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Preparing Teachers & Teacher Education Professionals for Dimensions of Diversity:
A Study of Pedagogical Responses to Diversity in Distance Learning and Traditional Instruction

By
Rocky Blessey-Bragg

Claremont Graduate University
2021

Approval of the Dissertation Committee

This dissertation has been duly read, reviewed and critiqued by the Committee listed below, which hereby approves the manuscript of Rocky Blessey-Bragg as fulfilling the scope and quality requirements for meriting degree of Doctor of Philosophy in Education.

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Abstract

Preparing Teachers & Teacher Education Professionals for Dimensions of Diversity:

by

Rocky Blessey-Bragg

Claremont Graduate University: 2021

This qualitative study framed in Albert Bandura's Self-Efficacy theory involved 6 teachers from Chaffey Joint Union high School District and 8 teacher education professionals from teacher education programs in southern and central California. It examined reported pedagogical strategies in responding to specific dimensions of classroom diversity: culture, readiness and economics. Participants took Bandura's Self-Efficacy survey prior to the first of two semi-structured interviews. In the second of those interviews, each group had the opportunity to react to findings from the first round of interviews from their own group and the opposite, as to how their perceptions of diversity have evolved and what pedagogical strategies they employ in traditional instruction, and what they did during distance learning.

Teachers and teacher education professionals (TEPs) described two salient pedagogical strategies that they find valuable and effective in engaging and teaching diverse groups of students ordinarily and during distance learning: varying instruction and building strong relationships with students. Of course, in terms of the challenges brought on by my economic diversity, which were no clearer than during distance learning, both groups advocated for institutional support in equipping students with adequate technology and access to the internet. Although both groups demonstrated strong feelings in their efficacy to influence different school

variables that impact student outcomes according to Bandura's survey, a t-test revealed low significance levels between the groups, despite these feelings being reaffirmed in the interview phases of this study.

The findings suggest the importance of equipping teachers with skill sets and strategies for engaging diverse groups of students and building rapport. They also demonstrate implications for ongoing dialogue between teachers and TEPs to continually inform current classroom practice, as well as optimal pre-service teaching experiences. This study suggests what teachers can do ordinarily and during times of crises to best reach their students.

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CHAPTER 1

Statement of the Problem

On March 13, 2020, school doors closed, lockdowns ensued and the Coronavirus pandemic laid bare the vulnerabilities of our educational system, both familiar and new. The traditional school year was gone, and with it went motivation, grades, loved ones and everything familiar about how we lived; the educational homeostasis had been disrupted, the ripples of which we continue to experience.

But, despite this global phenomenon, some things remained constant: people--young and old--needed community and resources, and students--regardless of the economic situation this pandemic facilitated for them and their families-- needed to learn. Educational professionals would be asked over a weekend to take everything they had known and everything they had done in their careers, and move it online, becoming *Zoom* teachers. In doing so, they would be tasked with negotiating students' economic, readiness and cultural difficulties compounded--or further illuminated-- by the global pandemic. The vastly different experiences of these diverse groups of students and the constantly evolving demographics in K-12 education over the last half century warrant scrutiny of how teacher education professionals and K-12 teachers prepare for the heterogeneity of today's classrooms, specifically high school classrooms; fortuitously, the technology of learning in current distance learning conditions offer a unique opportunity to learn more about the salience of various kinds of diversity.

In 2018, Hansen-Thomas and Chennapragada posited that diversity "is the norm, not the exception", a reality substantiated by the quickly shifting trends in demographics over the last half century (White-Clark 2005; Tomlinson et al. 2003; NCES 2020). Ultimately, educators understand that they must respond to external social changes like these demographic shifts. But

in a time where the technology of instruction has been radically upended, where the familiar classroom and the employment of universal staples of learning--recesses, textbooks, desks, blackboards, socialization-- are absent, aspects of student diversity such as their language skills and learning styles, race, preparation and ability, motivation and economic means that influence a student's ability to learn, become much more valuable predictors of their outcomes and potential beacons of insight enabling educators to respond to individual needs.

High schools are incubators for society, representing intersections of sexuality, culture, race, religion, language and desires, yet research shows that schools frequently do not provide the ongoing collaboration and assistance necessary to implement new instructional approaches to acculturate their pedagogy to the needs of the shifting demographics (Lee & Picano 2013).

Detailed discussions on specific pedagogical practices teacher educators use to prepare teachers to be culturally responsive--especially in light of more nuanced dimensions of diversity are less plentiful (Ellerbrock et al. 2016) and offer something different altogether when compared with the challenges of diversity discussed by teachers. What much of the literature leaves unaddressed is how teachers and teacher education professionals teach and engage diverse classrooms; additionally, not much is known, if anything, of how the current distance learning conditions have illuminated and in some cases, exacerbated the challenges posed by diverse demands and how teachers and teacher education professionals respond to nuanced dimensions of the issue, especially in tandem with the challenges posed by the technology of present distance learning conditions.

The learning loss-- a major concern-- was especially alarming in schools that predominantly serve students of color, where scores were 59 percent of the historical average in math and 77 percent in reading (Dorn et al. 2020). Additionally, only 60 percent of low-income

students were regularly logging into online instruction; 90 percent of high-income students do (Dorn et al. 2020). Engagement rates are also lagging behind in schools serving predominantly black and Hispanic students; just 60 to 70 percent are logging in regularly. English Language Learners in particular, took a hard hit in learning loss suffered in distance learning. Over 1.1 million students, nearly 20 percent of all students in California are considered English Learners, and in one month, LAUSD saw 42 percent of grades earned by English Learners were D's and F's. To make matters more concerning, fall interim assessments indicated that more than 94 percent of English Learners in middle and high school were not grade level ready in math or English (Esquivel 2021).

Although every person had been impacted by Covid-19, and specifically distance learning, these disparities are widely different and, in some cases, much worse for underprivileged populations. Teachers' actions matter to students and their outcomes, and teachers can negotiate for students' attention, engagement and commitment in positive and negative ways; their efforts in that battle are invaluable to the future of teaching, for both face to face and online instruction (Davidson 1999).

Purpose of the Study

Therefore, the purpose of this study is to identify pedagogical techniques that high school teachers and teacher education professionals use to teach and engage diverse classrooms with a specific focus on economic, readiness and cultural aspects of diversity. Economically, what have teachers done to bridge the gap for students whose families were most devastated by the financial hardships of the pandemic, and consequently, found themselves without adequate access to technology? How are educational professionals navigating the varying grade level readiness and preparatory levels of students? What are educators doing to meet students in their

context, which is to ask how they are negotiating the ethnic, linguistic, behaviorally diverse needs of their culturally rich classrooms? Furthermore, it is important to explore how both groups perceive diversity and how their conception of it has evolved through the challenges and opportunities of distance learning.

Among many challenges recognized in academia, a limited understanding of multiculturalism and diversity issues by preservice teachers has been noted by researchers (Bodur 2016; Guillaume, Zuniga-Hill, & Yee, 1995; Kyles & Olafson, 2008; Neuharth-Pritchett, Reiff, & Pearson, 2001; Zeichner, 1993). Naturally, the literature demonstrates conflicting views among teacher education professionals (TEPs) and among teachers with respect to how both groups frame the challenges of and responses to diversity, what their education has taught them about how to teach and engage diverse classrooms and what their experiences suggest are the best means for charging forward.

Additionally, pivoting towards the distance learning setting in focus for this research, literature has pointed out that challenges of distance learning are greatly exacerbated in the absence of adequate motivational and relational support; the former refers to the classroom environment's responsiveness to students' background and interests, and providing the autonomy necessary for students to express themselves and feel competent, and the latter emphasizes teacher-student and student-peer relations and rapport (Shernoff et al. 2017).

Therefore, this study will examine the self-reported practices of core subject high school teachers (English, Math, Science, Social Science, Foreign Language), comparing them with the perceptions of TEPs, with regards to what pedagogical techniques they have seen as most efficacious for the dimensions of diversity they have always prepared for, and that which distance learning introduces. The goal is to identify pedagogical successes and disappointments

between high school teachers and TEPs; have there been bright spots, for example where teaching methods have led to greater student engagement and learning among the more disadvantaged despite known challenges of distance learning stifling student engagement and consequently, learning? Have there also been surprising failures of teaching techniques hitherto thought to be well adapted to various kinds of diversity? And how do these different pedagogical techniques mingle with different kinds of diversity being discussed in this research: cultural, economic and readiness?

Significance of the Study

This study has implications for policy, practice, and theory. The transition from student to teacher and the early years in teaching have received a great deal of attention over the last decades (Flores 2001; Flores & Day 2006; Pillen, Beijaard, and den Brok 2013; Thomas and Beauchamp 2011, 2007; Hong 2010; Smagorinsky et al. 2004; Yuan and Lee 2016; Carrillo and Flores 2020). But there is tension between what TEPs assert as particularly important for pre-service teachers to know in order to engage and teach a diverse classroom, and what teachers' experiences tell them about the most effective methods for engaging and teaching the diversity of their classroom; this untapped dialogue between the two could prove illuminative, if not transformative for all education professionals. For example, in teacher education, theory underlies all of a preservice teacher's knowledge base, but when practice and theory clash, practice wins and that bubble of knowledge is disrupted, necessitating a new approach, practice. Where TEPs beliefs may initially guide a pre-service teacher towards appropriate means, the local context that the teacher works in shapes what, when and how those means look. There also stands a strong chance to learn something exciting for online learning post Covid-19, something

that can be done to help students who choose alternative education (online learning) and that have different learning backgrounds.

Over the last half century, the student population has grown more diverse and prompted educators to reconsider how they conceive of diversity and what strategies they employ to be effective in diverse settings. With the increasing diversity of the school population, more literature has emerged that addresses the needs of non-White students from the standpoint of language and culture (Ladson-Billings 2000). In light of this, most teachers report that their pre-service preparation did little or nothing to prepare them for today's diverse classrooms (Ladson-Billings, 1994; Ladson-Billings 2000). But the literature shows that no single course or set of field experiences is capable of preparing preservice students to meet the needs of diverse learners; rather, a more systemic, comprehensive approach is needed (Ladson-Billings 2000). Some of this thinking has shifted since Ladson-Billings. Django Paris and Samy Alim (2014) believe that much of the work being done under the umbrella of culturally relevant pedagogy has come up short in preparing teachers for multilingualism, multiculturalism and in encouraging students to critique the dominant power structures that depersonalize and deindividualize student needs. There is no canonical pedagogy for addressing the strain placed on teachers to tailor their teaching to highly individualized needs. Teacher education and teachers' learning in action may depend on conveying adaptive skills like gaining trust and self-belief.

It is important to not forget that as part of the dimensions of diversity, teachers must negotiate between highly advanced learners; students whose first language is not English; students who underachieve for a complex array of reasons; students from broadly diverse cultures, economic backgrounds, or both; students of varying genders; motivated and unmotivated students; students who fit two or three of these categories; students who fall closer

to the template of grade-level expectations and norms; and students of widely varying interests and preferred modes of learning (Tomlinson et al. 2003).

Now, add to this difficulty the prolonged period of remote learning and its impact. From rising rates of depression and anxiety to the loss of student learning, more questions have been raised regarding educators' preparation for common and extraordinary circumstances, like the ones currently being faced.

Historically, many have theorized about the power of culturally responsive and sustaining teaching practices to respond to these challenges; this pedagogy that recognizes the importance of including student cultural references in all aspects of learning cultivates a more familiar learning environment for diverse groups of students (Ladson-Billings 1994). But there has been little consideration about how educators might apply these same notions in unprecedented times such as these and in teacher education settings, even though research shows that a central component of any successful teacher preparation program is faculty regularly modeling best practices with respect to instructional strategies for working with a diverse student population (Cheruvu 2017; O'Hara & Pritchard 2008).

Ultimately, this absence of literature and lack of continuity contributes to the disagreement among education professionals of core beliefs deemed universally essential in preparing pre-service teachers. As Bandura's theory of self-efficacy has shown and as research has suggested, preservice teachers are not likely to enact pedagogies they have not witnessed and experienced (Darling-Hammond & Bransford, 2005; Cheruvu 2017; Bandura 1997), so if there is not a robust consensus of pedagogical strategies, then it is unlikely that new teachers will arrive at effective means for engaging diverse classrooms.

As a potential result of a lack of confidence and uncertainty among teachers in best addressing specific diverse student needs, teachers have struggled to attune their teaching to nuanced student diversity related specifically to learner exceptionalities, such as giftedness, special education, second language acquisition, multicultural learners, and students from low economic backgrounds (Tomlinson et al. 2003). So, despite growing attention to the conversation of diversity, educators remain unsure of how to best prepare teachers for diversity in their classrooms, and more still, using appropriate pedagogy to address that diversity. However, in light of the distance learning setting that Covid-19 prompted, there is a great absence of research on effective strategies for engaging students with new, or ever-present challenges illuminated by the current circumstances: students without adequate access to technological devices (chromebooks, iPads); students without adequate and consistent access to internet; students without adequate learning circumstances (minimal distractions to their learning); and students responsible for supervising or having to share resources with siblings during synchronous instruction. In many communities, schools are the hub for supports such as school meals, mental-health counseling, and childcare, so the absence of these supports as well as academic support may widen the margin of student achievement.

Learning loss is a major issue that distance learning has exacerbated, given diverse readiness levels of classrooms and increasingly stratified test scores like those discussed in the study conducted by the Curriculum Associates i-Ready Platform. The Curriculum Associates i-Ready platform learned that students only achieved 67 percent of the math and 87 percent of the reading that grade-level peers would typically have learned by the fall, on average, equating to a loss of three months of learning in mathematics and one-and-a-half months of learning in reading (Dorn et al. 2020). The learning loss was especially alarming in schools that predominantly serve

students of color, where scores were 59 percent of the historical average in math and 77 percent in reading (Dorn et al. 2020). Like Lee and Picano (2013) point out, a typical classroom will have students of a similar age, yet with diverse readiness levels for any given subject, which means that teachers can learn that much more from the pedagogical techniques being used for all of the different types of students that teachers must work with; finding effective, proven methods of engaging this level of diversity is critical for student outcomes and expanding the catalogue for appropriate methods of engaging diverse classrooms (2013). This is especially imperative to explore now, in a time where failures are at an all-time high and where a reliance on creativity and experimentation has never been higher. New approaches could reimagine effective teaching.

The United States population has continued to increase and diversify, especially over the past two decades in which the Asian population increased by 74 percent, the Hispanic population increased by 64 percent, the Pacific Islander population increased by 56 percent, the Black population increased by 18 percent, the American Indian/Alaska Native population increased by 14 percent and the White population increased by 1 percent (US Department of Commerce 2017). Between fall 2009 and fall 2018, public school enrollments among White students decreased from 26.7 million to 23.8 million. Similarly, the number of Black students decreased from 8.2 million to 7.7 million. In contrast, the number of Hispanic students increased from 11.0 million to 13.8 million (NCES 2021).

These enrollment trends produced changes in the overall composition of U.S. public school students, specifically, the percentages of students who were White and Black decreased (from 54 to 47 percent and 17 to 15 percent, respectively), while the percentage of students who were Hispanic increased from 22 to 27 percent over the period. In fall of 2015, approximately 30 percent of public-school students attended schools in which minority students comprised at least

75 percent of total enrollment; over half of Hispanic, Black, and Pacific Islander students attended such schools (US Department of Education 2016). However, trends of teacher demographics have remained steady with a slight decline in the last two decades. In 2017–18, about 79 percent of public-school teachers were White, 9 percent were Hispanic, 7 percent were Black, 2 percent were Asian, 2 percent were of Two or more races, and 1 percent were American Indian/Alaska Native; additionally, those who were Pacific Islander made up less than 1 percent of public-school teachers (NCES 2021). In 1999 to 2000, White and Black teachers made up 79 and 8 percent, and Hispanic teachers made up 6 percent.

Despite increasing diversity in U.S. schools, the topic of teacher effectiveness often remains dominated by a universal narrative and the belief that effective teaching is already known, and universally accepted, implying that there is no new knowledge to be gained or researched on the topic (Robinson & Lewis 2017). The literature shows that teacher education programs offer robust theories as to the inner workings of high school classrooms and effective teaching, but without firm continuity, teachers have explored nuanced strategies for teaching and engaging diversity, not the least of which have been discoveries supporting the natural and inseparable connection between culture and cognition, which is to say that there is an intimate link between culturalization and how one learns and engages with the world (Sheets, 2005). In other words, to be effective as a teacher, you must understand how culture and diversity interact with one another in the teaching and learning processes. Language, ethnicity, preferred learning style and other cultural indicators are key for teachers to bridge the often rigid and unfamiliar classroom to the familiar cultural experiences of different students. Important to these findings, Sheets (2005) also notes that teachers must recognize the variables that exist in everything that happens in a classroom: Teacher Pedagogical Behaviors (TPB), which describes how teachers

think and act in the classroom, and Student Cultural Displays (SCD), the ways children show who they are and what they know; ultimately, how these two mingle together determine positive or negative student outcomes.

But, despite the growing body of literature of teachers sharing best practices for assessing and engaging the diversity of their classrooms (Casey et al. 2019; McIntosh 2019; Darling-Hammond 2009; Tomlinson et al. 2003; Robinson & Lewis 2017; Bodur 2016), additional research is needed to explore how high school teachers perceive and engage the diversity of today in their classrooms, how much of that aligns with what their teacher education prepared them for and what the next steps are for expanding the catalogue on such practices. This is especially important given differences in diversity and how those differences influence learning processes and outcomes; diversity does not necessarily preclude successful interaction; however, people do develop vested interests in being and acting differently from one another in response to their relative positions in the social order (Davidson 1999). For this reason, researchers have argued that children from social groups that typically perform less well in school do so largely in reaction to stigmatized social differences (Polleck & Yarwood 2020; Davidson 1999; Parsons 2003). But children can learn to trust educators, better their engagement and assent to learn if teachers develop strategies that lessen or minimize the impact of stigmatized social differences.

