a starter kit on resources I can use, even if it's links of places. Some examples of what other teachers in my age group that I'm teaching are doing, and examples without the names and information obviously. I feel like those things like teachers in this population for IEPs and everything like that, there's a lot of wording you have to put in there to, for it to sound like fluid or make it sound how it's supposed to. And I think that would help out teachers for sure.

Intern 04 also shared, regardless of the cultural background of students, additional program support in learning how to assess students at the beginning of the year would have been more beneficial. By learning how to assess students' needs earlier in the year, the intern feels they would have been able to address the diverse needs of their special education students sooner.

They said:

So, I barely took a class my 2nd year on how to assess a student and I feel like that needs to be kind of one of the first classes that needs to be taught. Only because that's a big part of teaching as far as the triennial IEPs that come by and like IEPs don't really wait for people. You kind of have to go for it whether you're new or not. So, I think that's really important.

**Unique Challenges to Teaching Students.** Unique challenges in the classroom teaching students is the last CRT centric code. As teachers of color, the interns collectively agreed there are unique challenges to teaching students, even more so when race is a factor for the student and/or the intern. One barrier expressed by an intern was in handling students' behavior. The two students the intern is having difficulty with are of an underrepresented ethnic group that is disproportionately overrepresented in discipline issues. Intern 06 shared:

There are times when I get the behavior challenging kids. And I had two this year that, oh my goodness, they were behavior challenges. You know, those behavior challenges, how to react when you have a kindergartener that goes, "I don't wanna do it." How do I react to that?

An Asian intern revealed how, as an EL themselves, they have trouble understanding English speaking students. This presents a unique challenge because their students may speak rapidly or use colloquial language, which is hard for the intern to understand. Intern 05 said:

I feel so handicapped because of the accent, not because of mine, you know, because sometimes I have trouble understanding how they speak. It is English, but the way they speak, you know, the drawl and the different way, so that sometimes I have to ask my students twice, probably they might find it annoying, but I would say that I'm having trouble with the accent. Can you just be a little slower? I might have trouble with that. I'm trying to work on all those.

Another intern shared a similar experience; however, this is with the university supervisor supporting them in their classroom. This intern has had two different university supervisors due to a change in credential programs. The intern's experiences with both university supervisors have been different. The first university supervisor initially did not understand this intern's instructional style as they approached teaching in a nonsequential manner. The intern noted how this method was taught in their country. But in taking courses, they now understand universal design for learning and its importance in the classroom. Universal design for learning is a teaching approach to accommodate a variety of learners by eliminating barriers in the learning process (Novak, 2016). Intern 02 shared:

I'm a woman of color and a teacher of color. So, my pronunciation and my way of working are different. She [the university supervisor] initially misunderstood my way, but then stopped and thought through it. And then she understood, and she appreciated me because I come from a cultural difference.

The second university supervisor was not as understanding. Intern 02 explained that their university supervisor was White, and they felt she has implicit bias against them because of their difference in cultural background. They said:

While my current one, she constantly compares me with a Caucasian teacher and how she does in a sixth period class. And just because I'm a [teacher] of color, my pronunciation is different. She thinks though my content of math is high, she thinks I cannot work with eighth graders. She even told me to go to a lower grade while I have a great rapport with my students. And she also told me that in my age, I think eighth grade is not suitable.

This intern felt they are not receiving authentic support and feedback because the university supervisor is racist and ageist. However, the intern felt the program overall has provided a supportive and positive experience.

All participants shared one class in particular that provided robust content in working with diverse learners. A course in examining beliefs and mindset was perceived as instrumental to their learning experience as an intern teacher of color. One intern stated how they felt prepared in teaching diverse students because of the courses being taken and the discussions regarding different types of learners. Intern 01 said:

I feel prepared to teach diverse students because . . . educators need to be mindful and support each of our students' needs. There's an emphasis with equity within the classroom and how we support our students and each other. And I'm currently in a cultural competency class and just basically learning as an educator how to put ourselves outside, trying to put ourselves in the shoes of our students and understanding them and their backgrounds and their differences and how we can as educators support them and their learning needs. So, I do feel pretty prepared to support diverse learners because many of the courses often discuss the needs of every student and not just a particular student.

Intern 04 put this into perspective of working with diverse students in a special education setting. Culture adds a dimension to working collaboratively with parents and families to ensure their students are receiving the academic and behavioral services they need to be successful. They said:

I do like when classes talk about how we can be collaborative with parents and how we communicate with parents because that's when you can express your issues, your concerns, maybe a challenging parent. And also that goes hand-in-hand with culture because sometimes some cultures think that their child has a disability because of maybe something they have done wrong in the past, like just that cultural aspect of it. And there's parents that are grieving and it's just, you have to be there for that too.

Despite challenges shared by all interns who participated in interviews, one intern eloquently captured the essence of why they chose to become a teacher, which is to fulfill a passion to serve all students. Demographic parity and cultural synchronicity state that teachers of color are important role models for diverse students. The interns interviewed shared this strong sense of duty to fulfill this responsibility. Intern 03 said:

That's why I got into teaching, right, was to be more of a representation, especially in math, than what I felt students were getting. So as far as how do I feel teaching racially diverse students, that's my passion. That's where my heart is . . . I want every ethnicity that's represented in my classroom to feel like they're getting a fair shot at what I'm teaching. And so, I just try to make my classroom as engaging and interactive as I can to everybody, respectful of all situations.

### *Constructivist and CRT Dependent Codes*

**Emotional Experiences of a New Teacher.** There are codes that are not centered on constructivist or CRT frameworks. These codes exist in both frameworks and are, thus, labeled as constructivist and CRT dependent codes. The feelings of being overwhelmed, confused, and/or frustrated formed the first dependent code, as these are emotions experienced by new intern teachers. All interns interviewed shared their personal experiences as they navigated their first years of teaching. One sentiment recorded is how it would have been appreciated to have had someone to collaborate with; Intern 01 shared:

For instance, if I compare my 1st year to my 2nd year, my 1st year we didn't really have many meetings and I didn't really have a person I could go to about certain curriculum. Now in my 2nd year where I'm currently at, I do have differences in support within my work where I can speak with somebody for a specific curriculum, and about specific strategies. So that would've been helpful my 1st year . . . it would've been nice to have met with somebody and kind of had more of a guideline of how to pace myself.

Another sentiment recorded was feeling comfort in being able to ask questions to those with more knowledge and experience. Being able to connect with their network of support when work gets challenging allowed interns to express their feelings and process their emotions.

Intern 02 said:

I received a lot of support of mental support answers to my question of "what do I do next" from the teachers. All the [instructors] in [the college] helped me a lot because I have a lot of questions, whichever [instructor] I had, if you ask them, they'll say that I have a lot of questions.

**Coping Strategies.** Coping strategies for dealing with difficult situations was another dependent code. These are strategies used by the interns to cope with feelings of being overwhelmed, frustrated, and/or confused. The constructivist centric code of network of support and CRT centric code of unique challenges are grounded in how interns cope. Intern 01 stated reaching out to their network of support at the college is their way of coping with challenges, sharing:

When it comes to my [instructors], I'm able to get their advice and guidance and they're able to help me stay on track. With the coordinator, I'm able to express the things I'm going through, and the coordinator will find ways for me to get the support I need with different exams, the courses I'm taking, and just different strategies that I can implement as a teacher as well.

Intern 04 has reached out to their network of support at work for solace when teaching gets difficult. Sharing their teaching experiences with one another provides the comfort of knowing they are not alone in feeling this way and the reassurance that things will be better. They shared:

Having time to vent to my coworkers and even them telling me about their day, I feel like that equally helps with my coping with my feelings because I know like, okay, I'm not alone. I'm not the only one that goes through these things or I'm glad you can understand me.

**Balancing Multiple Demands.** The ability to balance multiple demands was the final dependent code, which exists in both constructivist and CRT frameworks. Intern teachers serve as teachers of record while they are attending coursework in-person twice a week. Balancing personal and professional obligations may create a tumultuous work-school schedule in which

the intern may feel responsibilities are competing for their time. All interns interviewed voluntarily shared hurdles to finding that balance. Intern 03 said:

I think it's the experience part that just makes it less daunting than the 1st year. Right. And then you've established a routine, trying to balance being in the classroom and taking the classes at night and trying to figure that part out.

Some suggestions on how the program can help with balancing the multiple demands of coursework requirements, two interns share the following sentiments. The first statement, from Intern 01, focused on how to balance course schedules with examination schedules.

I think I would've appreciated having these exams placed in that schedule to prepare yourself for this timeframe for that and the next exam and all these other things that I recall from that one meeting. But obviously I forgot because there's only so much an educator can recall, you know, after one meeting. And so, things I kept trying to remind myself were I have to at least attempt the RICA [Reading Instruction Competence Assessment] twice and these are the things that follow if I don't pass certain exams. So, I think that would've been helpful knowing what, what timeframe I needed to complete certain exams as I'm taking certain courses.

The other statement, from Intern 05, shared how understanding the general format of the program schedules and courses is helpful:

I would say the general format of [the college], how they are, how the courses are designed, how they are structured, and how they systematically teach the course. Like every course is different. So, one course is on culture, another course is on like curriculum, how to prepare for your TPAs. You know, all those things are very, very informative.

## **CGT Summary of Results**

Three themes emerged from the coding analysis, deriving from the methodology of CGT and supported by the theoretical frameworks of constructivism and CRT. Using qualitative data analysis software, relationships within open codes and across axial codes were explored to discover selective codes. During the axial coding process, connecting the constructivist and CRT frameworks provided an additional layer prior to identifying selective codes. The selective codes with the most relationships in common created the grounded theory for this study. The theories that emerged were: (a) as a new teacher, it is common to feel overwhelmed, confused, or frustrated while trying to balance multiple demands, including lesson planning and grading; (b) teaching racially diverse students presents unique challenges, including the need to accommodate students' needs, while also navigating issues related to classroom management and engagement; and (c) to thrive as a teacher, it is crucial to seek support from colleagues, mentors, and support networks, as well as learn from experiences during their intern program.

### **Balancing Multiple Demands as a New Teacher**

It is common for intern teachers to feel overwhelmed, confused, or frustrated while trying to balance multiple demands. Examples provided by interview participants included lesson planning, grading, planning for formal and informal observations, working with difficult parents and students, working with cultures that are different than theirs, and balancing work–school responsibilities. This theme was a result of the distillation of interview responses through constructivist and CRT dependent perspectives. Desired supports shared by interview participants included orienting oneself to the intern program course designs, understanding the purpose of the courses as it relates to real-life application, knowing when licensure exams are due, and learning time management skills for better work–life balance.

## **Teaching Racially Diverse Students Presents Unique Challenges**

There are unique challenges for new teachers to overcome in teaching diverse students. As an intern teacher, the first years of teaching can be an emotional experience. Feelings of being overwhelmed, confused, and/or frustrated without coping strategies may outweigh the positive experiences of teaching. Although this theme is heavily considered to be in the constructivist and CRT dependent selective code, the theme leans more toward being CRT focused. Building positive relationships with diverse students benefits both the intern teacher and the students in whom they serve. Unique challenges experienced by interviewed interns include understanding their culturally divergent students, managing difficult student and parent behaviors, working with biased colleagues, and meeting the diverse academic and socioemotional needs of their students. Useful guidance would be to collaborate with MKO, such as colleagues and mentors, receive materials and resources, prompts or scripts on how to address parents, tips on how to manage students, and continually increase cultural self-awareness.

## **Seeking Support Networks and Learning Experiences**

To thrive as a new teacher, it is crucial to seek support from colleagues, mentors, and support networks, as well as learn from experiences during their intern program. Interview participants described their experiences in seeking support from both work and program colleagues. At work, participants appreciated having involved administrators who exhibited cultural awareness, teacher teams who provided instructional and moral support, and mentors who shared experiences and resources to increase their productivity and success. At their intern program, participants found common company with fellow interns, sharing stories of success and survival. They were aware of and used their instructors and coordinators to motivate them,

encouraging their progression through the intern program. This theme was a result of constructivist centric codes, theoretically reinforcing people's need to learn from others and to offer and receive help through human interactions.

### **Conclusion**

This chapter shared information about this mixed method study about intern teachers of color and their sense of self-efficacy as new teachers in X County. Results of the quantitative and qualitative analyses revealed alignment with the theoretical frameworks for this study. Analyses also connected back to the research questions. For the quantitative portion of the study, the TBMS results of 144 intern teachers of color teaching in schools located within X County were analyzed using descriptive statistical analysis to determine perceptions of self-efficacy at the end of their 1st year of teaching. For the qualitative portion, six intern teachers of color volunteered to participate in semistructured interviews to further understand what types of support were desired as a new teacher. Participants of the interviews represented two ethnic groups in various content and classroom settings.

Using constructivist grounded theory methodology, three levels of analysis were conducted to distill data collected from open codes to core categories or themes. In open coding, 248 codes emerged from the interview transcripts. Atlas.ti, a qualitative data analysis program, categorized open codes into axial codes based on how the open codes are related. Using Atlas.ti, the researcher generated 18 axial codes, which in applying the theoretical frameworks, aligned nine axial codes to constructivism and nine axial codes to CRT. Further analysis of the relationships between the axial codes deepened, categorizing them into more meaningful associations as selective codes. Constructivist centric codes, CRT centric codes, and constructivist and CRT dependent codes derived as the selective codes, creating nine selective

codes falling evenly among all three centric and dependent codes. The three themes resulting from the study summarized the perceptions of self-efficacy by intern teachers of color: (a) as a new teacher, it is common to feel overwhelmed, confused, or frustrated while trying to balance multiple demands; (b) to thrive as a teacher, it is crucial to seek support from colleagues, mentors, and support networks; and (c) teaching racially diverse students presents unique challenges.

There was a difference in the perceptions of intern teachers of color in their level of self-efficacy from their 1st year of their program in comparison to their 2nd year, as shared by interviewed participants. Data showed that in their 1st year of being an intern teacher, their level of self-efficacy ranged around *some degree of confidence* on Scale 1 of the TBMS and *somewhat confident* based on Scale 2. Although perceptions of self-efficacy have improved, intern teachers of color desire ongoing support from their network of colleagues and mentors in balancing multiple demands and working with diverse students. In Chapter 5, critical analysis and discussion of the three themes are addressed, answering the research questions initially proposed in this study. Implications for theory, research, and practice are also presented, and recommendations for future research are introduced for consideration.

## CHAPTER 5: DISCUSSION

The purpose of this study was to examine the level of perceived preparedness of intern teachers of color while in a California county teacher preparation program. This chapter focuses on the discussion of findings related to the literature of supporting intern teachers and the implications that may be of value to teacher preparation programs, people supporting intern teachers, and intern teachers who teach in diverse communities. The chapter concludes with a summarization of the limitations of the study and areas of future research.

This chapter has discussions and future research possibilities in answering the following research questions:

1. What is the level of perceived preparedness of teacher candidates of color in their teacher intern preparation program? (Quantitative)
2. What support do teacher candidates of color perceive they need while in their intern program to increase their level of preparedness? (Qualitative)

The mixed method study was conducted using an explanatory sequential design. This two-phase model involved collecting quantitative data followed by gathering qualitative data to explain the quantitative results. Quantitative data collection and analysis were conducted using archival research from the May 2022 administration of the Teaching Beliefs and Mindset Survey (TBMS). Qualitative data collection and analysis were conducted using constructivist grounded theory (CGT) using transcripts and fieldnotes collected from interviews. CGT is a qualitative method that uses open, axial, and selective coding to discover relationships among discrete parts of qualitative data, categorizing codes until themes emerge (Charmaz, 2006). Theoretical frameworks in constructivism and critical race theory (CRT) framed the questions used for the

qualitative portion of the study. The theoretical frameworks were applied to the coding analyses, which iteratively generated the themes from this study. Comparing the findings from the archival research and CGT results showed the themes supported responses to the research questions.

### **Interpretation of the Findings**

Three themes emerged from the data analyses conducted from the archival data and interviews: (a) as a new teacher, it is common to feel overwhelmed, confused, or frustrated while trying to balance multiple demands; (b) teaching racially diverse students presents unique challenges; and (c) to thrive as a teacher, it is crucial to seek support from colleagues, mentors, and support networks. These theories were based on constructivist centric codes, CRT centric codes, and constructivist and CRT dependent codes. These theories explain how intern teachers of color are coping with their professional obligations, and the need for a strong network of support is desired at work and school.

#### **Balancing Multiple Demands as a New Teacher**

As a new teacher, balancing multiple demands could generate feelings of being overwhelmed, confused, or frustrated. Intern teachers work as teachers of record during the day and attend teaching credential courses in the evening multiple days a week. At work, tasks include developing and implementing lesson plans, managing students' behaviors, differentiating instruction to meet students' diverse needs, assessing students' progress, and managing grades and assignments. Outside of their instructional time, interns have contractual obligations, such as communicating with and contacting families, working with colleagues on projects, attending mandatory and voluntary meetings, and continuing their professional development through trainings and workshops. At their teacher preparation program, interns have course-related

assignments and homework, licensure examinations, state performance assessments, and clinical practice requirements to complete. These two areas, work and school, compete with the interns' ability to spend time with their families, affecting their social lives and personal well-being. Learning to balance these obligations is an area in which all interns interviewed experienced. They collectively shared the importance of orienting oneself to the intern program course design, understanding the purpose of the courses as it relates to real-life application, knowing when licensure exams are due, and learning time management skills for better work–life balance.

### **Teaching Racially Diverse Students Presents Unique Challenges**

Teaching as an intern presents challenges, some of which were shared in the previous section. Combined with being a teacher of color and serving racially diverse students, there are unique challenges to overcome. The first years of teaching can be an emotional experience. In addition, working with racially diverse students may compound that experience when the interns' feelings of self-efficacy come into question. It was noted in interviews that, being racially diverse themselves, interns may struggle with understanding the language and culture if they are different from theirs. Guidance from more knowledgeable others (MKO) as stated in Vygotsky's (1978) research helps to alleviate the stress, such as collaborating with colleagues and mentors with experience in handling culturally relevant situations, sharing materials and resources, receiving prompts or scripts on how to address parents, tips to managing students, and learning to increase cultural awareness.

### **Seeking Support Networks and Learning Experiences**

It is crucial for intern teachers to seek support from colleagues, mentors, and support networks to survive and thrive. Interns acknowledge their appreciation of having colleagues who practiced cultural awareness and did not exhibit bias toward them or their students. They also

discovered they enjoy the feeling of camaraderie, experiencing commonalities in their stories of success and survival. When interns interact with colleagues who do not have cultural awareness, they feel they experience bias, and they are judged negatively in relation to their White peers. These feelings of inadequacy do not build the interns' confidence in their teaching abilities. This theme supports constructivist centric codes, supporting interns' desire to learn from others and to build knowledge from social interactions.

### **Findings Related to Research Questions**

Chapter 3 presented the inquiry approach, method and methodology, instrumentation, and data analysis of the study. Using an explanatory sequential mixed methods inquiry approach, the research collected quantitative data through archival research of the TBMS and qualitative data using CGT through semistructured interviews. These designs were used to gather the information needed to answer the research questions.

#### **Research Question 1: What Is the Level of Perceived Preparedness of Teacher Candidates of Color in Their Teacher Intern Preparation Program? (Quantitative)**

The TBMS measured results from 1st year, intern teachers of color on two scales: the Teachers' Sense of Self-Efficacy and the Culturally Responsive Teaching Self-Efficacy. The descriptive statistics showed intern teachers of color felt some degree of confidence about their skillsets in the subscale areas of student engagement, the use of instructional strategies, and classroom management. However, the wide distribution of data from the mean showed there were interns who either were excelling or struggling more than the normed group. These quantitative data were supported by the qualitative data collected from interviews. Participants felt generally prepared for teaching, but there were areas within the subscales in which they did

not feel confident, lowering their sense of self-efficacy that generated feelings of confusion, frustration, and being overwhelmed.

The CGT qualitative themes supported the quantitative findings. Balancing multiple demands as a new teacher can negatively affect intern teachers of color and their sense of self-efficacy. According to Lupu and Ruiz-Castro (2021), work–life balance is a cycle, not an achievement, and they recommended reprioritizing tasks and commitments. According to Lupu and Ruiz-Castro (2021), “The [people] that described a more positive work-life balance intentionally reprioritized how they spent their time in a way that lined up with their true priorities” (p. 5). Figuring out the balance of prioritizing work, school, and family can be conflicting. Sperling (2013) addressed this work–family conflict debate in her article, which described how “women with parenting responsibilities are not succeeding in the workforce on equal terms with men who also have parenting responsibilities” (p. 48). With a teacher workforce predominantly filled with women, prioritizing their parental obligations among their work and school responsibilities can affect their self-efficacy in both areas.

Teacher and student racial diversity need to be considered in developing self-efficacy. The descriptive statistics from the Culturally Responsive Teaching Self-Efficacy Subscale posited that intern teachers of color felt *somewhat confident* to *quite confident* in their ability to meet the needs of culturally and linguistically diverse learners. However, the areas which showed high standard deviation were in relation to supporting ELs and the interns’ ability to bridge the gap between school and home cultures. According to Ingersoll et al. (2019), demographic parity is a benefit for increasing racial diversity in the teacher workforce. Teachers of color become important role models for students who see their racial identities reflected in their teachers. In Carver-Thomas’s (2018) study, students who have teachers of color within

their educational career boost their academic achievement, improve their graduation rates, and increase their chances in attending college. In working with culturally and linguistically diverse learners, teachers with the same linguistic backgrounds can help close the communication gap between students' home/families and school.