We must also consider the implications of readiness and economic backgrounds and how those different markers of diversity interact with varying pedagogies. Creating classroom environments that engage students of all social backgrounds requires the identification of strategies that educators can use to help eliminate the detrimental effects of social and readiness borders (Davidson 1999). A next step lies in moving beyond the research of conceptions and preparation for diversity, and into exploration of how these conceptions have evolved over time

and in light of the challenges illuminated by distance learning, identifying pedagogical techniques that high school teachers and TEPs know are most effective in engaging and teaching today's diverse classrooms.

Theoretical Rationale

Teacher efficacy has proven to be strongly related to many critical educational outcomes such as teachers' persistence, enthusiasm, commitment and instructional behavior, as well as student outcomes such as achievement, motivation, and self-efficacy beliefs (Moran & Hoy 2001). In short, a teacher's efficacy belief is a judgment of his or her capabilities to bring about desired outcomes of student engagement and learning, even among those students who may be difficult or unmotivated (Armor et al., 1976; Bandura 1977). In addition, teachers' efficacy beliefs also correlate with their behavior in the classroom, the effort they invest in teaching, the goals they set, level of aspiration, their willingness and self-conception of their ability to assess, explore and apply appropriate and effective pedagogies in teaching a wide range of diversity in K-12 classrooms (Moran & Hoy 2001).

Research also suggests that self-efficacy beliefs can improve the teacher's ability to respond effectively to stressful and challenging situations. For example, research has indicated that teachers with strong, positive efficacy beliefs about their teaching ability are more likely to take risks and use new techniques (Guskey, 1988; Stein & Wang 1988), and to experiment and persist with challenging strategies that may have a positive effect on student achievement (Hani, Czerniak, & Lumpe, 1996; Ross, 1992). Bandura's theory of self-efficacy provides a useful theoretical framework for examining how teachers' beliefs of their own capacities interact with their ability to explore new strategies and how their successes and failures inform their attempts

to be effective for diverse classrooms. So, in using this framework and in exploring what teachers and TEPs are doing in their classrooms, I first want to discover how much these educators feel it is within their ability to respond to the different dimensions of their learning environments. Once I have this information, I may be able to draw connections between their feelings of self-efficacy and their reported pedagogical responses to different dimensions of diversity. Educators' innovative abilities to teach and engage varying dimensions of diversity may be closely linked to confidence they received from their teacher education or that which their time teaching has taught them as Figure 1 below demonstrates. It also serves as an important construct in determining how much power TEPs believe their teachers possess in being successful and adopting new methods for engaging and teaching diverse classrooms that were not introduced in their schooling.

This could be an important predictor of teacher effectiveness with a focus on navigating the challenges of diversity. How to tailor the high-school classroom experience, including pedagogy, to student diversity probably depends on the subject matter and the teacher's self-efficacy in understanding and dealing with diversity. Whether teachers are prepared for the particular dimensions of the diversity of today's classroom or not, exploring how they go on to enact their roles as educators and the confidence they have in doing so, especially when tackling the challenges that distance learning and diversity have presented, is pivotal towards understanding not only what educators do in situations of crises, but what educators do ordinarily to be effective for their students. This theory may also be useful for highlighting the experiences and challenges that teachers felt unprepared for in teacher education.

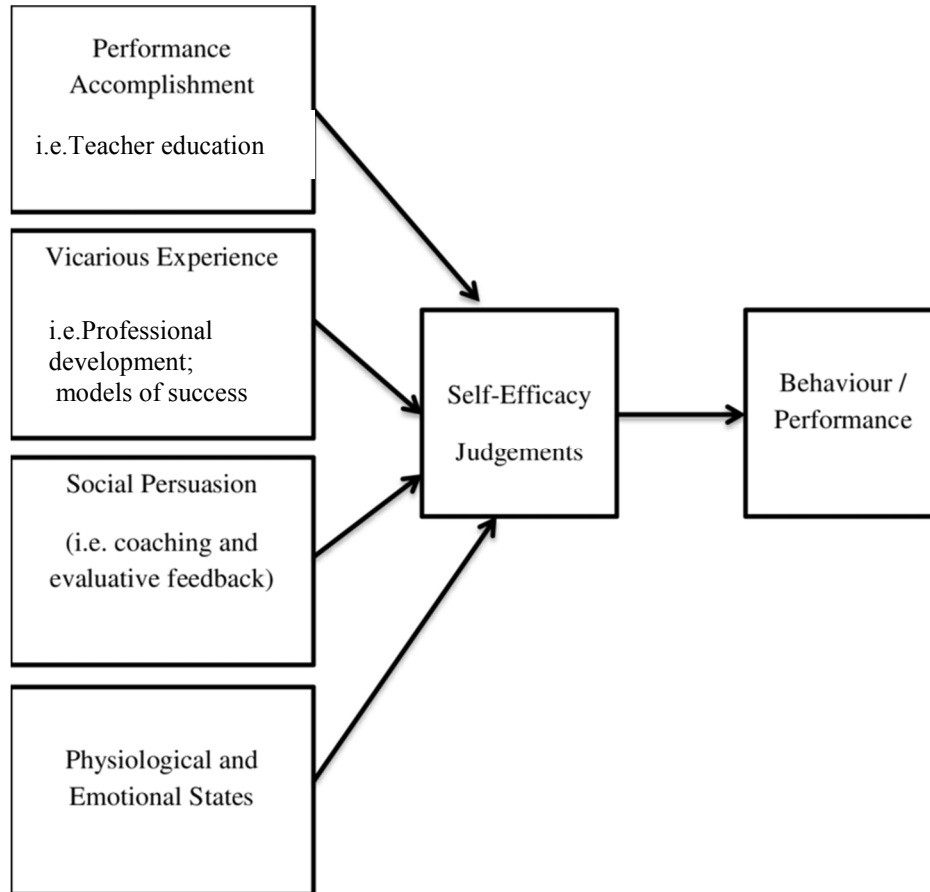


Figure 1.1

Components of self-efficacy theory leading to expanded practice & policy implications. (Bandura 1997)

Background

Just as research has shown that teachers in culturally, racially and economically diverse settings are more likely to be "unqualified" in their content areas, there are also findings indicating that they have been neither adequately prepared nor provided sufficient professional development to teach effectively, and that disparity is even greater in poor or minority communities. (White-Clark 2005; Ingersoll 2002). For example, teachers in not poor/white/

suburban schools are more likely to have graduate degrees and more likely to have full certificates than those in poor/minority/ urban schools (Ingersoll 2002).

White-Clark (2005) explored a national report, in which researchers found that only 17% of the teachers who taught limited-English-proficient, or culturally diverse (linguistic, ethnic, preferred learning style, etc) students were totally prepared, 30% were somewhat prepared, and 33% were moderately prepared to meet the needs of these students. Consequently, educators are seeing that the more culturally diverse a classroom, the greater the likelihood for harmful or inequitable student outcomes.

Diversity also often threatens self-efficacy as students from one culture, or with one level of ability, or with one economic background are suddenly thrust into a new environment where the rules are different, and naturally student confidence lessens as the environment and conditions they must now learn in, are completely unfamiliar. Part of the pedagogical challenge is developing in (diverse) students their own confidence and resilience to deal with their learning challenges and opportunities. The same holds true for the self-efficacy of teachers. It is also known that to combat these barriers to learning or inhibitors to self-efficacy, that effective and thoughtful preparation based on cultural awareness increases student learning and participation, but teachers often plan lessons and sessions with prewritten questions designed to elicit discussion, elaborate important points, and encourage generalization of learning (Predmore et al. 2017). It may be useful to examine the extent to which teachers take into account diverse perspectives or try to elicit diverse perspectives instead of trying to elicit right answers.

To avoid this generalization pedagogy, many studies have shown that teachers employ culturally responsive pedagogy by focusing on multiple aspects of student's cultural identities

and including students' cultural references in all aspects of learning (Ladson-Billings 1994); central to culturally responsive pedagogy are positive perspectives on parents and families, learning within the context of culture, student-centered instruction, culturally mediated instruction and reshaping the curriculum. But much of the research points towards limited implementation of said strategies (White-Clark 2005; Bodur 2016; Predmore et al. 2017). Paris and Alim advocated for traditional and evolving ways of culturally sustaining pedagogy like their examples of Hip-Hop pedagogies that ask students engage in spoken, written and rhymed texts, rap-battles, literacy and language (2014). But culturally responsive teaching is not the only strategy teachers consider when determining the most effective methods for engaging diversity (Robinson & Lewis 2017; Hansen-Thomas & Chennapragada 2018; O'Hara & Pritchard 2008; Juvonen et al. 2019). Academia is left to assume that preservice teachers learn or discover much more about the complexity of diversity, the challenges posed by it, and effective strategies to engage it during their practice, post-teacher education.

Teachers' exploration of practices and knowledge are valuable insights into what works and what does not for diverse classrooms, now and always. The connection between what TEPs find most important towards engaging and teaching diversity in the classroom and what teachers learn to do after their teacher education merits further research and may illuminate challenges not previously addressed, or much more difficult to observe without the opportunities presented by distance learning.

Research Questions

The overarching research question examines how high school teachers and teacher education professionals prepare for cultural, economic and readiness dimensions of diversity. More specifically:

1. What pedagogical techniques do TEPs find most useful for teachers to teach and engage in diverse classrooms? --Teacher education professionals' practices and beliefs about most effective practices vary depending on context (location, experience, knowledge, etc.). Because of this, it will be valuable to examine what similarities and differences exist and determine the weight of these agreements and disagreements among different professionals.
2. How do high school teachers' pedagogical techniques compare with TEPs' beliefs of the most effective strategies for teaching and engaging diverse classrooms? --As noted in the background, implementation of varying pedagogical strategies is often limited upon finishing teacher education (Predmore et al. 2017). So, we know that much discovery takes place in the experience of teaching; this question is critical in discovering what teachers remember and apply from their teacher education, what works, what does not, and what have teachers found to be gold for them in terms of engaging and teaching diverse classrooms.
3. How have teacher and teacher education professionals' thoughts regarding cultural, economic and readiness diversity evolved over the last 5 to 10 years? --In relation to question one, this aims to interrogate how perceptions of diversity have evolved over time and to what degree this change in perception has manifested in changes of theory and practice, subsequently impacting the practice of teaching at large. Cultural, economic and readiness diversity are the three dimensions of study that I will be focusing on and ask participants to explore.
4. To what degree have the challenges of engaging diverse classrooms been exacerbated by distance learning? What new dimensions of diversity are teachers needing to prepare for?

--Most intriguing, Covid-19 presents researchers with an opportunity to examine what new challenges are posed in this distance learning setting and what new dimensions of diversity teachers must contend with. It will be fascinating to explore what is happening in education, and how much of these challenges or nuanced profiles of students do we attribute to distance learning or attribute to ever-present issues only illuminated--even exacerbated--by the current state of learning.

Definition of Terms

Diversity - refers to the variance in students in a classroom; historically it has referred to the giftedness, special education, second language acquisition, multicultural learners, race, ethnicity, and students from low economic backgrounds. For the purpose of this research, it will require participants to focus on the economic, readiness and cultural aspects of diversity.

Cultural Diversity - refers to the primary language, beliefs, values, norms, behaviors and preferred learning styles.

Readiness and Preparation Diversity - refers to a student's grade level cognitive ability and proficiency; in other words, the degree to which a student can be successful, independently, in their respective grade level as dictated by several readiness indicators (social emotional, language, cognitive development, critical thinking and reasoning, etc.).

Economic Diversity - refers to a student's family income level; given the strenuous economic conditions of the global pandemic, this will necessitate teacher or school intervention in appropriately resourcing students for distance learning.

Pre-service teacher - a student teacher who has not yet earned a teaching credential; also referred to as a teaching candidate.

Diversity Pedagogy - a set of principles that point out the natural and inseparable connection between culture and cognition (Sheets, 2005). Here, teachers (a) observe children's cultural behavioral patterns to identify individual and group cultural competencies and skills; and (b) use this knowledge to guide their teaching decisions.

Teacher education professionals (TEPs) - educators working with and preparing pre-service teachers.

Distance Learning - instruction that occurs when the instructor and student are separated by distance, time, or both, utilizing synchronous (live instruction) and asynchronous (student-paced) modes of instruction.

Measures of Success - products of ideal engagement and learning outcomes; these can be grades, persistence, improved social skills and behavior, improved self-esteem, participation and attendance.

Description of Project

Following this chapter is a literature review in Chapter 2 discussing evolving demographics in K-12 education, teacher identity and teacher education with a specific emphasis on teacher effectiveness in response to diversity. I then transition to a discussion on the technology of learning and distance learning before a brief mention of implication. Chapter 3 highlights the method of this project noting the research questions, theoretical framework, data sample and proposed analysis, instrumentation as well as my researcher positionality. Chapter 4

reveals results and is broken into 4 sections that correspond with the 4 research questions of focus. Each section provides a general outline of the research question, responses from teachers, TEPs or in some cases, both, followed by connections to the Self-Efficacy survey, distance learning revelations and a summary. This project is concluded in Chapter 5 with a discussion of the results broken down by each research question, with recommendations for policy, practice and research, and finally the conclusion.

CHAPTER 2

Literature Review

The evolving demographics of K-12 education have garnered significant attention in the last several decades (Kirschner & Jeroen 2013; Tomlinson et al. 2003; Juvonen et al. 2019; Whiter-Clark 2005). The literature demonstrates a shift, an increasingly diverse student population, running parallel to increasing popularity in multicultural and culturally responsive pedagogy. However, as the learning profiles of students continue to diversify and become complex, and with the added variable of distance learning further complicating teachers' perceptions of diversity, we can surmise that there is much to learn from the experiences of teachers and teacher education professionals (TEP) of today in how to effectively engage and teach diverse classrooms. As educators are forced to adapt to the conditions and demographics of their classrooms, Bandura's self-efficacy (1994) offers a useful framework in better gauging teachers' preparation and action, and TEPs' reported beliefs on effective diverse classroom pedagogies.

To fully address these ideas, we should examine the literature on professional development of teachers and what their teacher education has taught them about student variance. It is also critical to examine how much of that education remains relevant in teacher experiences in engaging diverse classrooms; if it does not, then a look into what effective methods teachers discover during their practice is of equal importance and can fill in gaps of literature. In addition, a synthesis of the technology of learning and the nature of distance learning are necessary to underpin the rest of this review. This review of the literature is organized to understand multiple factors that contribute to teacher perceptions of diversity, and

pedagogical techniques for teaching and engaging that diversity, with some implications for policy and teacher education, ultimately demonstrating that while much work has been researched and done to meet the needs of diverse classrooms, there is still much that we do not know and that can be useful to prepare future teachers for both face to face and online instruction.

Developing Professional Identity in Teacher Education

Teachers come to the profession with their own skill sets and traits, but teacher education further develops, or in some cases, equips new teachers with resiliency, adaptability, empathy or qualities that are key in meeting the demands of classrooms. Maria Flores (2020) recognized teacher identity as a dynamic and multifaceted process and initial teacher education plays a key role in its development. As part of a broader project carried out in Portugal, Flores collected written narratives from 20 student teachers enrolled in their first semester in a master's degree in Teaching Philosophy and a master's degree in Portuguese and Spanish, ranging from ages 22 to 28, and all but one of the participants were female. Curious as to what further shapes the identity of teachers and teacher professionals, Flores gleaned four key patterns from narratives and various other responses from her participants: overwhelming moments of feeling like a student but thinking like a teacher, confronting present and past experiences, raising awareness of the complexity of the classroom context and the concerns of prospective teachers, holding a rather negative view about teaching as a future career (Flores 2020).

Flores' findings are not unlike the stories told from Ranita Cheruvu's (2017) qualitative case study focusing on the experiences of four preservice teachers of Color in a critical multicultural education course. Using course artifacts and phenomenological interviews that focused on participants' experiences in the course, and their racialized experiences and

understandings of their racial identities over space and time, Cheruvu found that despite the course being situated in a program and institution of higher education with a commitment to issues of equity in education and the course's overt commitment to anti-racist teaching, there was a consistent and pervasive colorblindness underscoring strategies and foundational knowledge. Participants described the numerous ways that course structures, processes and discourses left them feeling othered. It was particularly the discourses of diversity and social justice positioned these teachers as being objects of discussion; and these negotiations highlighted the complex, multiple and nuanced ways that preservice teachers of color understand race, racism and their racial identities (Cheruvu 2017). But Cheruvu did experience some success in getting this group of pre-service teachers of color to share willingly and as they would say, in a space where they did not feel othered, and that came from mutual vulnerability. The vulnerability shared between the researcher, who was the course instructor, and the participants during the interviews was identified by participants as being transformative and necessary when discussing issues of race and racism, culture and culturally sustaining pedagogy (Cheruvu 2017).

Cheruvu's findings underscore the reported inability of pre-service teachers to apply complex diverse pedagogies to increasingly diverse classrooms, substantiated in the work of Fadzilah Abd Rahman, Jon Scaife, Nurul Aini Yahya and Habibah Ab Jalil (2017). Rahman et al. (2017) examined the knowledge of pre-service teachers (PST) and their ability levels in applying their knowledge of diverse learners in various contexts to meet the needs of individual students using a sample of 74 PSTs at a university in Malaysia, 11 of which were interviewed. Results indicated that PSTs were able to develop Knowledge of Diverse Learners (KDL) and show their understanding of it, yet not able to readily apply such knowledge in modified situations. More specifically, PSTs were able to develop teaching goals that were related to

different students' ability levels, but less able to transform those goals into specific strategies, materials, and assessments; additionally, teachers had acquired basic abilities but had lesser knowledge in applying more complex tasks and asking complex questions of their students (Rahman et al. 2017). Given that all the participants came from the same teacher program, it is unclear if these findings would hold water for other PST's in different programs, but given the previously cited research (Cheruvu 2017; Flores 2020; Darling-Hammond 2009; Bodur 2016) and body of literature that exist on the development of professional identity and notions of diversity in teacher education for pre-service teachers, findings like this serve at least as an impetus for further research and examination as to contributing variables that shape the makeup of the teaching field. Bodur (2016) found that culturally responsive pedagogy was integrated into beliefs about effective teaching and being an effective teacher to a very limited degree. In a longitudinal study, 58 elementary education preservice teachers at a major research university in the southeastern United States (all females and 83 percent White) were asked to write a perspective paper analyzing the degree to which they prescribe effective teachers integrate issues of linguistic and cultural diversity into their teaching, and half of the preservice teachers in the sample did not make any reference to either cultural or linguistic diversity in their perspective statements.

Teacher Effectiveness & Positive Outcomes

Examining teacher effectiveness and how effectiveness is determined in relation to changing demographics is concomitant to understanding the professional and identity development of teachers and for building upon best practices to produce the best academic and socioemotional outcomes for students. Robinson and Lewis (2017) tackled the universal narrative of teacher effectiveness despite increasing diversity in the U.S. using critical theory,

critical race theory, and culturally responsive pedagogy to position teacher effectiveness as contextual to urban schools and relational to the asset-based view of the learner. In their study, Robinson and Lewis employed a phenomenological design to gather the shared experiences of nine teacher educators (8 women and 1 man). Findings showed that effectiveness in the context of the urban learning environment is a product of dispositional and responsive fit (Robinson and Lewis 2017), which is to say that a teacher's personal context, prior experiences and interactions, and perception of a culture, influence their effectiveness. This aligns with what previous research has suggested about the preparation of the educator and their ability to respond to their immediate environment in terms of the confidence they have in oneself, the skillsets needed to respond, and social and cultural awareness that should influence their decisions (Cheruvu 2017; Flores 2020; White-Clark 2005).

But, when localizing efficacy perceptions and effective strategies towards engaging diversity, it becomes clear that there is potential that exists in strategies that have not yet been researched and legitimized in academia; take Ladson-Billings' research on effective practices with African-American students specifically. She contends that the best means of doing such involves: situated pedagogies that consider race, class, and gender (Ellsworth, 1989; Hooks, 1989; McLaren, 1989); academic achievement, where teaching and learning are exciting symbiotic events; cultural competence that enables teachers access to heightened understanding of their students, their contexts and their needs; and sociopolitical critique that helps students understand the ways that social structures and practices help reproduce inequities (Ladson-Billings 2000). Ladson-Billings also makes the case for teacher education professionals to reflect and reexamine what current curricula efforts are being made to prepare teachers in understanding minority groups of students and meeting them at their social, cultural and academic locations for

optimal achievement. Many of Ladson-Billings' ideas of cultural competence and asset-based approaches are echoed in Caetano, Freire and Machado's (2020) interrogation of student voice and participation, which noted that concepts such as intercultural education and empowerment are interconnected. In other words, teachers have the power to elicit student input and part of doing that requires the teacher to validate and leverage the culture of students. Take for example the Project "Voice of children and young people in the development of the intercultural education" which involved several sub-projects. Contrasting situations and distinct courses of action were tested in the field according to the dynamics and contexts of each subproject, so each subproject led to a case study with its own specificity and its own intrinsic investigative value, like the stories of student participation. The co-design and implementation of each project aimed to engage others in activities such as debates, workshops, meetings, documentary production, and fashion show. Students from Case Study B reported saw themselves as active participants in the process (e.g., "We all work and play together", participant B16). In all three case-studies, the student groups involved other partners (e.g., schoolmates and school staff, elderly people from a local charitable institution and parents/tutors), so that their contact with diversity was widened and revealed within a frame of cooperation and healthy human relationships. The teachers played a key role in facilitating these processes. In Case Study A, the group was very diverse, but friendships were established not only among students who from the beginning felt connected and trusted each other but also among those who discovered that they shared experiences and interests. Students got along well and increasingly trusted each other, to the extent that some of the interview sessions became places where they could share confidences and intimate problems. In reflecting on what Ladson-Billings and Caetano et al. found particularly effective in recruiting student voices, the instructors in this example appropriately

and effectively put students in situations with many examples of diversity and placed them in a situation where they would use their own cultural capital and that of their peers, to work through this project. Students' knowledge was legitimized and validated as part of the learning.

Shifting Demographics & Challenges of Diverse Classrooms

Meeting students at their social, cultural and academic levels is becoming increasingly difficult to do given the rapidly shifting demographics over the past few decades, and the fact that there is more to consider than these traditional markers of diversity. Coming back to the 2018 comment from Hansen-Thomas and Chennapragada, noting that diversity “is the norm, not the exception”, the last half century has and will continue to endure significant change in the traditional student profiles K-12 education has grown accustomed to (White-Clark 2005; Tomlinson et al. 2003; NCES 2020) Tomlinson et al. (2003) recognized this trend and examined a need for differentiated or academically responsive instruction. Tomlinson et al. provides support in theory and research for differentiating instruction based on a model of addressing student readiness, interest, and learning profile for a broad range of learners in mixed-ability classroom settings: highly advanced learners; students whose first language is not English; students who underachieve for a complex array of reasons; students from broadly diverse cultures, economic backgrounds, or both; students across the gender spectrum; motivated and unmotivated students; students who fit two or three of these categories; students who fall closer to the template of grade-level expectations and norms; and students of widely varying interests and preferred modes of learning (2003). Tomlinson et al. cited two instances of effective differentiated instruction where achievement gains were demonstrated across economic lines and on state standards test. Researchers first recognized that student challenges must be at the proper level of difficulty in order to remain motivating: task that are too easy become too boring and

task that are too hard become frustrating. Secondly, modifying instruction to draw on student interest, like generating questions and task that interest students, enhances motivation, engagement and achievement (Tomlinson et al. 2003).

By 2035, students of color will be a majority in our schools, with increasing populations of children of immigrant and migrant families expanding the presence of cultural diversity in schools, a reality substantiated by countless researchers (White-Clark 2005; O'Hara & Pritchard 2008; Juvonen et al. 2019). In support of this recognition, Kirschner and Merriënboer (2013) reaffirmed the role of researchers and practitioners, necessitating more critical analysis of individual student trajectories, abilities and nuances, rather than collective grouping and cataloging, which grossly ignores the complexities of the students, their skill-levels and their learning styles.

How do teachers meet the needs of their constantly evolving classrooms with each student a complex case of gender, culture, language, motivation, access to resources and resilience? How do educators meet those needs with new and changing technology embedded in the world we live in, requiring new literacies and prompting issues of access and mastery? We know from previously cited research that new dimensions of diversity are neglected in much of the preparation for teachers; we've not yet discussed the challenges of this diversity and what teachers experience and implement as effective methods of engaging and teaching diverse classrooms. Holly Hansen-Thomas and SriPadmini Chennapragada (2018) discuss the preparedness new teachers must be equipped with for teaching classrooms of *superdiversity*, a term coined by Steven Vertovec (2007). Superdiversity characterizes the multidimensional, multilayered and complex identities that fill our classrooms. As the authors note, diverse classrooms are the norm, not the exception; while many classrooms may not include the intense

diversity of that in the case study, they will indeed have similar issues (Hansen & Chennapragada 2018).

In an ethnographic study, the authors spent approximately five weeks observing and researching in a high school Chemistry class at a long-established newcomer school called the Newcomer School of America, or NSA (NSA programs are designed primarily for late-arrival immigrant students with limited proficiency in English, but many students in newcomer programs also lack age-appropriate education in their home country and familiarity with the American school system; they also serve as host to refugee children, who come to school with a range of issues running the gamut from low self-esteem, even personal trauma—such as that experienced by children in war-torn areas). Towards the end of observations within a unit, severe conflict was observed in which the physical gesture of a hand on the shoulder was perceived as hostile, resulting in a fight between students of different cultural backgrounds, the tossing of materials and chairs, and the endangerment of other students (Hansen & Chennapragada 2018). It's important to note that because all of the teachers at the NSA work with English as a Second Language populations, they were all trained in ESL methods, which is to say these professionals are more culturally attuned to work with the populations they do than standard K-12 educators, yet, the complexity of the diversity still posed an issue of preparedness; if anything, this scenario—albeit one of I'm sure dozens of positive interactions—sheds light on the center in the spectrum. By observing radically diverse classrooms, we are not just learning what to do in these extreme circumstances, but what can be done ordinarily to close the gap and improve the identification and response to superdiversity.

Shin and Koh (2007) experience similar cross-cultural differences that shed light on disagreements in fundamental pedagogical teachings. Using public high school teachers from an

urban midsouth school district in the United States and teachers from a city school district in Korea, Shin and Koh (2007) distributed surveys to principals at 14 schools, who went on to distribute the surveys to their teachers in this cross-cultural study, designed to determine what kinds of cross-cultural differences exist in beliefs of American and Korean classroom teachers with respect to their instructional management and student management. A clear contrast between the two cultural groups was found in the result: American high school educators tended to be more intervention and control oriented in their instruction and employ more behavioral management strategies than Korean high school teachers (Shin & Koh 2007). For example, more American teachers (95 percent) than Korean teachers (58 percent) reported that the teacher should direct student transition from one learning activity to another. Additionally, more American teachers (51 percent) than Korean teachers (26 percent) responded positively that student seating assignments should be performed by teachers. However, owing to the characteristics of cross-cultural study, one may be cautious to generalize these findings to other settings because of some intrinsic cultural and historical factors, so let's pivot to other examples.

Predmore, Kushner and Anderson (2017) grappled with the difficulties that teachers inadvertently produce in “uninviting” students to the shared intellectual space of discussion, because of the predetermined outcomes, acceptable responses and interpretations students find inaccessible because they are not designed in the student's perspective or context. For example, a teacher might have a pre-designed lesson and interpretation of a text, but a culturally diverse group of students may not read that text the same way, and feel invalidated when their interpretations are othered, or not entertained at all.

Parsons (2003) mentioned similar unintended consequences of teachers with good intentions, attempting to instruct in a value-free, unbiased fashion, but subconsciously

responding to their own set of socialized cultural values. Jaana Juvonen, Leah M. Lessard, Ritika Rastogi, Hannah L. Schacter and Danielle Sayre Smi (2019) provided a critical analysis of barriers to social inclusion and integration in schools and proposed inclusive educational practices that help connect and unite diverse students. The authors reviewed theoretical frameworks that help explain group dynamics and contextual conditions that contribute to exclusion (i.e., peer victimization, rejection, friendlessness) of students based on ethnicity, sexual orientation, body weight, and so on, and argue that to be able to facilitate inclusion (acceptance by peers, cross-group friendships), educators and school administrators need to be aware of group and interpersonal dynamics (Juvonen et al. 2019). When teachers are aware or seeking awareness, students experience great acceptance, improved intergroup relations and inclusion. One such success story came from the use of cooperative learning practices including jigsaws and other group-based activities, requiring input from all group members to make progress toward a common goal, to achieve individual and group success. Cooperative learning is robustly associated with the formation of cross-group friendships across gender, ethnicity, SES, and ability status (Slavin, 1995).

Collectively, much of the literature shares the belief that students are willing to accept a fairly broad range of behaviors from teachers, as long as students are convinced that teachers have respect for and confidence in students who are socially different than themselves, and who support and elicit student voice and input (Juvonen et al. 2019; Parsons 2003; Davidson 1999). For example, Juvonen et al. recommended lessons on relationship skills that may incorporate collaborative problem-solving exercises where students witness firsthand the value of incorporating diverse perspectives to develop creative solutions, or lessons on social awareness, where students learn about the ways that social and cultural norms affect the feelings and

behaviors of those who do not “fit in.” Insofar as teachers play a critical role in facilitating student cooperation and inclusion, recommendations have been made to incorporate new teacher training tools into social-emotional learning programs (Trach, Lee, & Hymel, 2018), such as “scouting reports,” from which teachers learn about the social dynamics of their classrooms. Teachers can then use such information to make structural modifications through seating arrangements and integrating isolated students into group activities (Farmer et al., 2016). The analysis and recommendations here support the existing body of literature in conceptualizing diverse classroom strategies and preparing new teachers for the dimensions of diversity.

Engaging Diverse Classrooms

In light of these challenges posed by diversity, what do we know about what works, at least in local implementations? To what degree, if any, do preservice teachers integrate culturally responsive pedagogy into their perspective about effective teaching? How do these perspectives and their application change over time? Gloria Ladson-Billings (1995) proposed that culturally responsive pedagogy must focus on student learning and academic success, develop students’ cultural competence to assist students in developing positive ethnic and social identities, and support students’ critical consciousness or their ability to recognize and critique societal inequalities. But teachers must be equipped in utilizing all of the aforementioned principles. Paris and Alim furthered this understanding of culturally sustained pedagogy, positing that culturally sustained pedagogy (CSP) must perpetuate and foster linguistic, literate, and cultural pluralism as part of the democratic project of schooling and a response to demographic and social change (2014). Bodur (2016) concluded that teacher education programs should infuse issues of cultural diversity into their programs and monitor possible changes in preservice teachers’ perspectives to assess if these changes reflect a commitment to teaching in a culturally

responsive manner. Findings from Bodur's longitudinal study (n=58) found that culturally responsive pedagogy was integrated into beliefs about effective teaching and being an effective teacher to a very limited degree; more than half of the participants did not even make mention of cultural or linguistic diversity in their perspective statements, highlighting a particular need to increase early exposure to diverse pedagogies to strengthen the efficacy and ability to implement these concepts.

But, where previous literature has failed to offer concrete practices for teacher education professionals, Ellerbrock, Cruz, Vasquez and Howes (2016) delivered a comprehensive set of guiding principles to foster equipped and culturally competent pre-service teachers, recommending the following pedagogical practices to combat the challenges experienced by pre-service teachers in their teacher education: establish a positive classroom environment; build relationships; promote cooperation; encourage self-reflection; implement purposeful learning activities; build cultural competence; investigate school demographics; make meaning of inequities; build sociopolitical consciousness; examine one's assumptions; consider cross-cultural perspectives; provide appropriate field experiences with a focus on diversity; lastly, provide early, intermediary and final field experiences. These recommendations are somewhat prescriptive, but the researchers reported improved diversity awareness, consideration, greater sense of belonging and greater problem-solving skills among their pre-service teachers. However, the authors also recognize that content delivery will be sacrificed for the establishment of a positive learning environment by dint of communication rules and guidelines being understood; the former should not be pursued without implementation of the latter. The suggestions here are vital for effective teaching in any classroom, but these practices highlight the particular need of engaging pre-service teachers in continuous reflexivity, modeling and

collaborating for enhanced incorporation of rigorous, standards-based instruction that is also culturally relevant and sustaining (Polleck & Yarwood 2020).

Researchers have proposed several methods of effective teaching that have worked in local contexts, like Rose Hernandez Sheets' (2009) Diversity Pedagogy that links culture, cognition and schooling in a single stroke of the brush. Diversity Pedagogy Theory (DPT) is a set of principles that point out the natural and inseparable connection between culture and cognition (Sheets, 2009). In other words, to be effective as a teacher, you must understand and acknowledge the critical role culture plays in the teaching and learning process. Her work demonstrated a connection between teachers becoming conscious of one's own thinking patterns and responding in ways that enable students to achieve like how teachers choose to interact with students, including the quality of their interpersonal relationships with specific children, ways they arrange their room physically, how they establish the emotional tone of the classroom, and clearly establishing what they expect academically and socially from their students.

Changnam Lee and Kathryn Picano (2013) advocated for more developmentally focused research and evidence-based instructional practices that simultaneously respects the phases of learning: (a) acquisition, (b) retention, (c) recall, and (d) generalization. Their work supported the fact that all students benefit when multiple means of instruction are used simultaneously, targeting the learning style, preparedness level and composition of the content. Tomlinson noted the same in his work making reference to Kulik and Lou who found that student gains were greatest when instructional materials are varied for different instructional groups, rather than using the same materials for all groups (Kulik & Kulik, 1991; Lou et al., 1996).

Their research highlights the importance of these learning phases that all students experience and that while a typical classroom will have students of a similar age, they will all

have diverse readiness levels for any given subject, which makes the choices of instructional tools that much more important and critical to the student's achievement. If there is anything that can be extrapolated from the research, it's a consistent discontinuity among education professionals, all of which underscores what seminal researchers suggest: effective teachers appear to be willing to implement pedagogical and socioemotional strategies that are inconvenient and fall outside of their training (Robinson & Lewis 2017).

Technology of Learning and Distance Learning

The technology of learning describes communication, information and technological tools used to enhance learning, teaching and assessment; it's also understood as the multitude of familiarities we associate with traditional classroom learning environments and tools used to foster a healthy education (employment of recesses and textbooks, desks and blackboards, homework and tests, and the sought-after certificates and credentials). In most places, the global pandemic has drastically altered the technology of high school learning. The familiar classroom was suddenly off limits; recesses with one's peers were gone; and much, if not all of the same learning content had to be covered online. The initial findings have been discouraging and motivating, depending in part on aspects of student diversity: readiness and preparation, economic means and access, and culture, taking into account language and preferred learning styles. Though it may have been heard for the first time for many in March of 2020, distance learning dates back to the first online course delivered at Penn State University in 1995; since, a rapid technological shift has made possible the blended learning space for students and teachers globally, though reviews of the impact of technology on learning are strikingly mixed. Lant Pritchett (2013) suggested technology be adopted and scaled based on evidence of its impacts on learning, but the social, economic and educational upheaval by the Coronavirus did not allow for

such conveniences, placing the education system in a situation with few other choices, staring down the barrel of predictable learning declines and failures that many had researched prior to this global pandemic (Levy 2011; Davis & Fullerton 2016; Malinovski et al. 2014; Gemin et al. 2018; Mupinga 2005).