The CGT generated theme of teaching racially diverse students presents unique challenges corroborated the quantitative findings. Unique challenges include teaching culturally divergent students, managing difficult student and parent behaviors, working with biased colleagues, and meeting the diverse academic and socioemotional needs of their students. Interview participants shared the difficulties they experienced based on their life experiences as an intern teacher of color working with cultures other than their own. CRT provides the educational framework of using culturally responsive teaching practices to educate racially and culturally diverse learners. CRT analyzes social inequity that is covertly demonstrated through racist practices with academic institutions (Ladson-Billings & Tate, 1995). Culturally responsive teaching practices need to be taught and reinforced in teacher preparation programs to ensure diverse teachers are creating safe educational spaces and opportunities for all students, and especially for underrepresented students.

**Research Question 2: What Support Do Teacher Candidates of Color Perceive They Need While in Their Intern Program to Increase Their Level of Preparedness? (Qualitative)**

Based on interview responses, developing strong support networks and sharing learning experiences were key areas in supporting intern teachers. Interview participants described their network of support existing both at work and in school. At work, participants appreciated having involved colleagues who exhibited cultural awareness, provided instructional and moral support, and shared experiences and resources to increase their productivity and sense of self-efficacy. At

their intern program, participants valued common experiences with their classmates, such as stories of success and survival. They reached out to program coordinators, instructors, university supervisors, and mentors to motivate and encourage them through their 2-year intern program.

Vygotsky's (1978) social constructivism states people learn from their individual experiences and are mediated through engagement with others. The mediation of these experiences is focused on social interaction, working with the MKO, and learning within one's zone of proximal development (ZPD). The type of support sought and valued by intern teachers of color are the interactions and collaboration with more knowledgeable colleagues (i.e., MKO) and learning within their instructional level of need (i.e., ZPD). When interns are left on their own with no mentoring, or are learning at their frustration level, that is when interns have to cope with feeling overwhelmed, stressed, and frustrated.

Additionally, Kolb's (1984) research on the experiential learning cycle supported interns' needs for systematic support. Interns' concrete experiences are grounded in their daily work as teachers of record. Through site and university support and mentoring, interns engage in reflective observation, abstract conceptualization, and active experimentation in their practice of continuous improvement. Self-reflective dialogue is evident in the interviews conducted, and they externalize those dialogues by processing them with their MKO network of support.

### **Implications for Theory and Research**

Chapter 2 included constructivism and CRT as the theoretical frameworks for this study. The constructivist framework included Bandura's (1997) self-efficacy, Kolb's (1984) experiential cycle, and Vygotsky's (1978) social constructivism. The CRT framework provided the lens in which the researcher examined the teacher preparation program through an equity focus. These theoretical frameworks were used to connect theory to research, and research to

practice. How these theories frame the implications for practice is further explored in the following section.

### **Implications for Practice**

Taking into consideration the findings related to the research questions, and the implications of theory and research, the next step is to identify implications for practice. This study was conducted with intern teachers of color in X County in California, where their teacher preparation program and assigned school sites are located. Implications for practice were developed using the information collected and interpreted through the mixed methods study. Implications for practice for the teacher preparation to consider are (a) systematizing strong mentorships, (b) employing a teacher team model approach to clinical practice, (c) and providing cultural awareness training for interns' support networks.

#### **Systematizing Strong Mentorships**

In Chapter 2, preparing for the challenges of teaching was an area addressed in supporting teacher preparation. Various research (Hollins & Warner, 2021; Marszalek et al., 2010; Podolsky et al., 2016; Ronfeldt, 2021; Wilson & Kelley, 2022) cited challenges contributing to teachers leaving the profession other than for retirement purposes. Based on the review of literature, inadequate preparation was cited as a challenge for new teachers entering the profession. Along with coursework, new teachers need robust support to be successful in their clinical fieldwork. The ability to apply theory to practice is key in retaining new teachers. Based on past studies (Dinsmore & Wenger, 2006; Isaacs et al., 2007), the level of effectiveness of the preparation program determines the level of success interns have in clinical fieldwork.

The intern program at the institution of higher education (IHE) has a clinical practice system that is comparable to Kolb's (1984) experiential cycle. Clinical practice documents are

aligned to the California Teaching Performance Expectations and meet the California program standard requirements for fieldwork. University supervisors are retirees with many years of experience in their credential area and can impart knowledge to interns they support. An area for IHE leadership to consider is to systematize the university supervisors' training to ensure they are current in the content and type of support they provide to all interns, with special attention to intern teachers of color. It was evident in both the archival research and interviews that university supervisors may not have the knowledge base to sufficiently support, or are biased in working with, culturally divergent interns.

### **Teacher Team Model**

All interns in their interviews shared the importance of having a team of colleagues at work who provided both instructional and moral support. One area to further investigate and possibly explore is a teacher team model. In all interviews conducted, the instructional delivery model was the one-teacher, one-classroom model. According to Maddin and Mahlerwein (2022) from the Mary Lou Fulton Teachers College at Arizona State University, the one-teacher, one-classroom model is outdated by a couple of centuries and was originally conceived for the industrial era. Based on interview participants' accounts, this model fosters isolation and feelings of being on one's own. Statements of reaching out to their teacher teams outside of class time have been shared to explain how their network of support functions. Ideally, it would be beneficial to have the team of support within their classroom.

The traditional pathway, such as student teaching and the teacher residency model, has this type of mentoring support embedded within the program. However, this pathway is on a gradual release model, in which the student teacher or teacher resident initially observes and gradually progresses to a solo teaching period.

In a team-based model, several teachers are working with groups of students to meet their educational needs. The job of the teacher then becomes more sustainable, which means they are more apt to remain in teaching. At the IHE, a team-based model is currently being piloted by one of the schools in the teacher residency program. If successful, this model may be the way to provide comprehensive support for all teachers, not just new teachers. In the intern program, as schools hire multiple intern teachers, especially within the same grade level or content area, it is recommended to do further research in implementing a team-based model of support. This endeavor would require district support, in which the IHE leadership will need to initiate conversations about exploring this option.

### **Cultural Awareness Training for Intern Support Networks**

According to Marszalek et al. (2010), “The support of strong mentoring programs and professional development will enable teachers to continue to grow as professionals” (p. 25). It was evident in interviews that there is a need to ensure those supporting intern teachers of color exhibit cultural awareness. Interns shared examples of their experiences with explicit bias from university supervisors and administrators, founded in their assumptions on race and culture. Dinsmore and Wenger’s (2006) study discovered the relationship within the field experience affected learning; negative field experiences stifled learning while positive field experiences enriched their learning. If interns have negative field experiences, this may adversely affect their success and retention in the teacher preparation program.

It was overwhelming in interviews how interns felt the importance of coursework that explores equity, diversity, and inclusive practices. A recommendation would be to provide similar professional development and training with those supporting interns. The IHE leadership in the intern program should investigate the areas in which instructors, mentors, university

supervisors, and school-based personnel may need additional training in equity, diversity, and inclusion. Conducting annual equity audits or self-awareness reflections to capture individual's progression in this endeavor would be recommended to help monitor the impact of these types of trainings.

### **Limitations**

This mixed methods study collected quantitative and qualitative data using an explanatory sequential design. Qualitative data were collected to provide context and explanation of quantitative results, which increases the credibility of the study. There were limitations in collecting both sets of data. Quantitatively, the researcher analyzed archival data rather than distributing the Teaching Belief and Mindset Survey (TBMS) for more current data. Additionally, archival data were analyzed for all interns of color, and in retrospect, could have been disaggregated further by analyzing only the data collected for interview participants. However, this would have been ideal had there been a higher number of interview participants. Survey responses were self-reported, which may contain response bias wherein respondents may not have answered questions honestly.

Limitations associated with qualitative research using CGT included difficulty in recruiting, the number of interview participants, response bias, extensive amount of time in collecting and analyzing data, and off-topic responses. Despite having a target population of 128 potential intern teachers of color for interviews, only six respondents participated. Also, interns identifying as Black or two or more races did not volunteer to participate in interviews, even though two more attempts were made to invite these two groups. Response bias, providing answers respondents perceive as desirable to the researcher, may have affected responses due to the researcher's positionality as the college president. The study employed CGT as the

qualitative method, which is iterative and time consuming in collecting data and conducting multiple cycles of coding. During two of the interviews, participants went off-topic in one of their responses, which had to be disregarded in the data analysis. Additional limitations include sampling from one type of teacher preparation program, sampling from one IHE, and sampling from one California county. These limitations may be used as consideration for future research studies.

### **Recommendations for Future Research**

As stated previously in the limitations section of this chapter, there are opportunities to conduct future research based on the limitations of this study. Quantitatively, archival data were analyzed for all interns, and in retrospect, could have been disaggregated further by analyzing survey data of those who also participated in interviews. A comparative statistical analysis (i.e., *t* tests) can be conducted to compare data between dichotomous groups, such as gender and types of teacher preparation pathways (i.e., intern vs. residency). Analyses of variance (i.e., ANOVA and MANOVA) can be considered when comparing variances of means across different groups, such as race/ethnicity, school settings, grade levels, and/or types of credential programs.

Qualitatively, there are other method designs to consider. The researcher used CGT in the form of interviews for data collection. Other qualitative method designs, such as observations, focus groups, and case studies, can be used to collect data. Qualitative research, coupled with quantitative data, creates a credible and more robust study since it provides contextual information through participants' stories. Qualitative research provides student agency in sharing their authentic experiences, which enhances the meaningfulness of the study.

There are several areas for future research that would complement this study. Replication studies, comparative studies, longitudinal studies, and program evaluations are areas in which the

institute of higher education (IHE) participating in this study could pursue to gather more information regarding supporting new teachers in their teacher preparation programs.

Replication of this study to determine perceived levels of preparedness in targeted demographics is a consideration to pursue for this IHE. One area of future study could be to replicate this study and conduct research for the other teacher preparation pathway, teacher residency. As a follow up study, research can compare results from both traditional and alternative teacher preparation pathways. Thinking more broadly, this study may be of interest to other teacher preparation programs with similar demographics. If so, other IHEs may conduct their own research using methodology sufficiently similar to this study's methodology. Replication studies increase the validity of this study by attempting to validate these findings as being broadly applicable.

Other follow-up studies can focus on targeted demographics such as by gender, school settings, grade levels taught, and/or credential types. Comparison studies could explore the similarities and differences between preselected demographics. This type of study could identify root causes in disproportionality among and within programs, and IHE leadership can use continuous improvement science to address these issues.

Longitudinal data collection can be used to compare the effectiveness of changes made in the intern program. Annually collecting survey results to measure the effectiveness of changes is one way to determine the impact of recommendations made as a result of this study. It is important to include the qualitative portion of collecting student voice to provide context to the survey results collected and analyzed. Conducting a longitudinal study of these changes can then lead to a program evaluation.

Conducting a program evaluation would be a practical use of the longitudinal data collected. This study focused on the IHE's intern program. Considering the findings and implications of practice stated earlier in this chapter, a program evaluation could be conducted to evaluate if changes had an effect on intern teachers of color and their perceived level of preparedness. If replication studies are conducted in other targeted demographics or at different teacher preparation programs, identified findings and implications of practice implemented can be measured for effectiveness through this type of study. Program evaluation is a tool IHE leadership can use to measure a program's effectiveness to improve services to their teacher candidates.

### **Conclusion**

This chapter discussed the archival research and interview results in addressing intern teachers of color and their perceived preparedness and the types of support they desire. It also connected CGT themes to the theoretical frameworks, leading to informed practices for the IHE leadership to consider as they work on meeting the needs of their intern teachers of color. Systematizing strong mentorships, exploring teacher team models, and training their network of support to interns in cultural awareness are areas for the IHE leadership to further investigate and implement. Recommendations for further research were provided, in the spirit of continuous improvement and in contributing to the body of research as other IHEs and their teacher preparation programs address diversifying the teacher workforce in their regions. These recommendations are of value to teacher preparation programs to support recruitment and retention of teachers of color, people supporting intern teachers, and intern teachers who teach in diverse communities. As the field of education experiences a massive turnover, attrition due to retirements and quiet quitting, opportunities for diverse teachers to enter California's classrooms

increase, supporting demographic parity and cultural synchronicity for its growing population of diverse students. Representation counts, and California's PK–12 students need teachers who look like them, talk like them, and live like them to be their advocates.

## References

- Amineh, R. J., & Asl, H. D. (2015). Review of constructivism and social constructivism. *Journal of Social Sciences, Literature and Languages, 1*(1), 9–16.  
<https://doi.org/10.4236/ce.2012.326131>
- Aragon, S. (2016). *Teacher shortages: What we know*. Education Commission of the States.  
<https://www.ecs.org/wp-content/uploads/Teacher-Shortages-What-We-Know.pdf>
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. Freeman.
- Beare, P., Torgerson, C., Marshall, J., Tracz, S., & Chiero, R. (2012). Examination of alternative programs of teacher preparation on a single campus. *Teacher Education Quarterly, 39*(4), 55–74. <http://www.jstor.org/stable/23479652>
- Bhattacharya, K. (2017). *Fundamentals of qualitative research: A practical guide*. Routledge.
- California Commission on Teacher Credentialing. (n.d.). Clinical practice guidance. Retrieved on April 11, 2022, from [https://www.ctc.ca.gov/docs/default-source/educator-prep/pdf/clinical-practice-guidance.pdf?sfvrsn=9cf257b1\\_6](https://www.ctc.ca.gov/docs/default-source/educator-prep/pdf/clinical-practice-guidance.pdf?sfvrsn=9cf257b1_6)
- California Commission on Teacher Credentialing. (2016). *Common standards glossary*.  
<https://www.ctc.ca.gov/credentials/certification-glossary/Common-Standards>
- California Commission on Teacher Credentialing. (2018). *Teaching performance assessment*.  
<https://www.ctc.ca.gov/educator-prep/tpa>
- California Department of Education. (2019). *2018-2019 enrollment by ethnicity*. Data Quest.  
<https://dq.cde.ca.gov/dataquest/dqcensus/EnrEthLevels.aspx?cds=00&aggllevel=state&year=2018-19>

- Carver-Thomas, D. (2018). *Diversifying the teaching profession: How to recruit and retain teachers of color*. Learning Policy Institute. <https://doi.org/10.54300/559.310>
- Carver-Thomas, D. (2022). *Teacher shortages take center stage*. Learning Policy Institute.
- Carver-Thomas, D., Burns, D., Leung, M., & Ondrasek, N. (2022). *Teacher shortages during the pandemic: How California districts are responding*. Learning Policy Institute.
- Carver-Thomas, D., & Darling-Hammond, L. (2019). The trouble with teacher turnover: How teacher attrition affects students and schools. *Education Policy Analysis Archives*, 27(36). <http://doi.org/10.14507/epaa.27.3699>
- Carver-Thomas, D., Kini, T., & Burns, D. (2020). *Sharpening the divide: How California's teacher shortages expand inequality*. Learning Policy Institute.
- Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. SAGE Publications.
- Creswell, J. W., & Guetterman, T. C. (2019). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (6th ed.). Merrill.
- Croasmun, J., Hampton, D., & Herrmann, S. (1999). *Teacher attrition: Is time running out?* Horizon Site. <http://horizon.unc.edu/projects/issues/papers/Hampton.asp>
- Cummins, A. (2020). The time is now: Leaders, researchers advance teacher diversity as an imperative issue. <https://publications.csba.org/issue/spring-2020/the-time-is-now/>
- Cunanan-Cruz, C. C. (2002). *The effects of the constructivist-based teaching approach on students' conceptual understanding of introductory calculus* [Doctoral dissertation, De La Salle University]. Amino Repository. [https://animorepository.dlsu.edu.ph/etd\\_doctoral/911](https://animorepository.dlsu.edu.ph/etd_doctoral/911)

- Darling-Hammond, L., Chung, R., & Frelow, F. (2002). Variation in teacher preparation. *Journal of Teacher Education*, 53(4), 286–302. <https://doi.org/10.1177/0022487102053004002>
- Darling-Hammond, L., Furger, R., Shields, P., & Sutcher, L. (2016). *Addressing California's emerging teacher shortage: An analysis of sources and solutions*. Learning Policy Institute. [www.learningpolicyinstitute.org/addressing-ca-teacher-shortage](http://www.learningpolicyinstitute.org/addressing-ca-teacher-shortage)
- Darling-Hammond, L., Oakes, J., Wojcikiewicz, S. K., Hyler, M. E., Guha, R., Podolsky, A., Kini, T., Cook-Harvey, C. M., Jackson, C. N., & Harrell, A. (2019). *Preparing teachers for deeper learning*. Learning Policy Institute. <https://learningpolicyinstitute.org/product/preparing-teachers-deeper-learning-brief>
- Darling-Hammond, L., & Youngs, P. (2002). Defining “highly qualified teachers”: What does “scientifically-based research” actually tell us? *Educational Researcher*, 31(9), 13–25. <https://doi.org/10.3102/0013189X031009013>
- Delgado, L., Baese, K., & Hauptman, A. (2021). A pathway to teaching for paraprofessionals of color. *Kappan*, 103(3), 17–21. <https://doi.org/10.1177/00317217211058508>
- DiNapoli, M. A., Jr. (2022). *The federal role in tackling teacher shortages*. Learning Policy Institute, 1–7. <https://learningpolicyinstitute.org/blog/federal-role-tackling-teacher-shortages>
- Dinsmore, J., & Wenger, K. (2006). Relationships in preservice teacher preparation: From cohorts to communities. *Teacher Education Quarterly*, 33(1), 57–74. <http://www.jstor.org/stable/23478734>
- Easton-Brooks, D. (2019). *Ethnic matching: Academic success of students of color*. Rowman & Littlefield.

- Easton-Brooks, D. (2021). Ethnic-matching in urban schools. In *Handbook of urban education* (pp. 234–252). Routledge.
- Easton-Brooks, D., Robinson, D., & Williams, S. M. (2018). Schools in transition: Creating a diverse school community. *Teachers College Record, 120*(13), 1–26.  
<https://doi.org/10.1177/016146811812001307>
- Ed-Data. (n.d.). *County summary*. Retrieved on April 9, 2023 from <https://www.ed-data.org/county>
- Eddy, C., & Easton-Brooks, D. (2011). Ethnic matching, school placement, and mathematics achievement of African American students from kindergarten through fifth grade. *Urban Education, 46*, 1280–1299. <https://doi.org/10.1177/0042085911413149>
- Egalite, A. J., & Kisida, B. (2016). *The many ways teacher diversity may benefit students*. Brookings.
- Eichelberger, R. T. (1989). *Disciplined inquiry: Understanding and doing educational research*. Longman.
- Emerson, J. M., Junor Clarke, P., & Moldavan, A. (2018). Bridging pedagogy and practice: From coursework to field experiences in a teacher preparation program. *Georgia Educational Researcher, 14*, 24–35. <https://doi.org/10.20429/ger.2018.140203>
- Encyclopaedia Britannica. (2021). Critical race theory. In *Encyclopedia Britannica*.  
<https://www.britannica.com/topic/critical-race-theory>
- Fong, A. B., Makkonen, R., & Jaquet, K. (2016). *Projections of California teacher retirements: A county and regional perspective* (REL 2017-181). U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory West.

- Gay, G. (2018). *Culturally responsive teaching: Theory, research, and practice*. Teachers College Press.
- Goldhaber, D., & Holden, K. L. (2021). The early teacher pipeline: What data do – and don't – tell us. *Kappan*, 103(3), 13–16. <https://doi.org/10.1177/00317217211058507>
- Grenot-Scheyer, M. (2016). *With state support, what higher education can do to address teacher shortages?* EdSource. <https://edsources.org/2016/with-state-support-what-higher-education-can-do-to-address-teacher-shortages/561836>
- Guha, R., Hyler, M. E., & Darling-Hammond, L. (2017). The power and potential of teacher residencies. *Phi Delta Kappan*, 98(8), 31–37. <https://doi.org/10.1177/0031721717708292>
- Heineke, A. J., Carter, H., Desimone, M., & Cameron, Q. (2010). Working together in urban schools: How a university teacher education program and teach for America partner to support alternatively certified teachers. *Teacher Education Quarterly*, 37(3), 123–136. <https://files.eric.ed.gov/fulltext/EJ902712.pdf>
- Hollins, E. R., & Warner, C. K. (2021). *Evaluating the clinical component of teacher preparation programs*. National Academy of Education Committee on Evaluating and Improving Teacher Preparation Programs. National Academy of Education. <https://doi.org/10.31094/2021/3/6>
- Hood, S. L., Dilworth, M. E., & Lindsay, C. A. (2022). *Landscape of teacher preparation program evaluation policies and progress*. National Academy of Education Committee on Evaluating and Improving Teacher Preparation Programs. National Academy of Education. <https://files.eric.ed.gov/fulltext/ED619002.pdf>

- Ingersoll, R., May, H., & Collins, G. (2019). Recruitment, employment, retention, and the minority teacher shortage. *Education Policy Analysis Archives*, 27(34–39), 1–42. <https://doi.org/10.14507/epaa.27.3714>
- Isaacs, M. L., Elliot, E., McConney, A., Wachholz, P., Greene, P., & Greene, M. (2007). Evaluating “quality” methods of filling the “teacher gap”: Results of a pilot study with early career teachers. *Journal of the National Association for Alternative Certification*, 2(2), 5–22. <https://files.eric.ed.gov/fulltext/EJ1053314.pdf>
- Kaput, K. (2019, July 10). *Why do teachers of color leave at higher rates than White teachers?* Education Evolving. <https://www.educationevolving.org/blog/2019/07/why-do-teachers-of-color-leave-at-higher-rates-than-white-teachers>.
- Kee, A. N. (2012). Feelings of preparedness among alternatively certified teachers: What is the role of program features? *Journal of Teacher Education*, 63(1), 23–38. <https://doi.org/10.1177/0022487111421933>
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice-Hall.
- Ladson-Billings, G., & Tate, W. F. (1995). Toward a critical race theory of education. *Teachers College Record*, 97(1), 47–68. <https://doi.org/10.1177/016146819509700104>
- Lambert, D. (2021, July 16). *California cuts the number of tests teachers must take to earn credential*. EdSource. Retrieved April 9, 2023, from <https://edsource.org/2021/california-cuts-the-number-of-tests-teachers-must-take-to-earn-credential/658142>