Nationally, the first grading reports revealed as much as two and three times the average amount of failures; states like New Mexico and California reported that over 40% of students were failing at least one class and in major cities like Houston and St. Paul, it was no different with districts reporting double the number of failures as is the case in a typical school year (Thompson 2020; Woolfolk 2020). Educators, parents, and students know firsthand the high cost of this prolonged period of remote learning, from rising rates of depression and anxiety to the loss of student learning, but Black, Hispanic and Indigenous communities have taken the hardest hits to their learning. A study conducted from the spring of 2020 into the fall shows students of color were about three to five months behind in learning; white students were about one to three months behind (Dorn et al. 2020). And while strong efforts have been made nationally to close the digital divide and improve the quality of remote learning, Black and Hispanic students continue to be more likely to remain remote and are less likely to have access to the prerequisites of learning—devices, internet access, and live contact with teachers (Dorn et al. 2020). Other analyses demonstrate that English language learners and students with disabilities were among those with the largest increases in failing grades; all students are suffering from the impact of distance learning, but research has made clear that those who came into the pandemic with the fewest academic opportunities are on pace to exit with the greatest learning loss (Dorn et al. 2020; Thompson 2020). As can be surmised, economic hardships, readiness and preparedness, and cultural differences appear most frequently in current literature on struggling learners during

distance learning, all of which link to varying deficits attributable to the failures (lack of motivation, lack of access, absence of resources, social and linguistic barriers).

To combat this decline in learning, teachers have been instructed to give less homework, prioritize the most important assignments; most teachers have been encouraged to find alternatives to traditional lectures and their grading scales have been curved down from a 100-point system to 50 points so that missing assignments--zeroes-- impact students' grades less (Thompson 2020). Some changes have worked. The most effective programs have reinforced core learning, relied on culturally relevant pedagogy, and limit groups to eight to 12 students (Dorn et al. 2020). Parent engagement has also proved promising; where parents are able to provide more traditional teacher inputs, their children have performed better, but this is a privileged circumstance that not many are able to benefit from during this time.

Teachers continue to struggle fighting against the lack of motivation that so many students are experiencing, a critical pillar of a quality learning environment which has been associated with students' propensity to learn; that propensity to learn is driven significantly by the presence of motivational and relational support (National Research Council, 2004; Shernoff et al. 2017). Keeping students engaged remotely is a challenge and data from instructional software provider Zearn showed that student participation in online math coursework decreased by 11 percent in the fall of 2020 with participation prior to the pandemic; among low-income students, the drop is 16 percent, while participation by high-income students decreased by just 2 percent (Dorn et al. 2020). The global pandemic is hurting students in so many ways. Beyond access and quality of instruction, students are suffering from food insecurity, housing insecurity, frequent depressive states and increased isolation with most families needing both parents to work. Given the plurality of challenges that students bring to the classroom during this time, and

the creativity that the current distance learning setting demands of educators, now is a valuable opportunity to learn what teachers are doing to engage and teach their students, despite the burdens stacked against them.

Summary

Teacher education is tasked with equipping teachers with robust and effective practices for engaging students, creating appropriate rigor and continually exposing students to multiple examples of diversity. But, as the literature demonstrated, too few teachers are part of purposeful conversations or were given few strategies for accomplishing these goals, in addition to effectively building relationship with and among students. We did see some good examples of how teachers can lean on their students and leverage their personal capital towards meaningful learning (Tomlinson et al. 2003; Juvonen 2019; Cheruvu 2017). However, increasing demographic shifts and the nuances of distance learning prompt new challenges that new and current teachers require guidance in navigating. How do these same culturally sustainable pedagogies work in an online setting? How easy or how challenging might it be to elicit student input and work symbiotically with students like Juvonen et al. demonstrated in their case studies? These areas of research require further exploration, and this project is situated in not only exploring these ideas but how the currently technology of learning has mitigated or exacerbated these challenges in distance learning.

Implications

The current era of teaching requires a knowledge and application that extends beyond much of what teacher education has historically prepared pre-service teachers for. Diversity is not new, but the trends over the last half century, especially in the last two decades, call into question what pedagogical strategies best meet the demands diverse groups of students, a group

that is more brown, black and socioeconomically stratified than previous generations (US Department of Commerce 2017; NCES 2020; US Department of Education 2016). Many have looked at effective strategies for engaging diverse classrooms (Ellerbrock et al. 2016; Tomlinson et al. 2003; Sheets 2009; Casey et al. 2019), but none have been presented with the obstacles that distance learning has created. This time presents an opportunity to examine challenges and nuances that complicate notions of diversity and effective pedagogies for engaging it; we may also learn something useful to prepare future teachers for both face to face and online instruction.

CHAPTER 3

Method

The purpose of this research is to identify secondary teachers' methods for engaging diverse classrooms, compared with teacher education professionals' suggested strategies. This research will also highlight changes in strategies and perceptions due to the current distance learning setting. A qualitative research study was conducted with secondary teachers of core subjects to better understand their perceptions of diversity and effective pedagogies for engaging diverse classrooms. These findings will be compared with teacher education professionals' perceptions and recommended pedagogies. Although a fair body of research has been conducted that examines effective teaching, typologies, and multiculturalism as a response to diverse classrooms, it did not interrogate educators' perceptions of diversity and how strategies are created in light of those conceptions, and the degree to which teachers and TEPs could take the framework, localize and implement the strategies. The research also did not discuss the necessary adaptations for distance learning that illuminate other challenges and methods for response.

It is important to acknowledge the absence of race as a focus of diversity in this study. Readiness, culture and economic circumstances are pervasive ordinarily, but had heightened challenges during distance learning that I believe draw clearer lines towards effective pedagogical strategies in responding to those challenges. Race is salient, and research has shown it is indicative of outcomes, access and other markers of achievement, but it is also a static aspect of identity and in this distance learning environment, it is my belief that race offers much less observable, pedagogical value for teachers in the way of teaching strategies, than to dissect the challenges of culture, readiness and economic circumstances. In terms of culture, students

grapple with linguistic, learning style and behavioral differences that impact their ability to learn, and with readiness, it is imperative to better understand the current readiness levels of students to gauge what next steps are for curriculum, standards-based testing, as well as reevaluating differentiation based on readiness levels. Lastly, economic circumstances affected access, and by extension the attendance and the type of engagement students could have in distance learning. Where race operates as a marker of identity—and in future work, could demonstrate proximities to challenges—the three areas of focus for diversity in this research are dynamic student and learning environment characteristics that are valuable to research and explore effective strategies for responding to such challenges. Educators' stories are valuable, and we can learn the most from those doing the work in the most unprecedented of times. The following sections will describe the research sample, proposed research procedures, proposed data analysis, timeline of research and limitations.

Research Questions

The overarching research question examines how secondary teachers and teacher education professionals prepare to engage and teach different dimensions of diversity; there are four main research questions that will guide this work:

- 1. What pedagogical techniques do TEPs find most useful for teachers to teach and engage in diverse classrooms?*
- 2. How do high school teachers' pedagogical techniques compare with TEPs' beliefs of the most effective strategies for teaching and engaging diverse classrooms?*
- 3. How have teacher and teacher education professionals' thoughts regarding cultural, economic and readiness diversity evolved over the last 5 to 10 years?*

4. To what degree have the challenges of engaging diverse classrooms been exacerbated by distance learning under Covid-19?

4.1 What new dimensions of diversity are teachers needing to prepare for?

Sample

Participants were secondary teachers from California; the participants taught varying core subject areas (English, Math, Science, Social Science). The second group of participants were teacher education professionals from California; I received a variety of teacher education professionals who are responsible for different types of teacher education courses (Foundational Teaching, Special Education, Literacy, Field Supervision). Both teachers and teacher education professionals had a minimum of three years teaching experience. My goal was to interview 15 teachers and 15 teacher education professionals; however, I went on to recruit 6 teachers and 8 TEPs. Given the nature of the research to value all of the methods shared by the educators, data saturation was not so much of a concern.

Data Collection

Teacher participants were recruited through Chaffey Joint Union High School District; the district boundaries span as southern as Eastvale, California and as northern as Wrightwood, California; the eastern boundary reaches from North Fontana, moving west as far as Montclair. The distance covered by this district offers a fair geographic representation of the state, capturing urban, rural and suburban land, with varying socioeconomic statuses. I personally contacted the superintendent, Dr. Mat Holton, and distributed my research information and consent form to solicit participants (see Appendix D). Teacher education participants were solicited from Southern to Central California teacher education programs (UC, CSU's, Private), where the same research information and consent form was sent and where I tried to match as closely as possible

the ratio of teachers prepared at the three types of institutions; I also aimed to provide geographical representation throughout Southern to Central California. I used snowball sampling as well to attract other participants. I then awaited my responses, and once consent was granted, I set up dates and times to conduct the interviews.

There was a total of two interviews that were conducted. Given the current climate, the interviews all took place over the phone or via Zoom. There was roughly a 1-2 month gap between the first and last interview, enough time to gather the data of other participants. Each interview was transcribed the day of the interview. In an attempt to attract more participants, a \$50 Amazon gift card was offered for those willing to participate in this research and emailed after the 2nd interview was conducted.

Instrumentation

The main instrument used was the interview. There were two interviews conducted per participant (see Appendix B & C for interview questions). The organization of these interviews involved getting to know participants in the first interview (such as motivations and perceptions) with a focus on strategies used to engage diverse classrooms. The first interview was preceded by Bandura's Teacher Efficacy Survey, a 30-question scaled survey to gauge perceptions of efficacy and control (see Appendix A). I utilized this data to better understand how teachers and teacher education professionals have responded to distance learning conditions; the survey demonstrates to what degree educators believe it is within their power to affect or impact the outcomes of their students, especially in trying circumstances. I hypothesized that individuals with higher efficacy levels will have experienced greater successes or creative freedom during distance learning, and those with lower levels of efficacy experienced a difficulty with attempting new pedagogical techniques; research has already indicated that teachers with strong,

positive efficacy beliefs about their teaching ability are more likely to take risks and use new techniques (Guskey, 1988; Stein & Wang 1988), and to experiment and persist with challenging strategies that may have a positive effect on student achievement (Hani, Czerniak, & Lumpe, 1996; Ross, 1992). The second interview involved sharing some findings with the participants from the first round of interviews and focusing on how their perceptions and strategies with diverse classrooms have evolved during distance learning, particularly in the interest of cultural, economic and readiness diversity. I anticipated that both interviews would take around 45 minutes to an hour.

Proposed Data Analysis

The interviews were recorded using Zoom and an additional recorder; they were then transcribed using Rev (transcription service) immediately following the interviews. Following each interview, I reviewed notes and familiarized myself more closely with each participant. After I collected the first round of data, I read through the data to get a sense of commonalities and differences that emerge and used Dedoose, a qualitative data analysis computer program, to classify, sort and arrange the information for my own work and that which was shared in the second round of interviews. The codes were used to generate central themes and a master list of all the codes to draw connections between participants and to the existing literature.

Protection of Human Subjects

No one was harmed during or after the study but given that participants shared intimate knowledge and experiences of their teaching with me, it was imperative that their identity remained confidential. First, participants were provided with an explanation of the purposes for my research and the expected duration of their participation. Second, a description of the process was provided discussing the role they will play in the study. They were made aware that their

participation is voluntary and the refusal to participate or discontinue participation will not amount to any penalty. While the research will benefit from as much as the participants care to share, they were made aware that they did not have to answer all questions if they felt uncomfortable at any point. Furthermore, any documentation with the participants' name was substituted with a pseudonym. They have complete access to me in the event they have any questions. I submitted the required application and form to the Institutional Review Board of Claremont Graduate University for approval to interview secondary teachers and teacher education professionals. I was not required to obtain IRB approval from CJUHSD.

Limitations

There were a handful of limitations to the study that were important to weigh. The sampling may not be equitable; while I strove for a fair representation of diversity in terms of the geographical locations of participants, years of experience, subjects, etc., pulling teacher participants from one school district, and teacher education professionals from multiple schools, may have presented questionable external validity. The sampling size was also insufficient for adequate statistical analysis, but the stories are most important for my findings.

Researcher's Positionality

This research is of particular interest to me; I am a high school English teacher working in the Chaffey Joint Union High School District. As a student, I resented school--as did many of my minority peers--because so much of what we did, did not speak to us and was never made accessible. It often felt that I was an afterthought in classes; this rang true in college preparation classes as well as Honors and AP courses I completed. However, I do remember having two professors as an undergraduate at the University of La Verne who made strong efforts to get to know me, learn where I come from and what my passions were. One of these professors would

give me the first book I ever read by a black author: *Sonny's Blues* by James Baldwin. Moments like this can have a profound impact on students and this one absolutely did for me. I've spent my adult life teaching and loving my job every day, but also curious as to what other teachers are doing that motivates and achieves success for all of their students, despite the complex makeup of their classrooms. I recognize my biases as a teacher and a teacher of color examining effective methods for engaging students like me and unlike me.

CHAPTER 4

Results

The overarching research question for this study focused on most effective, self-reported techniques by secondary teachers and teacher education professionals for engaging and teaching different dimensions of diversity, specifically cultural, readiness and economic diversity. In addition, this research also explores how those strategies shifted or remained constant during distance learning. Described in this chapter are results related to the study's four research questions and the relationship between those responses and the result of the Self-Efficacy survey (See Appendix A). This is prefaced by a brief profile of the Chaffey Joint Union High School District where teachers were collected from. Then this chapter is divided into four main sections. The organization of findings are in Table 4.1, which also notes the data source in relation to each research question.

Profile of CJUHSD

Chaffey Joint Union High School District serves the communities of Ontario, Montclair, Rancho Cucamonga, and portions of Fontana, Upland, Chino, and Mount Baldy. It has eight comprehensive high schools, a continuation high school, an online high school, a community day school, an adult school, and alternative programs. As of 2020, CJUHSD serves 23,724 students with the following racial breakdown for students: African American 7 percent; Hispanic 65 percent; White 16 percent; Asian 7 percent; Filipino 2 percent; multiracial 2 percent and American Indian .5 percent. As of 2019, there are 971 teachers making a 24:1 student-teacher ratio and the racial breakdown for teachers is as follows: Asian 4 percent; Black or African American 5 percent; Hispanic or Latino 23 percent; and White 65 percent. Of the 23,724

students, 62 percent are recognized as socioeconomically disadvantaged, 6 percent are English Learners, 5 percent are homeless, and 13 percent are students with disabilities.

Table 4.1
Chapter Organization and Data Sources

Question	Data Source
1. <i>What pedagogical techniques do TEPs find most useful for teachers to teach and engage in diverse classrooms?</i>	Interview one and two with TEP and Teachers; Self-Efficacy Survey (Bandura) Q3, Q7
2. <i>How do high school teachers' pedagogical techniques compare with TEPs' beliefs of the most effective strategies for teaching and engaging diverse classrooms?</i>	Interview one and two with TEPs and Teachers; Self-Efficacy Survey (Bandura) Q3, Q7
3. <i>How have teacher and teacher education professionals' thoughts regarding cultural, economic and readiness diversity evolved over the last 5 to 10 years?</i>	Interview one with TEPs and Teachers; Self-Efficacy Survey (Bandura) Q2,
4. <i>To what degree have the challenges of engaging diverse classrooms been exacerbated by distance learning under Covid-19?</i> 4.1 <i>What new dimensions of diversity are teachers needing to prepare for?</i>	Interview two with TEPs and Teachers; Self-Efficacy Survey (Bandura) Q1, Q3, Q5, Q6

Section 1: TEPs Pedagogical Techniques for Diverse Classrooms

Teacher education professionals were asked to report on what their experiences have taught them about what is most valuable for the preparation of incoming teachers and the challenges posed by diverse classrooms, as well as what they believe are the key elements of a

successful teacher education experience for pre-service teachers preparing to work in diverse classrooms. In the first interview, TEPs offered key experiences and knowledge that they attributed to the identified elements of a successful teacher education experience in consideration of diverse classrooms, in addition to recommended pedagogical strategies. Reported strategies most effective in engaging diverse classrooms included: real-world inquiry, relationship building, role-playing, asset-based frameworks, early exposure to multiple kinds of diversity and visuals. Strategies in this section are organized under the science of teaching and art of teaching, two recurring themes from participants in interviews. First, in Table 4.2, is an ethnic breakdown of the participants and years of experience. Following this is a discussion on the reported pedagogical techniques from this group of TEPs.

Table 4.2
Teacher Education Professional Participant Demographic Information

Name	Ethnicity	Years of Educational Experience
Tom	Chicano	20
Mason	White; Northern European	20
Destiny	White; Non-Hispanic	34
Aracely	Danish; Mexican	48
Blair	White	23
Elizabeth	White	33
Jessica	White	25
Emma	White	11

Profiles. The eight teacher education professionals interviewed had between 11 and 48 years of total educational experience with an average of 27.75 years. All of the participants work

in Southern California teaching education or credential programs, with the exception of one participant from the Bay Area. This group primarily instructs the following teacher education courses: literacy, special education, methods of teaching, and theory and research of teaching. One participant, Tom, also serves as a student teaching fieldwork observer in addition to courses taught.