- Learning Policy Institute. (2019). *Understanding teacher shortages in California: A district- and county-level analysis of the factors influencing teacher supply and demand (interactive map)*. <https://learningpolicyinstitute.org/product/interactive-map-understanding-teacher-shortages-california>
- Lindsay, C. A., & Hart, C. M. (2017). Exposure to same-race teachers and student disciplinary outcomes for Black students in North Carolina. *Educational Evaluation and Policy Analysis, 39*(3), 485–510. <https://doi.org/10.3102/0162373717693109>
- Lupu, I., & Ruiz-Castro, M. (2021, January 29). Work-life balance is a cycle, not an achievement. *Harvard Business Review*. <https://hbr.org/2021/01/work-life-balance-is-a-cycle-not-an-achievement>
- Machado, A. (2013, July 3). *Why teachers of color quit*. The Atlantic. <https://www.theatlantic.com/education/archive/2013/12/why-teachers-of-color-quit/282007/>
- Mackenzie, N. M., & Knipe, S. (2006). Research dilemmas: Paradigms, methods and methodology. *Issues in Educational Research, 16*(1–13). <http://www.iier.org.au/iier16/mackenzie.html>
- Maddin, B. W., & Mahlerwein, R. L. (2022). Empowering educators through team-based staffing models. *Kappan, 104*(1), 33–37. <https://kappanonline.org/team-based-staffing-models-educators-maddin-mahlerwein/>
- Marszalek, J. M., Odom, A. L., LaNasa, S. M., & Adler, S. A. (2010). Distortion or clarification: Defining highly qualified teachers and the relationship between certification and achievement. *Education Policy Analysis Archives, 18*(27), 1–33. <https://files.eric.ed.gov/fulltext/EJ913481.pdf>

- McCann, A. (2022). *Most & least diverse states in America*. WalletHub.  
<https://wallethub.com/edu/most-least-diverse-states-in-america/38262>
- Mertens, D. M. (2005). *Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative, and mixed methods*. SAGE Publications.
- Mojtahed, R., Baptista Nunes, M., Tiago Martins, J., & Peng, A. (2014). Interviews and decision-making maps. *The Electronic Journal of Business Research Methods*, 12(2), 87–95. <http://www.ejbrm.com/>
- Moore, E. J., Smith, F. G., Hollingshead, A., & Wojcik, B. (2018). Voices from the field: Implementing and Scaling-Up Universal Design for Learning in Teacher Preparation Programs. *Journal of Special Education Technology*, 33(1), 40–53.  
<https://doi.org/10.1177/0162643417732293>
- The National Council for Accreditation of Teacher Education. (2010). *Transforming teacher education through clinical practice: A national strategy to prepare effective teachers*.  
[http://caepnet.org/~media/Files/caep/accreditation-resources/blue-ribbon-panel.pdf](http://caepnet.org/~/media/Files/caep/accreditation-resources/blue-ribbon-panel.pdf)
- Nava-Landeros, I., Isken, J. A., & François, A. (2020). Open the door to diversity: Teacher residencies in urban schools boost retention and achievement. *Learning Professional*, 41(6), 33–36. <https://learningforward.org/wp-content/uploads/2020/12/open-the-door-to-diversity.pdf>
- Nguyen, M., & Gold, T. (2020). *Pipeline and retention of teachers of color: Systems and structures impeding growth and sustainability in the United States* (pp. 1–21). Digital Promise.
- Novak, K. (2016). *Udl now!: A teacher's guide to applying universal design for learning in the classroom*. CAST Professional Publishing.

- Ong, C., La Torre, D., Griffin, N., Leon, S., Sloan, T., Smith, T., & Cai, L. (2021). *California teacher education research and improvement network policy brief: Diversifying California's teaching force: How teachers enter the classroom, who they serve, & if they stay*. California Teacher Education Research & Improvement Network.  
<https://cterin.ucop.edu/resources/>
- Ouazad, A. (2008). *Assessed by a teacher like me: Race, gender, and subjective evaluations*. INSEAD Working Paper No. 2008/57/EPS. <https://doi.org/10.2139/ssrn.1267109>
- Peebles, J. (2021, July 22). *A boost for aspiring educators*. California Teachers Association.  
<https://www.cta.org/educator/posts/a-boost-for-aspiring-educators>
- Pennybaker, H. (2019). *Geography of California*. Sciencing. <https://sciencing.com/california-land-characteristics-8071567.html>
- Podolsky, A., Kini, T., Bishop, J., & Darling-Hammond, L. (2016). *Solving the teacher shortage: How to attract and retain excellent educators*. Learning Policy Institute.  
<https://doi.org/10.54300/262.960>
- Redding, C., & Nguyen, T. (2020). Recent trends in the characteristics of new teachers, the schools in which they teach, and their turnover rates. *Teachers College Record*, 122, 1–36. <https://doi.org/10.1177/016146812012200711>
- Redding, C., & Nguyen, T. (2021). Greener than ever? A look at the newest teachers in our public schools. *Kappan*, 103(3), 8–12. <http://doi.org/10.1177/00317217211058506>
- Reichwein Zientek, L. (2006). Do teachers differ by certification route? novice teachers' sense of self-efficacy, commitment to teaching, and preparedness to teach. *School Science and Mathematics*, 106(8), 326–327. <http://doi.org/10.1111/j.1949-8594.2006.tb17752.x>

- Reininger, M. (2012). Hometown disadvantage? It depends on where you're from: Teachers' location preferences and the implications for staffing schools. *Educational Evaluation and Policy Analysis*, 34(2), 127–145. <https://doi.org/10.3102/0162373711420864>
- Ronfeldt, M. (2021). *Links among teacher preparation, retention, and teaching effectiveness*. National Academy of Education Committee on Evaluating and Improving Teacher Preparation Programs. National Academy of Education.
- Rosen, J. (2018, November 12). *Black students who have one black teacher are more likely to go to college*. The Hub. <https://hub.jhu.edu/2018/11/12/black-students-black-teachers-college-gap/>
- Rowland Woods, J. (2016). *Mitigating teacher shortages: Alternative teacher certification*. Education Commission of the States.
- Schmitz, S. A., Nourse, S. W., & Ross, M. E. (2013). Increasing teacher diversity: Growing your own through partnerships. *The Education Digest*, 78, 59–63. <https://www.proquest.com/magazines/increasing-teacher-diversity-growing-your-own/docview/1349974868/se-2>
- Shaw, M. (2008). The impact of alternative teacher certification programs on teacher shortages. *The International Journal of Learning: Annual Review*, 15(3), 89–98. <https://doi.org/10.18848/1447-9494/CGP/v15i03/45665>
- Siawatu, K. O. (2007). Preservice teachers' culturally responsive teaching self-efficacy and outcome expectancy beliefs. *Teaching and Teacher Education*, 23(7), 1086–1101. <https://doi.org/10.1016/j.tate.2006.07.011>

- SlideSalad. (2021). *Kolb's experiential learning cycle* [PowerPoint slide].  
<https://www.slidesalad.com/product/kolbs-experiential-learning-cycle-google-slides-template/>
- Solorzano, D., Ceja, M., & Yosso, T. (2000). Critical race theory, racial microaggressions, and campus racial climate: The experiences of African American college students. *Journal of Negro education*, 60-73.
- Sperling, J. H. (2013). Reframing the work-family conflict debate by rejecting the ideal parent norm. *American University Journal of Gender Social Policy and Law*, 22(1), 47–90.  
<https://digitalcommons.wcl.american.edu/jgspl/vol22/iss1/9/>
- State of California. (2022). *Public K–12 graded enrollment*. Department of Finance.  
<https://dof.ca.gov/forecasting/demographics/public-k-12-graded-enrollment/>
- State Trends. (n.d.). *State trends*. Retrieved April 10, 2022, from  
<https://www.ctc.ca.gov/commission/reports/data/state-trends>
- Steinke, K., & Bryan, V. C. (2013). Teaching as literacy: The discourses required for success in the Title I school. In V. Wang (Ed.), *Handbook of research on teaching and learning in k-20 education* (pp. 118–133). IGI Global. <https://doi.org/10.4018/978-1-4666-4249-2.ch007>.
- Taylor, M., & Mendoza, C. (2021, June 4). *Annual report on passing rates of commission-approved examinations from 2015-16 to 2019-20*. California Commission on Teacher Credentialing. [https://www.ctc.ca.gov/docs/default-source/commission/agendas/2021-06/2021-06-4j.pdf?sfvrsn=3eca2ab1\\_2](https://www.ctc.ca.gov/docs/default-source/commission/agendas/2021-06/2021-06-4j.pdf?sfvrsn=3eca2ab1_2)

- Tschannen-Moran, M., & Woolfolk Hoy, A. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education*, 17, 783–805. [https://doi.org/10.1016/S0742-051X\(01\)00036-1](https://doi.org/10.1016/S0742-051X(01)00036-1)
- Tseng, N., & Clark, T. (2016). *Accreditation: Delivery models for teacher preparation programs, options for clinical practice and data collection*. California Commission on Teacher Credentialing. <https://www.ctc.ca.gov/>
- Vygotsky, L. S. (1978). *Mind and society: The development of higher mental processes*. Harvard University Press.
- Wenger-Trayner, E., & Wenger-Trayner, B. (2015). *Introduction to communities of practice: A brief overview of the concept and its uses*. Wenger-Trayner. <https://wenger-trayner.com/introduction-to-communities-of-practice/>
- Will, M. (2016). Analysis projects widening gaps in teacher supply. *Education Week*, 36(5), 1–11. <https://www.edweek.org/leadership/analysis-projects-growing-national-shortfall-of-teachers/2016/09>
- Wilson, S. M., & Kelley, S. L. (2022). *Landscape of teacher preparation programs and teacher candidates*. National Academy of Education Committee on Evaluating and Improving Teacher Preparation Programs. National Academy of Education. <https://files.eric.ed.gov/fulltext/ED618996.pdf>
- World Health Organization. (n.d.). *Coronavirus disease (COVID-19)*. [https://www.who.int/health-topics/coronavirus#tab=tab\\_1](https://www.who.int/health-topics/coronavirus#tab=tab_1)
- World Population Review. (n.d.). *X County, California population 2022*. Retrieved April 10, 2022, from <https://worldpopulationreview.com/us-counties/ca/>
- X County Schools. (n.d.). *Homepage*.

## **Appendix A: Email Invitation to Participate in Interview**

I am currently a doctoral candidate with the University of the Pacific, doing research on intern teachers of color and the level of support desired during their teacher preparation program.

You are receiving this email because you completed the Teaching Beliefs and Mindset Survey (TBMS) in May 2022 during your first year as an intern teacher. As a follow-up to the survey, I am inviting past survey completers to participate in an informal interview about your experiences as an intern teacher at our college. You are invited to participate in a follow-up interview. The interview will take about 30 minutes and will be conducted via Zoom. The intent of this interview is to gather contextual information about your experience as a new teacher in an intern program and your experience in serving racially diverse K–12 students in your classroom.

If you are interested in participating in the interview, please respond by 1/23/23 using this link:

<https://forms.gle/krJ7qYpEGaGV5kNm7>

Interviews will be conducted starting the week of January 30, 2023.

I hope you are willing to participate in this interview. Your contribution will provide valuable perspectives for our college to consider in improving our support to new intern teachers.

## Appendix B: Informed Consent Form

### BENERD COLLEGE

#### RESEARCH SUBJECT'S CONSENT TO PARTICIPATE IN RESEARCH

Intern Teachers of Color and their Perspectives of Teaching in One California County

Name of Lead Researcher: Girlie Hale

Name of Faculty Advisor: Dr. Anne Zeman

**Purpose of Research.** The purpose of the research is to investigate the level of perceived preparedness of teacher candidates of color in an alternative teacher preparation program (intern) and the types of support needed.

- A. **Duration of Participation.** The anticipated time of participation in this study will be approximately 30 minutes during the week of January 30, 2023.
- B. **Research Procedures.** If you decide to participate, you will have the opportunity to participate in an interview recounting your experiences as a first-year intern teacher. Five to ten individuals will be chosen for the interview. It will take about 30 minutes to gather contextual information about your experiences as a new teacher in an intern program and how you are serving racially diverse K–12 students in their classroom. You will be interviewed using a videoconferencing app (Zoom). The interview will be recorded with transcription services activated; however, video will not be enabled. Your consent will be required prior to the interview.
- C. **Foreseeable Risks.** There are no known risks associated with the research study. This study will ask about your perceptions of your experiences in preparing to become teachers to diverse students. You will participate anonymously, assigned a pseudonym and video will be disabled to protect your anonymity and neutralize authority dynamics. You may stop at any time or may choose not to answer (a) question(s).
- D. **Benefits.** The intention and purpose of this study is to better understand the needs and types of support intern teachers of color will need to be successful in the intern teacher preparation program. While there may be no expected direct benefits to you, there will be benefits in contributing to the field of study in improving the educational experiences of future intern teachers of color not only in this county, but in alternative teacher preparation programs in counties with similar demographics.

## I. CONFIDENTIALITY

The findings of this research may be published. There will be no identifiable information about you, your school, or your district in the final dissertation or any upcoming publications. All research materials will be stored in a password-protected computer with multi-factor authentication security that only the researcher will be able to access to ensure the privacy of the information provided.

## II. PARTICIPATION

You were selected as a possible participant in this study because you are a teacher candidate attending an alternative (intern) teacher preparation program. Please feel free to ask any questions you may have. Your decision whether or not to participate will involve no penalty or loss of benefits to which you are otherwise entitled. If you decide to participate, you are free to discontinue participation at any time without penalty or loss of benefits to which you are otherwise entitled.

## III. UNIVERSITY CONTACT INFORMATION

I am the lead researcher in this study and am a doctoral candidate at the University of the Pacific, Benerd College. This research study is part of my dissertation for my Doctorate in Education. It is encouraged to ask questions at any time during the study. For further information about the study, please contact Girlie Hale at xxxxx@u.pacific.edu or (XXX) XXX-XXXX.

If you have any questions about your rights as a participant in a research project or wish to speak with an independent contact, please contact the Office of Research and Sponsored Programs, University of the Pacific at (209) 946-3903 or by email at IRB@pacific.edu.

## IV. NO COMPENSATION AND NO COMMERCIAL PROFIT

There will be no compensation for participating in this study.

## V. ADDITIONAL COSTS TO SUBJECT

There is no cost for participating in this study.

## VI. ACKNOWLEDGE AND SIGNATURE

I hereby consent: (Indicate *Yes* or *No*)

- To be audio- and video-recorded during the interview portion of this study.

\_\_\_\_\_ Yes                      \_\_\_\_\_ No

You will be offered a copy of this consent form to keep for your records.

The signature below indicates you have read and understand the information provided in this document, have been afforded the opportunity to ask, and have answered, any questions that you may have, that your participation is completely voluntary, that you understand that you may withdraw your consent and discontinue participation at any time without penalty or loss of benefits to which you are otherwise entitled, that you receive a copy of this form, and that you are not waiving any legal claims, rights, or remedies.

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

Research Study Participant (Print Name): \_\_\_\_\_

Researcher Who Obtained Consent (Print Name): \_\_\_\_\_

## Appendix C: Interview Questions Alignment to Theoretical Frameworks and Research

### Questions

Research Questions	Interview Questions	Theoretical Framework
What is the level of perceived preparedness of teacher candidates of color in their teacher intern preparation program?	<p>IQ 1</p> <p>Based on your responses to the TBMS, describe how prepared you feel you are as a new classroom teacher.</p>	<p><u>Constructivism:</u></p> <ul style="list-style-type: none"> <li>• Bandura - self-efficacy</li> </ul> <p><u>CRT:</u></p> <ul style="list-style-type: none"> <li>• Tenets 2</li> </ul>
	<p>IQ 2</p> <p>How prepared do you feel in teaching racially diverse students? Please provide an example.</p>	<p><u>Constructivism:</u></p> <ul style="list-style-type: none"> <li>• Bandura - self-efficacy</li> </ul> <p><u>CRT:</u></p> <ul style="list-style-type: none"> <li>• Tenets 2 &amp; 3</li> </ul>
	<p>IQ 3</p> <p>When do you experience feeling overwhelmed, confused, or frustrated as a new teacher? How do you cope with these feelings?</p>	<p><u>Constructivism:</u></p> <ul style="list-style-type: none"> <li>• Vygotsky – tenets 1 &amp; 3</li> <li>• Kolb - Experiential Learning Cycle</li> <li>• Bandura - self-efficacy</li> </ul> <p><u>CRT:</u></p> <ul style="list-style-type: none"> <li>• Tenets 2 &amp; 3</li> </ul>
What support do teacher candidates of color need while in their intern program to increase their level of preparedness?	<p>IQ 4</p> <p>Describe the type of support you received that you felt helped you as a new teacher in your classroom?</p>	<p><u>Constructivism:</u></p> <ul style="list-style-type: none"> <li>• Vygotsky - tenets 1 &amp; 2</li> <li>• Bandura - self-efficacy</li> </ul> <p><u>CRT:</u></p> <ul style="list-style-type: none"> <li>• Tenet 2</li> </ul>
	<p>IQ 5</p> <p>Describe the type of support you would have wanted but did not receive that would have been helpful to you as a new classroom teacher.</p>	<p><u>Constructivism:</u></p> <ul style="list-style-type: none"> <li>• Vygotsky – tenets 1, 2, &amp; 3</li> <li>• Kolb - Experiential Learning Cycle</li> <li>• Bandura - self-efficacy</li> </ul> <p><u>CRT:</u></p> <ul style="list-style-type: none"> <li>• Tenets 2 &amp; 3</li> </ul>
	<p>IQ 6</p> <p>Is there anything else you would like to share with me regarding your level of readiness in teaching racially diverse students?</p>	<p><u>Constructivism:</u></p> <ul style="list-style-type: none"> <li>• Vygotsky – tenets 1 &amp; 3</li> <li>• Kolb - Experiential Learning Cycle</li> <li>• Bandura - self-efficacy</li> </ul> <p><u>CRT:</u></p> <ul style="list-style-type: none"> <li>• Tenet 3</li> </ul>

## Appendix D: Teaching Beliefs and Mindset Survey

CIS Year 4 2020-2021

Teaching Beliefs and Mindsets Survey

### Teaching Beliefs and Mindsets Survey

#### Survey Background

By inviting {INSERT INSTITUTION SOE NAME} students to allow for the study of who they are, what they know, and how they implement teaching practices, {INSERT INSTITUTION SOE NAME}, in collaboration with other teacher preparation institutions nationally, hopes to learn about the qualities and experiences of current and future teachers. The data collected in this survey is used for research focusing on understanding and improving the teacher education programs here at {INSERT INSTITUTION SOE NAME} as well as teacher education programs in general.

The survey will require no more than 15 minutes of your time to complete.

The confidentiality of participants will be assured; that is, data will never be reported in a way that makes it possible to identify individuals.

#### If you have questions about the survey, contact:

{INSERT INSTITUTION POC NAME}  
{INSERT INSTITUTION POC TITLE}  
{INSERT INSTITUTION POC MAILING ADDRESS}  
{INSERT INSTITUTION POC MAILING ADDRESS}  
{INSERT INSTITUTION POC PHONE}  
{INSERT INSTITUTION POC EMAIL ADDRESS}

CIS Year 4 2020-2021

Teaching Beliefs and Mindsets Survey

Section 1. Please indicate your opinion about each of the questions below by marking any one of the nine responses in the columns on the right side, ranging from (1) "None at all" to (9) "A great deal" as each represents a degree on the continuum. Please respond to each of the questions by considering the combination of your *current* ability, resources, and opportunity to do each of the following.

	None at all		Very little		Some degree		Quite a bit		A great deal
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1. How much can you do to prevent and respond to disruptive behavior in the classroom?									
2. How much can you do to motivate students who show low interest in schoolwork?									
3. How much can you do to calm a student who is disruptive or noisy?									
4. How much can you do to help your students value learning?									
5. To what extent can you craft good questions for your students?									
6. How much can you do to get children to follow classroom rules?									
7. How much can you do to get students to believe they can do well in schoolwork?									
8. How well can you establish a classroom management system with each group of students?									
9. To what extent can you use a variety of assessment strategies?									
10. To what extent can you provide an alternative explanation or example when students are confused?									
11. How much can you assist families in helping their children do well in school?									
12. How well can you implement alternative strategies in your classroom?									