TEP Interviews

TEPs participated in two semi-structured interviews; the first of which mainly focused on perceptions of the role as a teacher education professional, as well as identified elements of successful teacher education experiences in consideration of diverse classrooms. This included discussions about what was most memorable or effective from their own teaching credential experiences, how perceptions of diversity have evolved over the last 5-10 years and what they feel is most valuable in the preparation of new teachers for diverse classrooms. The second interview provided participants with opportunities to react to findings from both teachers and TEPs in the first round of interviews, as well as a specific conversation on useful and disappointing strategies for engaging students with various cultural backgrounds, economic circumstances, and readiness levels. From these interviews, the following themes emerged: relationship building, the art and science of teaching, role playing, early and frequent exposure to diversity and differentiated instruction. What follows is an in-depth discussion revolving around these strategies and how TEPs have adapted them to be more effective for both traditional and distance education.

TEPs and relationship building. Teacher educators agreed, “good teaching is good teaching” and that though each setting may differ, there are a handful of pedagogical necessities

that must make their way into the classroom, especially the racially, socially, economically, culturally, and readiness diverse classrooms of today. We will begin with the most commonly reported belief, relationship building. As Destiny, a 34-year teacher education veteran noted:

Competency with content and competency with pedagogy are essential aspects in teacher preparation. But I think there's a lot of interpersonal relational work that also needs to be present in teacher education so that our teachers are equipped with all of the range of skills that they need to connect with all of the range of students with whom they'll touch.

Some TEPs referred to it as “love”, others “empathy and compassion” and even a few mentioned “concern and care”, but the most recurring pedagogical strategy that the group saw as most effective in engaging any class, especially diverse classrooms, was the strategy of relationship-building. Which, oddly enough, was not something that many--if any of the participants--received in their own teacher education. Elizabeth affirmed this notion, acknowledging that she relays to her candidates, “You guys are getting far more background and skills and knowledge than I even dreamed about getting. I got nothing.”

Teacher education has evolved in so many ways over the last half century, but maybe none more important than the relational aspect of the job that builds trust, engages students and provides the instructor with the subtleties and information necessary to reach their class in ways that are individual, personal and meaningful. This extends beyond the “basic interest inventory type things” that Emma posited teachers will often let themselves get away with, the most well-known being standard icebreakers in the beginning of the year that some will write off as their full effort in getting to know their students when it may fail to adequately capture students in ways that are personal, important and can be leveraged in class.

Emma went on to mention the idea of “seeing and valuing students feels very different to me than how I was taught to engage with my students” pointing towards the different types of relationship building in a classroom setting. These strategies include knowing where students come from and to where they go once, they leave the classroom, culture, language, values, readiness, economic circumstances, creating opportunities for students to share their personal capital and delivering content that validates their diverse backgrounds. Teachers have always been instructed to rely on their academic assessments of students as a core basis for who they are, but Emma pushed back on that, stating:

I think like we talked about earlier, really getting to know our students on a different level than just, "These were the test scores from last year, and therefore I'm going to put you in this category." But really getting to know them and seeing them as full people. What I think that does is, it stops putting an emphasis on, well, you're in the third grade, but you're reading at a first-grade level, and so you're behind. But how quickly ... What can we do to move the marker from that first-grade reading? You might suddenly become the most successful kid in class because you just jumped grade level in your reading in three months.

A number of the TEP participants acknowledged similar care that needs to be taken with truly learning students’ desires, needs and backgrounds. That knowledge extends beyond the readiness levels they enter classrooms and begin school years with, and instead moves to distance teachers from a deficit mindset that these sole means of assessing students can manufacture. What becomes challenging is the prospect of diversity in the classroom and what it means for learning one set of students, especially when it may be disadvantageous or produce incomplete understandings when learning another group of students. Often teachers may fall

into what Tom described as a “fetishization of strategies” where educators are blinded by a preconception of authoritarian knowledge vs. student need, or as Tom imparts on his teaching candidates:

We operate under this belief that students want strategies and methods but what we need to think about is the reverse, is that we always have to think about first the students and the context, who they are, what might be happening. And then from there, then thinking about what strategy might be appropriate, knowing that whatever works for one person might not necessarily work for another person or for a group of kids.

It is so important to communicate to pre-service teachers, and of course implement with students, the recognition of the individuality of learners and that even though teachers may have a common objective of “getting to know their students”, that the means for which that is achieved will vary greatly student to student and teacher to teacher. Tom’s insight holds water not only in the realm of learning students, but in this larger arena that TEPs distinguished as equally important as the mechanics and science of teaching, what many of my participants referenced as the art of the teaching. All of these relational techniques fall under what this group prescribes as the art of teaching, and a discussion highlighting the contrast of the art and science of teaching will follow.

The art of teaching. Author and educator, Parker Palmer (1998) defined the art of teaching as this the marriage of a teacher’s ability to lovingly orchestrate the subtle strings of classroom dynamics and student expectations into learning with the truth that each class session is a unique, unrepeatable incarnation of shared presence. Elizabeth agreed with this citing Lucy

Calkins, founding Director of the Teachers College Reading and Writing Project at Columbia University:

It was Lucy Calkins that said it, there's the art of teaching and there's the science of teaching. The art is the "I care about kids, and I find ways to connect with kids and I can build rapport." The science is, you got to know your content, you got to know how people learn and understand ways of reaching kids like in a more scientific approach that's a little more measured. You got to be attentive to both of those and it's really hard to teach that.

Participants continued mentioning the importance of "buy-in", the result of effective relationship building. The benefits of relationship building tend to be overlooked, despite research revealing that the more positive relationships that students have, the more likely they are to be successful in school and in their lives (Roehlkepartian & Pekel et. al, Science Research, 2017). Sometimes those relationships evolve into "mentorship" as Mason mentioned, but broadly, the asset-based component of "leveraging their strengths and the ongoing check-in" as well as the "ongoing relational piece" were front and center for all of the participants at different points in the interviews. Even upon review of their peers' responses in the second interview, there was a clear consensus that this was something absent in their own teacher education, and of utmost importance in the curriculum they deliver to their teaching candidates.

Though Palmer and Calkins offer a conceptualization of this complex idea of the art of teaching, it can manifest in so many ways, ranging from "providing an opportunity and space where they [students] can learn about their own identities and learn to value the things that made them who they are" to learning what motivates them to work; but, as Emma was quick to note,

“that only gets you so far. And it can have a short-term benefit to it if you know what motivates a kid, but at the end of the day, that's not really who they are.” It seems that relationship building cannot be transactional, and Emma felt that superficial relationship building does not have long lasting success. There is a critical need to engage students, meet students where they are, before asking anything of them. This is a shift from classic approaches to teaching where students were considered just one of many, like the “factory model” of teaching advocated. But when we treat each student as every other, we lose sight of the individual content and their background which provides valuable capital that can be leveraged for greater learning outcomes, and potentially a fundamental ingredient to engagement.

Part of the conversation of effective teaching and recruiting engagement, can be the misconception of learners and what some teachers call *unmotivated students*. But, as the art of teaching prescribes, and as many of the TEP participants conveyed, there are always methods to reach students and our perception of a student’s lack of motivation is often wrong, or more often than not, incomplete. One of the participants, Jessica, expressed that “there are students who shut down because schools are not set up well for them, but I actually think that all students care about learning.” Some of the participants pushed back on the term *unmotivated students*, Aracely being one of them. She indicated that “There's some language we now use that I don't see in there. We don't use ‘unmotivated students’ anymore. We look at asset-based/deficit-based thinking, more of that type of thing.” Asset-based frameworks are evidence of paradigm shifts in how educators label and respond to students. Students bring so much emotional weight with them when they enter classrooms; naturally, students are shutting down because they are “disconnected from something in school or they have other stuff going on” as Jessica, a 25-year veteran TEP puts it. This became especially evident during distance learning, which provided a

window into the lives of many students, and this will be discussed in a later section. However, this group of participants believed that how we frame students directly influences how we engage and teach them, and when we have students from diverse backgrounds, there is more of a pressure and more of a need to adopt strategies that invite students to participate and validate their experiences. One such example of this comes from Blair, a seasoned educator:

I would underscore some of the things we talked about before in terms of talking about and inviting students' own background knowledge to share, to share their own experiences and their own identities. Like in my literacy class, one of the assignments that I do early on is a literacy autobiography where the candidates reflect on their own experiences with literacy and that happens really early on. So, because it's so autobiographical, it inevitably invites discussions about the cultural experiences of my students. And as they share out first in pairs and then in a larger class setting, inherently the similarities and differences between the backgrounds of all of my own candidates becomes part of the conversation.

The benefits of this are twofold: Blair's pedagogy is student centric and asks his candidates to utilize their social and cultural capital as part of content; secondly, he instills in his candidates a strategy of validating and leveraging the backgrounds of students, what Calkins and Palmer call *the art of teaching*.

The science of teaching. Kirsi Tirri and Auli Toom (2019) describe the science of teaching as the research on the instructional process in its wholeness: the key actors—teachers and pupils—in institutional educational contexts as well as the relationships between the key actors and processes related to learning, studying and teaching. Mason, a 20-year veteran in

teacher education, furthers this definition, positing that it is not only research-based instruction, but “what we know about neuroscience and research-based instruction and evidence-based practice.”

Although a number of TEPs expressed reluctance at the already abandoned concept of students’ individual learning styles, one which Tomlinson et al. (2003) and Howard Gardner discussed, there was a consensus that neurodiversity, and the recognition of individual differences as it relates to students’ content delivery preferences and cognitive processing, is paramount in reaching students in ways that optimally serve them. The assumption is that teachers should take their learners’ preferred styles into account, facilitating learning and helping them reach the best possible learning outcomes, which of course is intuitively appealing, with high face value, so much so that thousands of books have been published on learning styles and their applications in educational settings. Literature dictates that most learning styles are based on types; this means that a student’s learning style does not receive an ordinal ranking, rather students are classified into distinct groups. Unfortunately, many people do not fit a singular learning style, the information used to assign people to styles is often inadequate, and there are so many different styles that it becomes cumbersome to link particular learners to particular styles (Kirschner & van Merrinboer 2013).

So, if this is the case, what exactly are TEPs signaling for when mentioning terms like “neurodiversity” and “individualizing instruction”? This TEP group felt confident in three specific pedagogical strategies that best achieve the idea and goals of the aforementioned: varied instruction, visuals and inquiry-based learning. These three strategies were deemed core pedagogical techniques in the science of learning and teaching, and effective means for engaging

diverse classrooms in traditional face to face instruction, and during distance learning when possible.

Visuals. Mason expressed urgency at the obligation teacher education professionals have in trying to convey the importance of visuals. This conversation evolved into a discussion of universal design of learning principles (UDL); UDL recognizes the need to create opportunities for the inclusion of diverse learners through providing curricula and instructional activities that allow for multiple means of representation, expression, and engagement (Katz 2013). Blair also mentioned UDL, signaling proper use of the principles by teachers in providing multiple representations of knowledge that are helpful for students. He went on to offer further praise on the usage of visuals from participants in the first round of interviews, stating, “What people are saying by these answers might be a different thing, but this strikes me as a good range of both connecting to students' background and identity.” One participant, Elizabeth, acknowledged her own learning preference for visuals as part of the impetus for her intense examination and implementation of “the many ways to deliver the content and make it more interactive”.

Elizabeth preceded this feeling noting that she, too, is visual:

I'm visual, I do better when I can see it; I don't always remember detail well, unless as I get older, I guess. Maybe it was always this way, who knows? I don't remember. But visuals are important for everyone.

Varied Instruction. The second of the three recommend pedagogical techniques for engaging diverse classrooms, varied instruction, drew affirmation from all of the participants, but Aracely offered potentially the most intuitive analogy of appropriate instruction:

It's like a diet. You don't want to just eat the same thing all the time, right?

There is a delicate balance of instructional methods that has to be met; as Aracely said, direct instruction, group work and visual methods have a time and a place where they are more and less effective, and where they are more and less appropriate. Though Jessica submitted that good instruction is good instruction, whether it's in person or distance learning, she also recognized that effective teachers assess and implement the most effective instructional strategies to engage students and employ varied instruction.

Inquiry-based learning. Finally, inquiry-based learning garnered attention and agreement from several participants. Inquiry-based learning has been described as a teaching method which combines student-centered, hands-on activities with discovery; the educator acts as a facilitator of the learning activity, promoting student discussion and providing guidance rather than directing the activity. This type of learning cultivates the development of independent learners by encouraging students to take responsibility for their own learning, observing a phenomenon, synthesizing research questions, testing these questions in a repeatable manner and finally analyzing and communicating their findings. The learning is directed by the student with the educator providing a supportive role (Smallhorn et al. 2015). Blair saw inquiry-based learning as critical to reaching diverse classrooms, stating that, “the whole notion of inquiry-based learning and learning by design, backwards planning, essential questions, those sorts of things that I generally think of as overlapping with inquiry-based learning. I think of those things as being really crucial for engaging and teaching in diverse classrooms.” But inquiry-based learning is multidimensional with a range of benefits for learners if it provides students a range of opportunities to engage with the material and provides students with a self-assessment of the knowledge and skills they have beforehand. Destiny expanded on the layers of implementation for inquiry-based learning:

Then there's inquiry, then there's hands on, there's experiential, there's video, audio, social grouping learning. There are all sorts of ways to vary the process of learning that can address a range of readiness and preparation. Also, pre-assessment. I think we don't spend enough time on pre-assessment to understand where the kids are before we start delivering the lesson.

Part of reaching optimal outcomes for students--at least according to this group-- means asking the right questions first, so that students can ask more meaningful questions upon being given the autonomy to build upon, explore and create new funds of knowledge. Some participants, like Tom, see the value of inquiry-based learning not only for students in K-12, but for their own candidates. Tom's teaching candidates in the second year of their masters and credential program engage in a year-long inquiry project where they explore the ethnographic information, community profiles and relevant information of school communities that they will complete their student teaching in. This effort, incredibly immersive in the culture and world of students, allows candidates to have their own reflections about where they come from and how that may impact who and where they teach. Broadly, the value of inquiry-based learning--as well as visuals and varied instruction--cannot be understated; these strategies are what the group calls *good teaching*.

Role-playing. Another important pedagogical technique, role-playing, continued to emerge amongst participants in the first and second rounds of interviews. One participant, Destiny, mentioned a challenge presented by one of her teaching candidates, who found role-playing futile, exclaiming, "I don't need to discuss these kinds of things because I already know where I'm going to teach. It's going to be in the school district I grew up in and all the people are

going to look just like me, and that's the way it's going to stay.” But Destiny was quick to remind her of the unpredictability of teaching and the preparational need of controversial topics:

Talking about race, let's say, for example, "I'm asking you to create a lesson that specifically allows and invites discussion about race." And the candidate is like, "I really don't need to be doing this, because I'm not going to teach there, and that's not who I am." And I'm like, "Wow. Well, actually you do. Even if you don't ever plan to use it, you actually do need to talk about every child that may come across your path. You don't get to choose." So, I think we have to put them in those spaces. We have to put developing educators in diverse spaces. We must. From my experience, you can't just talk about it. We can talk about it. We can role play. We can design lessons around diversity, but we have to get them in spaces with support.

There is real danger in avoiding conversations like the one from Destiny's example as teachers not only invalidate students and their experiences, but perpetuate myths that these conversations will not arise, that students are not that curious to talk about these topics and that educators fully understand the complexities of their identities. Some educators also believe that it is not their responsibility to talk about issues like race, culture, class, sexuality and other taboo discussion topics. But the participants in this group felt different, asserting that part of the responsibility of an educator is to equip students with necessary skills to be able to talk about these issues, and to validate their ideas as meaningful, even if it is just in the context of their own lived experiences.

There is real value in dealing with specific scenarios that can arise at any time during class, not only for students, but for teaching candidates. While much of the evidence for the

efficacy of role-playing is at the K-12 level, the use of role-playing in higher education is being increasingly documented by a number of scholars (Blatner, 2006; Doron, 2007; Lebaron & Miller, 2005; Shearer & Davidhizar, 2003). Business schools have used case studies and role-playing for years. Counseling and psychology often use role-playing to afford future professionals with real life scenarios; the social sciences also value and utilize role-playing (Howes & Cruz 2009). Blair discussed role-playing's functionality with candidates and K-12 students, stating:

I feel like role playing and dealing with specific scenarios really helps my candidates think about how these things play out in real time, some of which might be inappropriate comments from students or from fellow teachers or whatever. I think often what keeps teachers from playing a sort of positive role in moving their own classrooms towards equity or justice is just being sort of caught on the spot in the moment, and not really knowing how to respond. Afterward, they feel like "Oh, I wish I had done X or Y." I think practicing with real life scenarios gives them an opportunity to go, "Okay, this is the kind of scenario that might show up." Maybe it's a little bit of a canned response, but if I have some notion of how I'm going to respond if a student says X in this situation, then I'll be more prepared to be proactive about it.

Blair expressed a shared fear along with a handful of other participants and largely, among teachers: educators can never anticipate what questions may arise in class. But part of feeling more confident to respond and navigate the situation requires preparation. Role-playing facilitates practice in visualizing and practicing different ways of handling a situation. It can also help lessen the anxiety one might feel with approaching these conversations and increase their pedagogical *toolkit*.

Early and frequent exposure to diversity. Early and frequent exposure to diversity was the last of the reported effective pedagogical strategies and framed the proximity that student teaching candidates and secondary students have to multiple representations and interactions with diversity as central to positive developmental and learning outcomes. Defining exposure and interaction to diversity is layered and, regrettably, can perpetuate a hindering sense of safety and comfort that educators have when educators maintain a distance between themselves and the communities that they teach in. Unfortunately, that distance does not facilitate growth, understanding or reflection that results in effective pedagogy for diverse groups of students. When teachers travel to a community to teach and drive home and spend no time learning in that community, it can create blind spots for them in their teaching. Tom offered the following:

I do believe early exposure to diversity, but it also means having consistent and multiple examples. So, if I'm the teacher that lives in Manhattan Beach and then drives to Compton and then goes back to Manhattan Beach, and everybody else that lives in my community still looks like me, has the same experiences, then I think my ideas and perspectives are going to be shortchanged. If I don't travel outside of that school and the only exposure is getting off that freeway and then teaching at that school and then jumping back into my car, going back into the freeway and then going back, then what change is going to be ... Am I still going to be afraid when I have to drive out there? Am I going to be locking my door just because those surroundings aren't as familiar to me?