## CIS Year 4 2020-2021

## Teaching Beliefs and Mindsets Survey

**Section 2. Rate how confident you are in your ability to successfully serve culturally and linguistically diverse learners through each of the tasks listed below. Each task is related to teaching. Please rate your degree of confidence by recording a number from 1 (not confident at all) to 9 (completely confident). Remember that you may use any number between 1 and 9.**

**Please keep in mind the following definition as you answer:**

**:A culturally and linguistically diverse (CLD) learner differs from the mainstream culture in terms of racial or ethnic background and/or language. Please answer the questions below in reference to serving CLD students as opposed to students identified as diverse along other dimensions (e.g. gender identity, sexual orientation, neurodiversity, etc.).**

	Not confident at all		A little confident		Somewhat confident		Quite confident		Completely confident
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1. Identify ways that the school culture (e.g., values, norms, and practices) is different from my students' home culture									
2. Implement strategies to minimize the effects of the mismatch between my students' home culture and the school culture									
3. Assess student learning using various types of assessments									
4. Obtain information about my students' home life									
5. Build a sense of trust in my students									
6. Establish positive home-school relations									
7. Develop a community of learners when my class consists of students from diverse backgrounds									
8. Use my students' cultural background to help make learning meaningful									
9. Use my students' prior knowledge to help them make sense of new information									



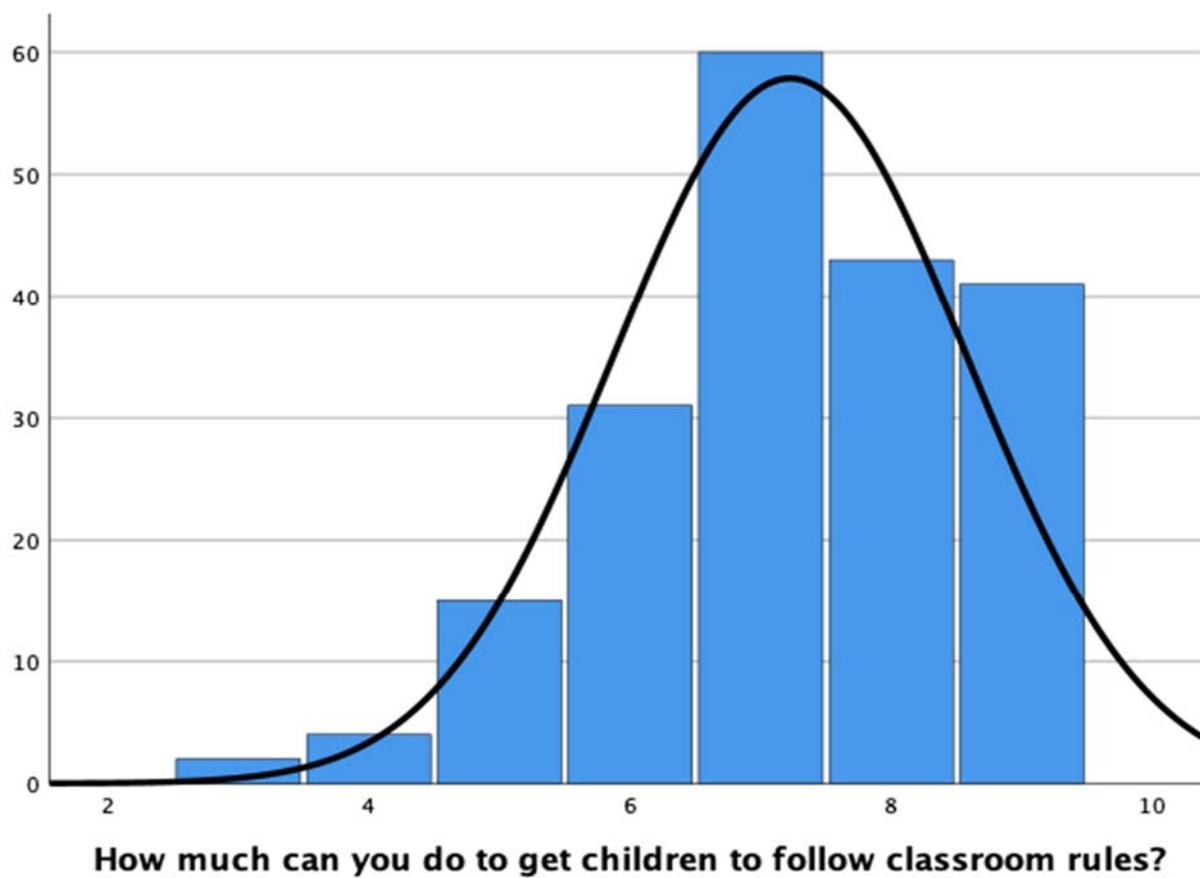
**CIS Year 4 2020-2021**

Teaching Beliefs and Mindsets Survey

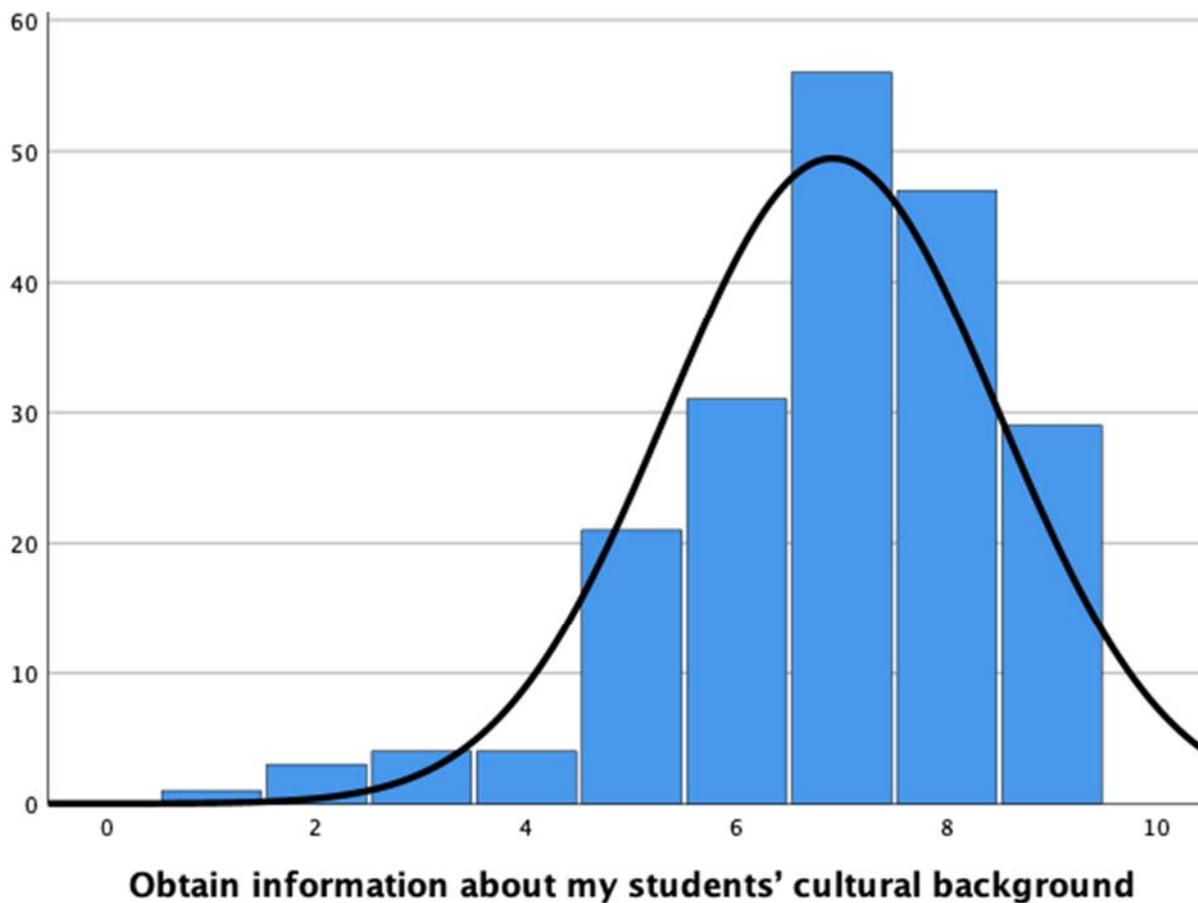
**Relevant Descriptive and Validity Research:**

**For Scale 1:** Tschannen-Moran, M., & Woolfolk Hoy, A. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education, 17*, 783-805.

**For Scale 2:** Siawatu, K. O. (2007). Preservice teachers' culturally responsive teaching self efficacy and outcome expectancy beliefs. *Teaching and Teacher Education, 23*, 7, 1086-1101.

**Appendix E: Histogram Example for Scale 1**

### Appendix F: Histogram Example for Scale 2



### Appendix G: Participant Interview Protocol

Date of Interview: \_\_\_\_\_ Consent Obtained: \_\_\_\_ Yes \_\_\_\_ No

Time of Interview: \_\_\_\_\_: \_\_\_\_\_ AM/PM Duration of Interview: \_\_\_\_\_ minutes

Interview: Girlie Hale, Doctoral Candidate and Researcher

Name of Interviewee: \_\_\_\_\_ Pseudonym: \_\_\_\_\_

Email Address: \_\_\_\_\_ Phone Number: \_\_\_\_\_

Setting Description: \_\_\_\_\_

Interview platform used: \_\_\_\_\_

Distractions, if any: \_\_\_\_\_

Permission to audio record the interview session obtained: \_\_\_\_ Yes \_\_\_\_ No

Interview Questions:

IQ 1

Based on your responses to the TBMS, describe how prepared you feel you are as a new classroom teacher.

Fieldnotes:

IQ 2

How prepared do you feel in teaching racially diverse students? Please provide an example.

Fieldnotes:

IQ 3

When do you experience feeling overwhelmed, confused, or frustrated as a new teacher? How do you cope with these feelings?

Fieldnotes:

IQ 4

Describe the type of support you received that you felt helped you as a new teacher in your classroom?

Fieldnotes:

IQ 5

Describe the type of support you would have wanted but did not receive that would have been helpful to you as a new classroom teacher.

Fieldnotes:

IQ 6

Is there anything else you would like to share with me regarding your level of readiness in teaching racially diverse students?

Fieldnotes:

## Appendix H: Fieldnotes

### Reflections from the Field

Intern 01 feels more prepared as a second-year classroom teacher due to their preservice and intern programs. They also feel prepared to teach diverse students due to the emphasis on equity and cultural competency within their course schedule. Whenever they feel overwhelmed, confused, or frustrated as a new teacher, they cope with these feelings by seeking guidance and support from their peers, teachers, and administrators. They also have a supportive university supervisor who comes in once a month to observe and give feedback on their teaching. However, in their first year, they did not have supportive administration and felt stressed without a system in place for more support.

Intern 02 explains that they often feel overwhelmed and frustrated as a new teacher when there are too many demands, such as planning, grading, and accommodating students with special needs. They cope with these feelings by taking breaks, seeking support from their colleagues, and reminding themselves of their purpose as an educator. Additionally, they attend the intern program, which provides them with ideas and strategies to work with their students better.

Intern 03 feels a lot more prepared in their second year of teaching, particularly in terms of structuring lesson plans and starting open-ended lesson plans. They attribute their increased preparedness to their experience in the classroom and establishing routines. When asked about teaching racially diverse students, Intern 03 states that it is their passion, and they try to make their teaching accessible to everyone. They also mention feeling overwhelmed, confused, and frustrated routinely, particularly when their students do not seem engaged or perform as

expected. To cope with these feelings, they reach out to more experienced teachers for guidance and support. They also have a strong support network at their school and in their intern program.