Tom extended the metaphor to high school students he taught earlier in his career, saying that students need a group of critical friends that will challenge them and create discomfort, because in that space is the opportunity to learn. Otherwise, as he concluded, we will never challenge the internalized biases that we have. Early and frequent exposure to multiple types of diversity is as

much a teaching tool as it is a learning tool; the group largely agreed that *we only know what we know*, and if we do not advocate for teachers to step out of their comfort zones to seek and learn what diverse can mean, then we cannot expect our students to possess that curiosity that we have not modeled for them. Destiny was another TEP who said that exposure to diversity is key for teachers. In her experiences at her institution, EL courses came later in the program, and she fought against this, exclaiming, “No. It needs to come at the beginning.” Students need frequent representations of as much diversity whenever possible to validate their experiences, to peel back the layers of their preconceived ideas of their peers and the world around them, and to demonstrate that there is always more to learn.

Teacher reactions to TEP responses

A stimulating component to this research was the opportunity to provide data from both groups in the first round of interviews to both groups in the second round of interviews to solicit more engagement, potential push back, but largely, to create a dialogue between teacher education professionals and secondary teachers. Can these groups agree? Do the experiences of TEPs or teachers possess crucial blind spots that further inequities or perpetuate ineffective theory or practice? Findings were presented on a graphic that participants had the opportunity to read through and comment on freely (See Appendix E & F). In terms of TEP recommended pedagogical techniques, Bill, a 20-year veteran English teacher, had this to say about the art and science of teaching:

I like the fact that they differentiated between the art of teaching and the science of teaching. I think that is definitely a big part of teaching new teachers, saying that the mechanics of teaching is not the only thing to bring to the classroom.

Broadly, all of the participants appreciated the separation of the science of teaching and the art of teaching, but one participant, Eve, a 33-year veteran social science teacher, did not want to settle on the belief that the art and science of teaching were all that we should consider when evaluating effective teaching for diverse classrooms:

I do believe that there are some things that in teacher prep, they can't be taught. I think some people were born to teach. Some people aren't. And some of this, in terms of empathy, it's in us and it's innate. I don't think that it's necessarily learned, but exposure will help. I was posed the question years ago, are teachers born to teach or are they trained to teach? And had a good lengthy conversation with other teachers and we all concluded that great teachers were just born that way. They were born with a skill set that allowed them to build relationships and try to get into the skin of our students, but to see the world through their perspective and to be empathetic regardless of who's sitting in front of you. The intangibles. It's something we're born with. I mean, obviously, a good teacher prep program would emphasize those things. But maybe I'm a little doubtful that that could happen for everybody.

Eve colored this conversation with something that educators are generally discouraged from leaning on, the intangibles as she put it. Eve was not as convinced that exposure to effective strategies and diversity can amount to repeatable, optimal outcomes for teachers and by proximity, students. But she did accept and champion the belief that relationships with students are the most important component to learning. Megan, a 32-year veteran science teacher seconded this, stating that, "I really think that to be successful, you need to have these good relationships with students, and you have to be planned and ready to go, because if you have that

extra stress, when you're stressed, you're a little bit more bitey, and you're less likely to be understanding.”

Relationships with students, preparation and reflection were prominent themes among the teachers when asked to comment on the TEP’s reported pedagogical strategies; Bill offered one last piece of advice to the group, posing that “we tend to teach in a way, sometimes, based on how we were taught, right?” For this reason, TEPs should undergo constant reflection to improve their communication to pre-service teachers of effective methods for engaging diverse students, and by extension, ongoing reflection is necessary on part of secondary teachers to make certain that they build rapport with students, provide them with multiple opportunities to engage with diverse content and demonstrate a commitment to the art of teaching, as well as the science.

Comparison with distance learning

In the advent of Covid-19, traditional learning and teaching vanished, prompting educators to adopt new ways of teaching and engaging, much of which was being experienced for the first time and needed to be ready to go over a single weekend. In the second interview, TEPs were asked to reflect upon their recommended strategies and experiences during distance learning to highlight what worked and what did not comparative to strategies they employ in traditional settings. Unfortunately, the transition for students--and teachers--was not as simple as we had hoped; teachers lost contact with many of their students, F’s and D’s increased by upwards of 200% in some places, and as much as some students struggled to learn through a screen, many teachers struggled to teach through one. Emma detailed that struggle a bit, mentioning some of the apprehension that her candidates and their secondary students experienced:

My teaching experience, it's been really hard. It has been a huge reinforcer that connection matters above everything in that you can connect to a degree over a computer, but not ... There's a lot of authenticity that's lost, or it's very easy to multitask and fold your laundry, or check your text messages, or keep your camera off, and that kind of engagement doesn't ... I'm not naïve. It happens in person, too. People are on Instagram and whatever on their computers while they're sitting in class, too. Sitting in the same room with other people, I think, offers a different level of connection, and respect, and interest, and it's so easy to shut that off on the computer, or to just not feel it and really miss it.

But despite this, ingenuity and innovation paved the way for traditional strategies used in face-to-face instruction, to become digitally effective in the online environment. There were successes, but not without many failures. So, we will delve into what TEPs found useful and disappointing during distance learning. Jessica experienced hurdles like every other educator but considered her distance learning experience fortunate and lucky. On the challenge of incorporating visuals, Jessica said, “We didn't just discuss the importance of visuals. I used visuals and we reflected on why that was helpful.” She did her best to model constant communication with her candidates on the efficacy of visuals to push them to do the same with their own students, especially in situations where students were reluctant to advocate for themselves. She would go on to discuss relationship building, which, as all TEP participants agreed, has always been a critical piece to teaching, but potentially no more important than it was during distance learning. Jessica shared this:

I was still building relationships over distance learning. It looked different because I had to get over the idea that people had to turn on their cameras for me to be able to build a

relationship with them. It turns out they don't. I like it. I like it when the cameras are on, but there are other ways of getting to know students.

All educators experienced the “black screen/profile picture” phenomena of students never--or sparingly-- revealing themselves on camera and for various reasons. As Mason said, this time of distance learning and its challenges pulled at every fiber of who we are as educators and as a people living these days. Distance learning presented a barrier to some in getting to know their students, but Jessica offered alternative opportunities for students to meet with her, as well as assignments that encouraged connection, reflection and a validation of things that impacted their learning. Destiny described her teaching experiences as constantly evolving, saying that, “I think initially I focused on gaining technology skills to even execute interactions. Then just adaptability and flexibility.” She, like others, eventually gained comfort with forms of technology that possessed the greatest utility for her classes, but she owed her ability of building good relationships with students by being much more intentional with technology:

I think it has influenced me to focus even more explicitly on the building of relationships in really thoughtful ways because they're not coming incidentally during break time or before and after class time. Structuring relationship building time has been much more conscious, and I feel that I have shared that with my pre-service teachers. Well, I'm just going to tell you it's about building relationships, and being empathetic and compassionate, and extending deadlines, and allowing for multiple submissions of things, and providing alternatives. It wasn't about the bells and whistles of technology, that's for sure, because I'm not good at that.

Repeatedly, all eight TEPs mentioned qualities like compassion and empathy and flexibility as key to traditional teaching, but extraordinarily important during distance learning. Lest we forget, there was an indescribable weight on the chest of everyone during distance learning and city-wide lockdowns, and participants fought back tears and painful memories in recalling how they navigated; but the difficulty of that period can still be measured in a number of ways: failures, job loss, empty seats at dinner tables that would never be refilled, technological divides, relationships lost and a general feeling of being *without*. But despite the obstacles, TEPs persevered and evolved in multiple ways, some anticipated and some completely unforeseen, like the example shared by Aracely of the power shift in her classes:

We worked together on how we could best demonstrate things. A student would say "Okay, I'm doing this strategy. Here's a little video of how I did it," let's say. Then how can we do something that will get the same results; I think pair-share but doing it in an online format. So, we can use Google Docs or whatever. We sort of grew together, the students and the professor. The professor was good at the content. The students were good at the technology. So, instead of the instructor giving the information and standing at the podium, it was this symbiotic relationship. Students understand technology. The instructor imparts knowledge about the content. It was this constant flow, this cycle, rather than just a one-way street.

It was harmonious, but more than that, it was an example of a gradual release of responsibility that is practical with secondary students and that which we will visit in an upcoming section.

Self-Efficacy Connections to Reported Beliefs

We now move to a discussion on the correlation between TEP reported pedagogical strategies and self-efficacy. Research suggests that self-efficacy beliefs can improve educators' ability to respond effectively to stressful and challenging situations. For instance, some research has proposed that teachers with strong, positive efficacy beliefs about their teaching ability are more likely to take risks and use new techniques (Guskey, 1988; Stein & Wang 1988), and to experiment and persist with challenging strategies that may have a positive effect on student achievement (Hani, Czerniak, & Lumpe, 1996; Ross, 1992). So, for this section, we will compare instructional and positive school climate self-efficacy scores with TEP reported beliefs to determine the connection between the confidence that this group possesses and their ability to leverage that confidence and enact effective pedagogical strategies for diverse classrooms. Participants were given a 1 to 9 scale. In response to the questions, participants determined their self-efficacy and influence with the following: a score of 1 to 2 indicated *Not at all*; a score of 3 to 4 indicated *Very Little*; a score of 5 indicated *Some Influence*; a score of 6 to 7 indicated *Quite a Bit*; and a score of 8 to 9 indicated *A Great Deal*. Six of the eight participants recorded responses on this assessment tool. Table 4.3 provides the data for TEP reported instructional self-efficacy beliefs.

Table 4.3
TEP Instructional Self-Efficacy Data; (N=6)

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
9	How much can you do to get children to do their homework?	5.00	7.00	6.33	0.75	0.56	6
8	How much can you do to overcome the influence of adverse community conditions on students' learning?	5.00	8.00	6.50	1.26	1.58	6
7	How much can you do to get students to work together?	7.00	9.00	8.00	0.58	0.33	6
6	How much can you do to motivate students who show low interest in schoolwork?	5.00	8.00	6.67	1.11	1.22	6
5	How much can you do to increase students' memory of what they have been taught in previous lessons?	7.00	8.00	7.50	0.50	0.25	6
4	How much can you do to keep students on task on difficult assignments?	4.00	9.00	6.83	1.57	2.47	6
3	How much can you do to promote learning when there is lack of support from the home?	4.00	9.00	6.50	1.50	2.25	6
2	How much can you do to get through to the most difficult students?	6.00	9.00	7.50	0.96	0.92	6
1	How much can you do to influence the class sizes in your school?	2.00	8.00	3.33	2.21	4.89	6

TEPs reported a handful of key pedagogical strategies deemed most effective for engaging and teaching diverse classrooms: role-playing, visuals, relationship building, varied instruction, inquiry-based learning. Early analysis seems to indicate that higher self-efficacy scores in relation to items 3, 4, 5, 6 and 7 correlate with TEPs perceived ability to enact meaningful strategies that best engage their diverse students. For instance, item 7 asked participants to determine the extent to which they can get students to work together; but that question is presupposed by a desire to want students to work together, which, thinking back to interview responses, group collaboration was recommended by all eight participants. The table demonstrates this relationship with a response low of 7 and response high of 9 out of 9 (M=8, SD=.58). Item 6 suggests the same; this question asked participants to determine the degree to which they feel they can motivate students with low interest. With a reported low of 5 and a high of 8 out 9, TEPs primarily agree that it is within their power to deeply impact the motivation of students, despite the circumstances. In addition, the data here (M=6.67, SD=1.11) suggests a

resiliency on part of TEPs to negotiate unpredictable conditions and combat low-interest or low motivated students with varying instructional methods.

Adjacent to instructional self-efficacy, positive school climate plays a critical role in a student’s learning outcomes and achievement rates as TEPs discussed in the first and second round of interviews. Table 4.4 provides the data for TEP reported positive school climate self-efficacy beliefs.

Table 4.4
TEP Positive School Climate Self-Efficacy Data; (N=6)

Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1 How much can you do to make the school a safe place?	5.00	9.00	7.17	1.34	1.81	6
2 How much can you do to make students enjoy coming to school?	6.00	9.00	8.00	1.00	1.00	6
3 How much can you do to get students to trust teachers?	6.00	9.00	8.00	1.00	1.00	6
4 How much can you help other teachers with their teaching skills?	5.00	9.00	7.00	1.53	2.33	6
5 How much can you do to enhance collaboration between teachers and the administration to make the school run effectively?	4.00	8.00	6.33	1.49	2.22	6
6 How much can you do to reduce school dropout?	4.00	7.00	5.50	1.26	1.58	6
7 How much can you do to reduce school absenteeism?	4.00	7.00	5.50	1.26	1.58	6
8 How much can you do to get students to believe they can do well in schoolwork?	6.00	9.00	7.67	0.94	0.89	6

For items related to what TEPs reported as the art of teaching and relationship building, key terms like trust, enthusiasm and safety surface. So, in looking at corresponding items 1, 2 and 3 we observed the following: (M=7.17, SD=1.34), (M=8, SD=1), and (M=8, SD=1). Data indicates strong self-efficacy feelings as it relates to building trust, perceptions of safety and student excitement. It is unclear if TEPs responded to the questions drawing on their own K-12 education experiences, or if their responses reflect their experiences as teacher educator professionals. It is assumed that it is the former, and partially responses representing the experiences of their pre-service teaching candidates since there are a few items that do not correspond with post-secondary education (influencing parent’s comfort, school activities, reducing absenteeism, etc.) It is unclear how much TEPs factored in campus-wide variables as

contributing factors to these scores. It is also unclear as to whether TEPs perceive the questions as what they solely have control over, or the general population of educators in their role.

Broadly, the data is encouraging and suggests that TEPs have acquired confidence over their careers to effectively enact meaningful strategies and build relationships of trust and genuine enthusiasm with students. We can assume this is case because all eight participants stated being so far removed from their own teacher education programs, that if they were to have any influence over the techniques they use now, it is minimal as they have adopted, evolved and colored traditional strategies with what has worked for them over the years, for some of them that is a 30 and 40 year-long educational career.

Summary

This first research question addressed what pedagogical techniques TEPs find most useful for teachers to teach and engage in diverse classrooms. Their responses to interview questions indicate a few key strategies: effective use of visuals, differentiated instruction, relationship building and inquiry-based learning. All of these strategies participants found important for every classroom, in other words, good teaching. The self-efficacy scores indicate that relative to exploration and implementation of these strategies, and ways in which they can be more meaningful, TEPs have confident perceptions of their ability to effectively utilize new strategies, create safe and exciting environments for students and motivate diverse groups of students despite external variables.

In most cases TEPs had a favorable view of their ability to contribute to overall student achievement and positive school climate with the exception of a few items (ability to influence class size, reducing school dropout and reducing absenteeism). In general, TEPs feel it is their duty to responsively implement effective pedagogical techniques for diverse students and

communicate and model these strategies for their teachers to equip them with a similar confidence in innovating, exploring and adopting new ways of teaching students. It is also clear that TEPs value both the art of teaching and science of teaching; they believe it is critical that educators not only demonstrate adequate competencies in delivering their content, but equally valuing the relational aspect of learning and ways for which educators can leverage student identities to enhance the educational experience for all students.

Section 2: A Comparison of High School Teachers' Pedagogical Techniques with TEPs

Secondary teachers were asked to report their beliefs of the most effective strategies for teaching and engaging diverse classrooms. What follows is a detailed discussion of those responses in comparison with what TEPs reported as the most effective strategies for teaching and engaging diverse classrooms, TEP reactions to the findings and a connection to the Self-Efficacy survey. In the first interview, these secondary teachers offered accounts of strategies that have proved really successful for them and those which have disappointed. These responses were broken up into strategies they remembered from their teacher education and those which they acquired over their years of working with students. Reported strategies most effective in engaging diverse classrooms included: the importance of visuals, role playing, varied instruction, leveraging cultural and linguistic differences and relationship-building. Reported strategies least effective in engaging diverse classrooms included: word walls, PowerPoint saturation and KWL Charts. KWL Charts are graphic organizers that help students organize information before, during, and after a unit or a lesson. They can be used to engage students in a new topic, activate prior knowledge, share unit objectives, and monitor students' learning. The approximate acronym stands for "What I Know," "What I Want to Know," and "What I Learned." First, in Table 4.5, is an ethnic breakdown of the participants, years of experience, and content area. Following this is a discussion on the reported pedagogical techniques from this group of secondary teachers.

Table 4.5

Secondary Teacher Participant Demographic Information

Name	Ethnicity	Years of Educational Experience	Content Area
Bill	Black Guyanese	20	English
Patricia	White; Northern European	33	Social Studies
Kirk	White; Italian; German	14	Science
Regina	Mexican-American	21	Math
Megan	White	32	Science
Richard	Korean	12	Science

Profiles. The six secondary teachers interviewed had between 12 and 33 years of total educational experience with an average of 22 years. All of the participants work in the Chaffey Joint Union High School district which serves roughly 24,000 students through its eight comprehensive high schools, one continuation high school, one online high school, one community day school, one adult school, and alternative programs. All participants from this group work in comprehensive high schools. English, Science, Social Studies and Mathematics are represented in this group. Three of the six participants (Patricia, Megan, Richard) completed their teacher education at Cal Poly Pomona, with two (Kirk and Regina) attending Cal State Fullerton and one (Bill) a Claremont Graduate University alum.