Intern 04 feels more prepared as a second-year classroom teacher than their first year, and building relationships with their colleagues, instructors, and classmates have been helpful. They feel mildly prepared in teaching racially diverse students due to cultural differences, but being a minority in their classroom helps them understand better. They also had to learn about dietary restrictions and practices of different cultures to better serve their students. When feeling overwhelmed, they remove themselves from the situation or talk to colleagues they feel comfortable with. They find support through venting to their coworkers and talking to mentor teachers in the same organization.

Intern 05 feels quite prepared as a second-year classroom teacher. They feel that they are receiving a lot of support from their intern program, and their identity as a person of color has not been a disadvantage in receiving support. They feel that the format of their program is well-structured and teaches them about different aspects of teaching. When it comes to teaching racially diverse students, Intern 05 feels that there is implicit bias among people of diverse backgrounds, including themselves, that can act to their detriment. However, they feel that progress is being made toward creating a culturally supportive society where people of diverse backgrounds are equally valued and respected. Intern 05 sometimes feels overwhelmed and doubts whether their students are listening to them due to their appearance, accent, or cultural background. They cope with these feelings by reflecting on their implicit biases and trying to evolve as a person, seeking feedback from their students, and reminding themselves of their good educational background.

Intern 06 feels better prepared as a second-year classroom teacher with regard to accessing resources, dealing with behavioral challenges, setting goals for students, and time management. They feel more confident in pacing themselves and not going too fast. As for teaching racially diverse students, they have experience working with ELs and using visual aids, gestures, and songs to help students understand the material. However, they still struggle with managing different learning speeds and keeping all students engaged during centers. As a new teacher, Intern 06 feels overwhelmed when a lesson doesn't go as planned, and they cope with these feelings by adjusting their strategy and trying to help students individually. They find it challenging to manage a classroom of 22 students without an aide to assist them.

## Appendix I: Open Codes

accent	compared to last year	EL	improve	observe	remember	support system
accessible	compassion	engaging	inclusion	observing	representation	surprise
address	complexities	equal	increased knowledge	office hours	resources	take a breath
administration	concerns	equity	Indian	online	respect	take time
advice	confidence	ESN	inflexible	open-minded	right direction	teacher coach
ageism	confusion	ethnicity	informal	overcome	rigidity	teacher of color
aide	connect	evolving	informative	overwhelming	role playing	teachers
aides	contribution	examples	input	pacing	routinely	teaching
allot time	coordinator	exams	instructor	Pakistan	rubric	team
alone	coping	expectation	instructors	parents	same teacher	thoughts
asian	course	experience	interact	passion	school	time
ask questions	course schedule	explicit bias	interactive	patient	science	topic
assignment	coworker	family	intern	peer	second career	TPA
awareness	coworkers	feedback	intersectionality	peer interactions	second chance	transgender
background	cultural	feeling of oneness	lack of compassion	peers	second year	trial and error
balance	cultural awareness	first year	lack of cultural awareness	person of a different culture	self-efficacy	uncomfortable
barriers	cultural competency	forget	lack of experience	person of color	self-reflection	understanding
beginning of school year	cultural difference	fortunate	lack of support	personal beliefs	shadow	unfavorable
behavior	culturally responsive teacher	frustrated	Latinos	personal part	sit down	unprepared
biases	culture	Give space	leave	powerful	socioeconomic	validate the feelings
biracial	curriculum	goals	lesson plans	pre-service	Spanish	valuable
black	data science	grace	materials	prepare	starter kit	value
challenges	deeper perspective	grades	math	prepared	stepping away	valued
challenging	designed	grieving	mentor	prepared to teach diverse students	stories	vent
change	different	guidance	middle eastern	proactive approach	straight, heterosexual	Way I look
class	different background	handled situations	minority	problems	strategies	Way I speak
class discussions	different backgrounds of learners	Hands On	needs of every student	program	stressful	white
classmates	different culture	hard day	neglected	progress	structure	woman of color
classroom	disability	help	network	Puerto Rican	struggling	work
cohort	disconnect	help in classroom	new teacher	purpose	student assessments	work-school balance
college	diverse	helpful	no help	racial diversity	students	worked as an aide
color	Diverse perspective	helps	not alone	reach out	students of color	
comfortable	diverse society	hispanic	not helpful	ready	succeed	
common	diversity	humanity	not the only one	receptive	supervisor	
communication	doubt	IEP	observation	relate	support	
community	effective	implicit bias	observations	relationship	support supervisor	

### Appendix J: Axial Codes\*

\*Axial codes in shaded grey boxes were associated with CRT centric codes. White boxes represent constructivist centric codes.

<p>1. Accent</p> <ul style="list-style-type: none"> <li>• Asian</li> <li>• Biracial</li> <li>• Black</li> <li>• Hispanic</li> <li>• Indian</li> <li>• Middle Eastern</li> <li>• Spanish</li> <li>• White</li> </ul>	<p>2. Work</p> <ul style="list-style-type: none"> <li>• Administration</li> <li>• Classroom</li> <li>• Curriculum</li> <li>• Data science</li> <li>• Exams</li> <li>• Lesson plans</li> <li>• Materials</li> <li>• School</li> <li>• Science</li> <li>• Work</li> </ul>	<p>3. Program</p> <ul style="list-style-type: none"> <li>• Assignment</li> <li>• Beginning of year</li> <li>• Cohort</li> <li>• College</li> <li>• Coordinator</li> <li>• Course</li> <li>• Course schedule</li> <li>• Expectation</li> <li>• Feedback</li> <li>• Grades</li> <li>• Network</li> <li>• Observation</li> <li>• Office hours</li> <li>• Program</li> <li>• Progress</li> <li>• Rubric</li> <li>• Same teacher</li> <li>• Support supervisor</li> <li>• TPA</li> </ul>
<p>4. Awareness</p> <ul style="list-style-type: none"> <li>• Awareness</li> <li>• Cultural awareness</li> <li>• Cultural competency</li> <li>• Implicit bias</li> <li>• Increased knowledge</li> <li>• Lack of cultural awareness</li> </ul>	<p>5. Background</p> <ul style="list-style-type: none"> <li>• Background</li> <li>• Different background</li> <li>• Different backgrounds of learners</li> </ul>	<p>6. Bias</p> <ul style="list-style-type: none"> <li>• Ageism</li> <li>• Biases</li> <li>• Cultural difference</li> <li>• Implicit bias</li> <li>• Explicit bias</li> <li>• Person of a different culture</li> <li>• Person of color</li> <li>• Personal beliefs</li> <li>• White</li> </ul>

<p>7. Challenges</p> <ul style="list-style-type: none"> <li>• Behavior</li> <li>• Challenges</li> <li>• Challenging</li> <li>• Complexities</li> <li>• Disconnect</li> <li>• Lack of experience</li> <li>• Overwhelming</li> <li>• Programs</li> <li>• Struggling</li> </ul>	<p>8. Communication</p> <ul style="list-style-type: none"> <li>• Ask questions</li> <li>• Communication</li> <li>• Connect</li> <li>• Discussions</li> <li>• Input</li> <li>• Interactive</li> <li>• Interact</li> <li>• Open-minded</li> <li>• Peer interactions</li> <li>• Peer(s)</li> <li>• Relationship</li> <li>• Respect</li> <li>• Support System</li> <li>• Thoughts</li> </ul>	<p>9. Community</p> <ul style="list-style-type: none"> <li>• Classmates</li> <li>• Cohort</li> <li>• Community</li> <li>• Diverse society</li> <li>• Humanity</li> <li>• Minority</li> <li>• Students</li> <li>• Students of color</li> </ul>
<p>10. Culture</p> <ul style="list-style-type: none"> <li>• Biracial</li> <li>• Black</li> <li>• Cultural</li> <li>• Cultural awareness</li> <li>• Cultural competency</li> <li>• Cultural difference</li> <li>• Culturally responsive teacher</li> <li>• Culture</li> <li>• Hispanic</li> <li>• Indian</li> <li>• Latinx</li> <li>• Middle Eastern</li> <li>• Spanish</li> <li>• White</li> </ul>	<p>11. Diversity</p> <ul style="list-style-type: none"> <li>• Ageism</li> <li>• Biracial</li> <li>• Black</li> <li>• Disability</li> <li>• Diverse</li> <li>• Diverse perspective</li> <li>• Diversity</li> <li>• Hispanic</li> <li>• Indian</li> <li>• Latinx</li> <li>• Middle Eastern</li> <li>• Person of color</li> <li>• Student of color</li> <li>• Teacher of color</li> </ul>	<p>12. Education</p> <ul style="list-style-type: none"> <li>• Allot time</li> <li>• Class</li> <li>• College</li> <li>• Cohort</li> <li>• Course</li> <li>• Course schedule</li> <li>• Curriculum</li> <li>• Exams</li> <li>• Goals</li> <li>• Increased knowledge</li> <li>• Lesson plans</li> <li>• Program</li> <li>• School</li> <li>• Science</li> <li>• Teaching</li> </ul>

<p>13. Equity</p> <ul style="list-style-type: none"> <li>• Equal</li> <li>• Equity</li> <li>• Increased knowledge</li> <li>• Inclusion</li> <li>• Proactive approach</li> <li>• Prepared to teach diverse students</li> <li>• Socioeconomic</li> </ul>	<p>14. Experience</p> <ul style="list-style-type: none"> <li>• Experience</li> <li>• Increased knowledge</li> <li>• Lack of experience</li> <li>• Second career</li> <li>• Second chance</li> </ul>	<p>15. Feelings</p> <ul style="list-style-type: none"> <li>• Confusion</li> <li>• Doubt</li> <li>• Frustrated</li> <li>• Grieving</li> <li>• Lack of compassion</li> <li>• Not alone</li> <li>• Not helpful</li> <li>• Not the only one</li> <li>• Overwhelming</li> <li>• Surprise</li> <li>• Take a breath</li> <li>• Validate feelings</li> <li>• Vent</li> </ul>
<p>16. Help</p> <ul style="list-style-type: none"> <li>• Aide(s)</li> <li>• Help</li> <li>• Help in classroom</li> <li>• Helpful</li> <li>• Helps</li> <li>• Mentor</li> <li>• No help</li> <li>• Support</li> </ul>	<p>17. Identity</p> <ul style="list-style-type: none"> <li>• Ageism</li> <li>• Biracial</li> <li>• Black</li> <li>• Disability</li> <li>• Hispanic</li> <li>• Indian</li> <li>• Middle Eastern</li> <li>• Person of a different culture</li> <li>• Person of color</li> <li>• Spanish</li> <li>• Straight</li> <li>• Transgender</li> <li>• Way I look</li> <li>• Way I speak</li> <li>• White</li> <li>• Woman of color</li> </ul>	<p>18. Learning</p> <ul style="list-style-type: none"> <li>• Accessible</li> <li>• Class</li> <li>• Hands-on</li> <li>• Informal</li> <li>• Informative</li> <li>• Needs of every student</li> <li>• Starter kit</li> <li>• Strategies</li> <li>• Student assessments</li> <li>• Prepared</li> </ul>