Secondary Teacher Interviews

Secondary teachers participated in two semi-structured interviews; the first of which mainly focused on effective classroom strategies for engaging and teaching diverse groups of students. This included discussions on what they found most memorable and useful from their teacher education, as well as the most disappointing strategies. In addition, teachers were asked

to reflect on how their perceptions of diversity have evolved over the last 5-10 years and what they feel is most valuable for new teachers to know before entering a diverse classroom. The second interview provided participants with opportunities to react to findings from both teachers and TEPs in the first round of interviews, as well as reflections on their teaching experience during distance learning. Then, the group shared teaching techniques and strategies that have and have not been successful in responding to cultural, economic and readiness challenges. From these interviews, a handful of effective pedagogical strategies emerged: the importance of visuals, role playing, varied instruction, leveraging cultural and linguistic differences and relationship building. In terms of ineffective strategies, teachers were disappointed in word walls, NEWSELA, direct instruction/PowerPoint saturation and KWL Charts in general instruction. Following this is a discussion of strategies deemed most effective for engaging diverse classrooms, followed by disappointing strategies that teachers found ineffective in their experiences.

The importance of visuals. Teachers, much like the TEP group, all mentioned the effectiveness of visuals; this mention is especially critical to note because of the multiple content areas represented in this group. Science, social studies, math and English teachers alike agree that nothing can replace the resulting benefits of effectively using visuals. In his science class, Kirk calls visuals a staple of good teaching, and he was one of the first participants to describe visuals as great, saying, “visuals and graphic organizers, I'd say are a close number two”, second only to leveraging linguistic and cultural differences, to be discussed in this section. Bill expressed a similar feeling, calling the use of visuals “a need”. He furthered this sentiment, stating, “students need to have visuals and things to touch; you can't just have them sitting there looking at a PowerPoint, you need to engage.” He was the only participant to mention Jim

Cummins, famous for his concept of Basic Interpersonal Communication Skills (BICS), Cognitive Academic Language Proficiency (CALP), and Common Underlying Proficiency (CUP) (Cummins 1994). His ideas are couched in second language acquisition theory, which Bill connected to his experiences teaching diverse classes:

I can go pull out my Jim Cummins book about cultural and linguistic differences. And he talks about... He has this four-quadrant thing about how you teach a language diverse class, and a part of it is using realia or visuals as cues to teach language. I would say the importance of visuals, to get concrete information and abstract information, that's Piaget, we talk about that in teacher ed, but that at the sight level freshmen and sophomores primarily, but I would go even straight up to seniors, they definitely need to see things.

Jean Piaget, esteemed Swiss psychologist, asserted the importance of visuals to concrete development; he recommended greater use of images and physical examples rather than just text, differentiating instruction for students who have yet to graduate to the next developmental stage and allowing students to learn in different ways rather than just through reading and lecture (Piaget 1990). Regina, the math teacher of the group, makes a concerted effort to include visuals as frequently as possible and finds a specific value for them in her content area:

The importance of visuals, I could relate to that. Just in math, trying to teach about volume. It's nice to have shapes that they can see, and touch, and ... Oh, my gosh, yeah. Luckily, I didn't have to teach volume last year. I'd tell students, "Find your mom's candles, let's see what shape they are. I think that's it."

Although a laugh was shared at this moment in the interview, Regina wanted to make it clear that visuals have always been part of her teaching philosophy and have never been more important than they were during distance learning, which we will revisit in Section 4.

Role playing. In addition to visuals, and somewhat congruent with the TEP participants' responses, secondary teachers also stressed the value of role playing. English teacher, Bill, talked about “playing the other” and the learning benefits of asking students to put themselves in other shoes, the other gender for even, for reflection and critical thinking. Role-playing is not an exclusively diversity-appropriate pedagogical strategy, but it does effectively develop communication skills, allow students to make sense of real-life situations, and gives students an opportunity to build social skills through exploration, investigation and experimentation. This was an example Bill shared about how he utilizes role playing in the classroom:

Well, with my seniors, because we have a unit called LGC, language, gender, and culture, I love that if probably the, well actually, it comes after juvenile justice. It's one of the top two units. I have students do gender reversal roles. So, for example, we have a Tinder date, and so the reverse genders would show what the other gender would do on a date. Of course, it's hilarious. They all laugh. But after we're done with all the fun, unpacking all those stereotypes, and the effects that those stereotypes have on the other gender, now I'm all mixing it up, but it would be as if you were to play a girl, how would you show how a girl acts on a Tinder date? And so, I think from that, and other things, not just that, this really opening up about, and the girls in particular will tell you that it's unfair that their brothers get to go out and stay out late, and they have to stay home, or do the chores. One year, I had a girl, she cried in class. It was very awkward, but she cried because she said she had three brothers, and they would play video games, do all the things, and she

did all the chores. And she was so intense about it that you can see that how do you have students come into the awareness of their own culture, celebrate it, but still be critical about it? So yeah, just playing the other.

Bill offered a thoughtful example with real world implications. This is also an example of varying instruction and creating a more accessible entry point into content for students. But what Bill does in addition to getting students “out of their comfort zone” as he called it, is provide some distance from self and from others as a means of reflection and hopefully, prompting critical thinking and interaction with new perspectives. Ultimately, he wanted to make it clear that part of the learning is allowing students to first have fun, and role playing offers a unique opportunity to be “the other” as he phrases it, and that separation prompts reflection and growth. Patricia expressed being a fellow advocate and regular user of role playing in her social studies classes. She shared her experiences here:

Yeah, I do role playing. We set up an imaginary government ... When you get the kids involved, the more actively engaged they are, obviously the more they're going to learn. So yeah, I've done role playing. When I used to teach world history, trench warfare, we dug ourselves in behind the desks, and we rolled up paper wads and we used trench warfare to see how long it took to kill each other, which you just don't.

Patricia, like Bill shared, and as Cummins and Piaget have stated in their research, felt that students learn much more when they are given different types of opportunities to learn, when they are engaged and when they can have fun. Role playing can make learning tangible to students; Patricia reflected back on occasions where she did not have technology in the

classroom and how much more students were able to get out of a simple role-playing exercise. In her words:

We did a lot of role playing. We did a lot of pictures to try to bring it, to make it real.

Yeah. We did a lot of that. It was amazing, just thinking about that, that we didn't even have computers.

There are victories to be had from role playing; “making learning real and physical” seem to be a recurring theme in these strategies, finding ways to let students interact with material in more ways than one.

Varied instruction. As part of the conversation thus far with visuals and role playing, varied instruction, an umbrella term for all of these multimodal pedagogical strategies, was mentioned by four of the six participants. Patricia first conveyed the importance of differentiating instruction because of what she was taught in her teacher education:

When I went to college, we were taught that authentic assessment was the best mode of assessing kids' knowledge, meaning that they can be assessed from doing various things because each kid brings something different to the plate. So, I'd learned that in college, but then it went away, and I was forced for 17 years to teach, not teach to the test, but teach to the test when we were doing all the data collection.

The term authentic assessment signifies the multiple forms of assessment that reflect student learning, achievement, motivation, and attitudes with instructionally relevant classroom activities. In the same way that TEP and secondary teacher participants expressed the need to deliver content through various means, Patricia remembered the importance of assessing through

various methods. And despite feeling like the field of teaching had forgotten a very important lesson of allowing students to demonstrate their knowledge through various methods, Patricia feels that education has refocused on what is beneficial for students:

So, we've come back full circle. And so now I'm able to employ methods that I was using out of college that are much more effective because it differentiates the instruction for everybody. So that's not something... I think maybe the thing that I learned in college went away, but then it came back. So, like people, your age group, the pendulum has swung back, now we focus on critical thinking skills and that impacts everybody equally.

Patricia reflected upon a period of time in her educational career where teachers were pushed to teach in a data-responsive fashion, meaning that test scores were the sole indicator of student progress and sole informer of pedagogical strategies. She expressed regret at not being more vocal and pushing back at the data driven pressure:

We were talking about differentiated instruction and authentic assessment. That was my training, and then it went away for 17 years. So, I could see why that would have been a response, especially for millennials. Well, it used to all be data driven. Shoot, the numbers matter, you got to test them, give them those multiple-choice tests. Data, data, data. Oh, goodness, that was such a waste of 17 years. Really was. I felt like I became a worst teacher in those 17 years than I had been previously. And now I feel the freedom to be the way it's supposed to be without the pressure for those test scores. And I wish that I had had the *cojones* to fight that data driven pressure and just say, screw you guys. I wish I had but I'm a team player, so I jumped on board. So that does not surprise me.

Patricia exclaimed that varied instruction is *the way it is supposed to be*. Now free from the pressure, she varies her delivery and assessment of content. Kirk expressed a similar feeling of permanence with varied instruction, saying that, "I feel like I've always done that because I always get a lot of special ed students." Furthermore, he and others in this group referred to varied instruction as "just good teaching", the same as 48-year veteran Aracely, and her peers in the TEP group of participants.

Leveraging cultural and linguistic differences. All of the participants in the group of teachers are believers in students bringing value to the class and that it is the responsibility of the teacher to recognize that and leverage that value for optimal learning outcomes. However, one teacher, Kirk, reminded us of how easily we can disrupt learning by our assumption of what others understand, culturally and linguistically. Kirk offered what he called a silly example of how language and culture--if not paid attention to--can create real confusion in a classroom, which as he says, should be two of several pieces of a student's background that should be used in what you do as a teacher. He recalled this:

Watching your language. And by that, I don't mean profanity. I mean, watching for idioms and expressions. I like to tell jokes and a lot of my jokes are of the dad joke variety, and I've realized that word play puns don't really work with second language learners. So, just making sure to be clear because I've been surprised by how many times a student got thrown off by an expression. The good old example, raining cats and dogs. Like, "Oh, man. I'm allergic to cats. I better stay home from school today." It's like, no, no, no, no, no. Not literally felines falling from the sky. That's the classic example. So, watch your idioms and phrases. Like, "Oh, that shirt takes the cake. Or "You pushed the envelope." So those kinds of things.

The example here sheds light on what some find commonplace, when in reality, we can lose students and disrupt the learning environment. But, before a teacher can leverage linguistic and cultural differences, we have to understand them. Bill agreed, the same as Kirk, that language is incredibly powerful, but that it is a product of culture and teachers need to know how to leverage both:

The use of language in the classroom is very powerful. And that was one of the things I got from Lisa Delpit's book. You also have Guadalupe Valdes, and she really showed you how parents in the Mexican culture, as a generalization, family comes before school, right? If a student tells me, "Hey, Mr. Bill, I can't take the test right now. I have to go to Mexico for a week." Whereas in my first year, I might've been, "How can you miss my test? It's important to us." Having read that book, I will tell you that I understand now more, "Hey, it's not just you who wants to go, but your family's going to take you, because it's important that you go."

Bill made a unique distinction, and it may be one that teachers can learn from and actively apply: a student's actions may not be their wants, but who they are. The Mexico example suggests that educators recognize the value of a student's entire self; with them, they bring experiences and knowledge that differentiates them from everyone else in the room, and that knowledge is special, important and valuable to learning because of it. Science teacher, Richard, shared a similar experience of cultural difference from his time teaching in Korea and the subtleties, and now teaching in the United States for the last 5 years:

There are a lot of things that... I don't know if I come from a different perspective because I taught seven years in Korea. So again, just to give you an idea of what it's like in Korea.

In Korea, they value education. It's what they consider the only pathway, right, unless you're going to be some sort of K-pop guru. And even then, they're still shoving education down your throat, right? So, you're still going to school, I guess. I don't know what they do. But I mean, we're talking about a society that will literally hold their economy in order for the students to get to their SAT class on-time. So, it's like, they'll close down the entire city so that these kids can go to take the SAT test unimpeded, right? So, there's nothing that's going to cause them to be late for it. I mean, this is how much they value it. So, there's a lot of reasons why I believe Koreans do well in school, right? So, it's backed up from every single perspective. From their home life to their culture, to school itself, everything. Coming to the United States and teaching here and spending five years here, I'm noticing that all those points that I just mentioned are not as... We're not emphasizing all those other areas as much as we should be, right? I hear a lot of teachers saying that "Well, it's because of this. Well, their parents don't care." I mean, that's the thing, that's the issue. I think that is something that also needs to be addressed. I think that's something that we cannot ignore, even as a teacher.

Richard's experience illuminates the dichotomy of value; what may be valuable to one may not be to another. But it is important to identify those differences in order to help inform how one conducts themselves, identify researched-based appropriate pedagogical responses and how educators can invest in those differences to produce positive, diverse learning outcomes. Megan, another science teacher, also shared with us the importance of cultural and linguistic diversity, and how they can both be utilized as assets in the classroom, but her perception was not always this way. She reflected on growing up, stating, "I led a very sheltered life, even through college."

She would go on to discuss how education helped inform her awareness and conduct around diverse groups of students:

I think I am more sensitive to respecting them appropriately and addressing their needs than perhaps I was in the past. I was never evil to them or bad, but I've greatly gained a depth of understanding and acceptance and sensitivity to them that I didn't have prior to that.

Lifelong reflection and education were key takeaways from her interview; but Megan is like many in that teachers come into classrooms with only their set of experiences and expectations, and only through exposure and education can they “gain a depth of understanding” as she puts it and learn to address individual needs despite blind spots that they have. Kirk was a great example of how education can continually inform teachers’ understanding of diversity and how it manifests in a classroom. He, like others, had a preconceived notion of what diversity signified; this was primarily the result of how his teacher's education framed it over a decade ago. This is how Kirk previously understood diversity and how that definition has evolved over time:

When I first heard of diversity in the classroom, I probably thought of it in terms of ethnicity. It's like, "Oh, I'm going to have some Hispanic students. I'm going to have some African American students. I'm going to have some..." And I probably naively thought, "Oh, my class is going to be this equal mix of some white students, some Asian students, some Hispanic students, some African-American students." No. And then I got into the classroom like, "Oh wait, but the specific ethnic mix or breakdown is determined by the geography of the region. I mean, this region is predominantly Hispanic, so that's

what shows up in the classroom. So, I think that's probably what I thought 10 years ago. Now I probably think of it more in terms of... How do I put it? Just more in social terms. I mean, there's diversity in religious beliefs, there's diversity in socioeconomic backgrounds, some kids are more well off, some have less resources. Different backgrounds.

This evolution has allowed Kirk to understand and engage diversity in relevant, current and personal ways that students demonstrate and negotiate through their inherent differences. Kirk believes that at minimum, he has become more socially aware and adept with diversity in his classroom. It also speaks to how perceptions of diversity have evolved over time, which will be discussed in greater detail in Section 3. As Patricia concluded with, “Language changes, and language evolves”, as does culture, and attention to these differences can result in massive benefits in terms of engaging and teaching students, and improved learning outcomes because as the participants in this group have taught us, learning has exponential promise when student differences are leveraged as assets rather than deemed deficits. A great example of this comes from Patricia. She said she experiences a better return when she lets students make choices when they are going to show what they know. Inherently, each student prefers to demonstrate their knowledge differently from the next, but Patricia feels that being open minded to those differences allows the student to shine.

Relationship-building. Much like the TEP participants, secondary teachers agreed that relationship building is of utmost importance, not only to learning but to making sure students know they have adults in their lives who value and care about them and their wellbeing. It is the greatest tool in a teacher’s toolbox as Patricia put it. She discussed the need for teachers to demonstrate concern for students and passion for their content because of a student’s ability to

observe that phenomena and gravitate towards it; this often results in stronger rapport, which leads to positive learning outcomes (Martin & Dowson 2009; Murray & Zvoch 2011). She shared this on the reward of building solid relationships with students and the challenge of maintaining respect:

Learning how to build a good rapport with kids, but at the same time, being able to be the authority in the classroom, to not cross that line where they're buddies with them. But that's okay too, to a certain extent you want, but building rapport with kids, a rapport that is one of mutual respect. I think that is the greatest tool. And it doesn't matter who those kids are sitting in front of you, but when you can build that rapport with your students and they know that you are there because you care about them and you care about their education being able to have, I think that is what makes a successful teacher from the get-go. And it's about mutual respect and being able to develop that and it takes work, you know?

Patricia would go on to attribute effective relationship building to qualities of good teachers. It was her belief that good teachers possess a natural ability for communicating with students and utilize that to their advantage in the classroom. She said:

Like, I think that what makes a real successful teacher is one who has the ability to create those relationships with kids and have that, yeah. It's all about like, if you're going to teach, then you got to teach not just because you love social studies, you got to teach because you want to help people. You want to empower people. And that's what truly is going to make the best teachers. Not these people who know all this like trivia could name the dates of everything. Who the heck cares? It's about building those relationships

with the kids so that they could come to you when they have problems. So, the authority, yes. But it's a kind and compassionate authority.

Her passion rang through during this point of the interview and Regina echoed similar sentiments about the rewards of building relationships with students. Her thoughts were that when we learn about students and their motivations, we can inspire them to want more and to be more because we have the means for creating the necessary urgency and drive. Regina urged me to never underestimate the value of a conversation with a student and shared an experience of hers:

One thing that worked for me very well is... I had a girl. This was like 15 years ago. I had a girl who was really upset because she was held back, and she tried to go to the high school. This is when I taught middle school. She tried to go to the high school and pretend she passed, but she was retained. And so, when she came to school, in middle school, she was really challenging. She was really just shut down. Didn't want to even try at all. And I pulled her aside one day and I just said, "Hey, look, I get it. You're upset. You remind me of myself when I was your age." And just something clicked for her that I took the time to talk to her rather than just scold her. It really made a big difference. I mean, she turned out to be one of my best students that school year. And it just really kind of shocked me, because just having that heart-to-heart with her and maybe pointing out that I saw things in her that were my characteristics. And she really loved that.

Regina highlighted the task-oriented nature of school and the overwhelming pressure to perform that we place on students, and sometimes within that, teachers forget to check in with their students and students begin to feel that they are nothing more than that, a student in X class needing to complete X assignment by X date. Ultimately, she suggested what a number of other

participants pondered: if teachers do not take the time to engage with students on a personal level and to learn about them, their context, their needs and their barriers to success, then how can we expect them to give us all of their energy and trust? Kirk echoed a similar thought and took ownership of the fact that in the same way students quickly forget the importance of relationships because of the inundation of tasks they receive, teachers do the same despite setting out for things to be different. In Kirk's words:

Importance of relationship building, this time every year, it's always late July early August where I say, "You know what, this year I'm going to focus on their relationships, curriculum's going to take a back seat, it's all going to be about the relationships this year." And then we start going to meetings and start getting paperwork and it's like, oh start going to training, and then it's like, oh, I got to start worrying about curriculum.

But despite those responsibilities, he and others still find immense value in building relationships with students and part of that can come straight from teaching. As Bill put it, when teaching, there is an emotive part of it and it can be positive or negative, but that's also part of the learning; the socio-emotional component of learning communicates more than just content but also feeling and students absorb that and factor that into how they feel about the space, their learning and you. Being an effective teacher, or a great teacher as Patricia calls it, means they have acquired a set of skills to see the world through their perspective and to be empathetic regardless of who is sitting in front of you. Some of this comes from one's teacher education and some come from experience. Several of the participants feel that great teachers are born attuned to these traits.

Experiences with ineffective strategies. All of the aforementioned successes do not come without trial and error; in this section of the interview, there seemed to be an inextricable

link between being an effective teacher and resilience, which is to say that only through some failure do educators arrive at deeper understanding and optimal strategies. Teachers were asked to reflect upon strategies that disappointed them in their experiences and describe the failures. The first of these strategies, KWL charts, seemed to have unanimous disappointment in the group. KWL charts are graphic organizers that categorize a student's knowledge base prior to beginning new content; the acronym loosely refers to "What I Know", "What I Want to Know" and "What I Learned". Regina expressed a particular regret and dissatisfaction with using KWL charts, saying, "KWL charts, I tried once, and I don't know where those work. Maybe once in your life those will work, one time." Kirk and Patricia shared similar feelings, both admitting that they used KWL charts earlier in their careers but have moved away from them in recent years; they both expressed having experienced diminishing returns with the strategy. They shared the same thoughts on what they both referred to as PowerPoint saturation. Kirk first shared this:

I already told you about PowerPoint lectures, where I'm at with that. I try to use Pear Deck and more of the interactive PowerPoints a couple of times a year. I don't want to ... see all these like strategies. I don't want to use them too much. Like every single PowerPoint is going to be a Pear Deck because then they'll get sick of it. I've even had students like, "Oh gosh, another Kahoot!" like, sorry, I didn't know that your other teachers did it today.

Kirk raised an interesting thought which is the exhaustion or boredom with otherwise engaging strategies, purely from overuse throughout the day. But, like Kirk, Patricia also stated how easy it is to overuse strategies like PowerPoint and consequently, said, "I gave up PowerPoint, thank goodness."

Several other disappointing strategies arose; Kirk and Regina shared a frustration over word walls. A word wall is a collection of large visible letters on a wall or bulletin board in a class designed as an interactive tool for students to refer back to for writing and reading. They provide reference support and help students to see patterns and relationships in words, generally building phonics and spelling skills. One might see them in a vocabulary-intense subject like science, or in a language arts class where a teacher may use word walls to illustrate themes of symbols from a reading. Kirk communicated his bewilderment with word walls in the first interview:

My old school was really into word walls, and I used to think it was kind of dumb. I was like, "Really? Having the word on the wall is really going to help them?" But maybe I'm just not using it properly.

He was not alone in this frustration; all of the teacher participants acknowledged a plausible failure on their part to appropriately adapt or implement some of the strategies they felt landed flat. Some offered more personal examples of ineffective strategies stemming from their teacher education, like Regina. She discussed Madeline Hunter, famous for her lesson plan template, as an ineffective way of organizing her content and planning for students. She offered the following to characterize the discouragement she received from having tried it Hunter's way:

Madeline Hunter, it was before Madeline Hunter. The whole thing was just dumb. It never helped. It never has. Instead of writing individual lessons for every assignment, it would have been better time spent to teach people how to... This is your whole year, identify the topics you want, how many days, figure out the days, and then figure out the topics within each of the big topics that you're going to cover. I didn't learn how to do

that until a long time ago. But not in the lesson planning class. It's like write the title, what is the point? It's like, well if you don't have the big picture, the little individual pictures are never going to work. Because it's not connected. You need that inner connectivity. At least, I do.

Regina also wanted to note the diminishing utility of textbooks and lack of navigational knowledge in effectively using a textbook, especially when they are given new ones to work from. She said most do not use textbooks and she feels like she is the only one pulling problems out of the back of these textbooks for her math classes. This problem is exacerbated by the addition of new textbooks and the push for technology. She feels that textbooks do not have much of a place, at least in her classroom.

Reactions from TEPs

TEPs were given the opportunity to react to findings from the first round of interviews, the same as teachers were. Findings were presented on a graphic that all participants had the opportunity to read through and comment on freely (See Appendix G & H). The objective of this format was to inspire dialogue among educators at different levels of their careers and who possess different proximities to pupils. Both sets of participants indicated an appreciation for this opportunity and commented that some of the responses throughout both interviews appear indicative of the participant's current role in the educational system. For this section, we will look at several responses to teacher reported strategies for engaging and teaching diverse classrooms.

The first point of discussion, which was also most commented upon by the TEP group, was the comment from teachers that their teacher education was not helpful at all. This came in

response to the question: Can you describe any examples of strategies you learned in teacher education that have worked or have been helpful to you in terms of engaging and teaching diverse classrooms? Five of the six teacher participants noted that teacher education was not helpful at all before recalling a handful of strategies that were discussed in the previous section and that they adapted for current times, that they cannot give credit to their teacher education, but rather their observance of the times and what works and what does not.

In response to the teacher findings, TEP participant Tom, commented, “That one about teacher education not being helpful in any way, that's interesting. I mean, I understand it and I know that's also a struggle, trying to make sense of context and then think about what are the best practices or what folks might think of as theoretical and then this division of what is practical. I think that's a piece that I think obviously we do need to work on.” Tom, like others in his group, expressed sorrow at these reported feelings, but the TEP group seemed not too surprised by the sentiment, and in some cases, offered follow up as to why this is the case. Tom continued responding to the question,

“There's this fetishization about teaching strategies and methods. And that students want strategies and methods, but what we need to think about is the reverse, is that we always have to think about first the students and the context, who they are, what might be happening. And then from there, then thinking about what strategy might be appropriate, knowing that whatever works for one person might not necessarily work for another person or for a group of kids.”

He inferred that many strategies derived from teacher education have a diminishing utility when not initially constructed with the locality and perspective of who implements them.

He furthered this notion, commenting this:

So then, if we're only simply teaching the strategy, then we're not really thinking about the contextual base and the relationship-based teaching that is occurring. And I know that students get frustrated with that, because the thing then becomes, "I'm walking into the classroom tomorrow. I need something. And I need something concrete." Right. And so, there's a lot of frustration that goes along with students saying, "I need tools, I need specific tools." And at least for me, one of the things I'm always trying is, "No, you need frames. You need frames of thinking, frames of seeing, frames of doing things, and then from there thinking about it."

Destiny echoed Tom's disappointment adding:

Of course, it's so discouraging, teacher education was not helpful in any way. I think that's really common. We have such a short amount of time in teacher preparation to prepare teachers, and I try to remind myself that when someone comes out of college with, let's just say a business degree, they don't know how to function in the company that they get hired by. They have to learn all of that within that corporation, and it sometimes takes a few years to really get themselves equipped. I think it's a lot to ask to think that any other career field would prepare that candidate a hundred percent for what they're about to experience. So, I agree that teacher ed isn't everything that it might be expected or perceived to be. I think on the job experience is where we really gain our knowledge." She would go on to note that though dissatisfaction with teacher education

is common among teachers, there is a “a little bit of an unfair expectation that it would give us everything we need.”

Aracely also commented on the response that teacher education was not helpful in any way:

This is not an unusual thing. One of the things that the commission wants us to do is to track our candidates out in the field and are they still using the things you taught them. As the gap becomes larger and larger, they become more and more influenced by their school setting, which makes sense, of course. You're talking 12 years. That's a long time. I'm surprised they can barely remember anything, that they know it and they're like "I learned it. I think it was in my teacher ed, or did I see somebody do it? I can't remember." I'm sort of surprised that they even remember anything, so that's good.

Part of the discussion thus far has suggested that strategies in teacher education do not keep up with evolving needs and conditions, and part of the discussion has determined that there may be more that teacher education is actually doing, but that candidates are too far removed from their experiences to recall their connection to. Blair offered one more comment to the conversation:

I think when I think about my own teacher preparation and just the way coursework typically happens in advance of substantive classroom experience, it's not surprising that for some students, for some teachers, that experience wasn't terribly helpful. Now, I do think in the last number of years, so less than the 12 years of your threshold for the teacher you're interviewing, I do think there is more.

Mason had a laugh when stumbling across this bullet point which grabbed the attention of all eight TEPs, stating, “Oh, that hurts! Their teacher education was not helpful in any way? Oh, man. It's like being on really smooth cement and then you hit the pothole. Yeah. I think we've tried to really mirror what their [teachers] needs have been out there.” Other points of discussion were responses to reported ineffective strategies, namely word walls and KWL charts, which were mentioned together from a few participants. Blair had this to say:

I think things like word walls strike me as things that get used a lot and KWL feels like the most go to. Candidates will learn at some point, "Hey, you need to tap into students' prior knowledge," and rather than conceptualizing that in a broad array of ways, they end up latching on to this one thing and the KWL chart becomes the one solution. And I can see that that would be really tedious and not effective, so I could see overdoing that.

He identified a common crutch in education, which is that once teachers recognize a strategy that gets the job done so to speak, it tends to get overused. A number of teachers mentioned this earlier. But some TEPs, like Tom, feel that there is a place and time for all of the reported ineffective and effective strategies. He commented, “I think there's a purpose to all these, but it's interesting that they're saying it has not worked. And I'm also surprised that they're saying KWL charts are not working.” Mason added that KWL charts are “old school”, and “we can do better”, referring to educators’ abilities to create and implement more effective strategies. Aracely also agreed that word walls and KWL charts were somewhat outdated, positing, “Word Walls might be a little juvenile for them.” She had this to say about KWL charts, “Well, KWL charts, it's a concept, not a strategy, and I think it has been overused. I agree with that. I tell students, "Don't use KWL. It's dumb." So, I agree with that.”

But TEPs were also quite enthused to see effective teacher reported strategies. Tom first gave praise to varied instruction by commenting, “Again, these are all really good, differentiation, group collaboration”. Blair also commented on varied instruction as well as the importance of visuals. These were his thoughts:

So, when I see the importance of visuals, I immediately go to, "Okay, they're learning UDL principles," that multiple representations of knowledge are helpful for students. What people are saying by these answers might be a different thing, but this strikes me as a good range of both connecting to students' background and identity. So, there's a lot of work, a lot of scholarship around that seems to have made its way into secondary classrooms, and then related to that, the strategies that reflect reaching diverse groups of students.

Aracely expressed a similar approval of varied instruction, inquiry-based learning and the importance of visuals. She had this to say:

I see that they're using inquiry-based, differentiated instruction, visuals. Those are all things that they probably tried and realized, wow they really work. I would say maybe they knew about a lot of other strategies that didn't, but these did.

In looking at the rest of the findings, she continued her thoughts, ultimately deciding that the group of teachers are doing “good things”:

The closest it gets to... identity, role play, varied instruction, I'm not quite sure what that means, grouping... Differentiated assessment, that one... I don't see any kind of adaptations, and under that, accommodations and modifications. Maybe they were

already doing that. So, that's good. It's hard for me to make an assessment about that because they didn't know it, now they know it, and they're doing it, and they like it. So that's good.

Overall, the TEP group was pleased and complimentary of the teacher participants' responses. Destiny put it the most succinctly, "There's a lot of knowledge there, a lot of insight and maturity. My first impression is I'm really impressed with the teachers that you engaged with, and I can't think of any glaring holes. It's awesome."

A Comparison with Distance Learning Strategies by Teachers

Though teachers reported utilizing strategies like varied instruction, visuals, role playing and the importance of building relationships to engage diverse classrooms in traditional settings, distance learning has proven to be a whole new world altogether. It sent a shock wave throughout the entire educational system with major ramifications, some of which we have anticipated, and many of which we still do not understand. But nonetheless, teachers had to adapt. So, this section focuses on how those strategies evolved, remained constant or were left out entirely during this 18 month stretch of time.

For some teachers, like Megan, doing traditional science class exercises became incredibly challenging, so much of what she was accustomed to, took on a new face. This was her experience in response to what differentiated or varied instruction looked like in her class online:

We did verbal, we did worksheets, we did have tutor simulations as appropriate, or tried to do some sort of thinking activity. It was really hard to do labs. And the zoology class it

was a little easier. We did virtual dissections. We found YouTubes that went through dissections versus doing a real dissection. We did color labels along with vocabulary. We just kept spiraling on stuff.

Like Megan, Kirk experienced a similar phenomenon of not being able to implement traditional strategies and assignments in the way that he had done his entire career, like his class notebook for instance. Kirk commented, “So yeah, so some of these I haven't really done during distance learning because a lot of these I did in our notebook and I kind of did away with the notebook when we had distance learning because everything was on Canvas.” Bill expressed a genuine “sadness” as he put it as the onset of Covid-19 and advent of distance learning. He shared the following:

The socio-emotional part was heavy. I felt, felt more so than thought, just stunted sort of, I couldn't do what I would normally do or how I would normally do things. It was frustrating, because I'm very much a visual... I go to the board and do certain things, or I have a doll, I have a shopping cart, other things in my classroom. These were ways to demonstrate things. Try doing that on Zoom. Maybe a bit of pocket notes, I don't know, but just one of the things where it's like I was in a box, an emotional box, it was frustrating. I felt inadequate. I felt frustrated, disappointed, saddened.

Bill was not alone in feeling *without*; the inability to implement pedagogical “go-to's” and physical distance from students seemed immeasurably difficult to negotiate, as all of the teachers would go on to express. Regina being one of those, shared her experiences with exercising practicality during an incredibly difficult time:

No, it started off really stressful because we have a new curriculum and then we had the new learning management canvas. And so, it started out pretty stressful, but what I just decided to do is just keep it real simple, put my assignments out, communicate with the students, do the best that I could, communicate with the parents, phone calls to parents before and after class as I could do. And then whatever I couldn't do I just didn't do, and I didn't stress about it. And I think it was good for me to take that approach because my second semester I got a little more willing to try things. So, I learned how to make the studio quizzes. And they were self-graded, so that took something off my plate. I just did mass email sometimes, like make sure your child did their test. And just communicate in a more efficient way. And if parents didn't see it, that's on them. I did my part, so I just tried to take what is in my control and worry about that.

Megan recalled her experiences with the overwhelming nature of needing to learn a new course and grade management system, as well as navigate the challenges of distance learning:

No, no. It was really hard just because of the amount of technology I had to learn in just a short period of time. My brain was melting. If it wasn't for the support of the science department, I would never have been successful. It was so different. I did strive every day to do the very best job I could. I think by the end of it, with what I had to do, and the amount of training I had, as I proceeded, I was really doing the best I could. Not that it was amazing or perfect. It got better as we progressed. It was less than ideal. It was [inaudible 00:23:13]. It was really hard because I couldn't see my kids. I didn't make them turn on their cameras. And the few times they accidentally left their mics on, the utter chaos in the background of their lives I felt really bad for them. I really got an understanding of what their home life might be like. It increased my amount of... It gave

me greater depth of understanding of their difficulties in life. As far as being an effective teacher, and having kids learn, some of them were amazing and some of them weren't. I did my best job I could. It wasn't the best.

But for some teachers, distance learning pushed them out of their comfort zone and in search of new ways to engage students. Patricia was one such benefactor of this; she shared her optimism with us saying, "I gave up PowerPoint, thank goodness. COVID pushed me even further in that direction. I love Canvas in that I can put my own content down on Canvas. I've been doing it for so long, I don't need a textbook." She would go on to mention the sadness she experienced in the beginning, much like Bill and others:

There were definitely some tears back in August, definitely in frustration. But I think that was because we had to learn Canvas and learn distance learning all at the same time. And definitely I felt like a first-year teacher. And like I said, this is 33 years in, it was definitely tough. It didn't have to be I guess; I could have just put my PowerPoints up and my worksheets up, but I evolved a lot with Canvas.

All of the participants recognized the profession of teaching as ordinarily difficult and full of challenges, but distance learning exacerbated that sentiment and created new challenges, primarily technologically based. But Patricia was resilient and shared this about how the experience moved her away from some of her traditional strategies and out of her comfort zone:

I get bored pretty easy and I'm not going to continue to do the same thing if it doesn't work. And so, I like the opportunities that Canvas a lot in me in terms of presentation of content and giving the kids links and materials that they have right there. And they have it all year, they have the entire ... Or semester that they can go back to. In terms of Zoom

... I'm not a teacher who ... If a kid's going to turn his camera, I don't care. I didn't stress. The ones that were paying attention, the ones that were with the class, I'm sure they got just as much or more out of it. I found that the experience itself, in terms of the kids, was actually more positive than negative. I had kids do better than they'd ever done before. And the content wasn't watered down. I did cut my content. With all the communications we had from district, I didn't feel like I had to do every unit. I definitely did less but I think that was better for the kids because they weren't just getting so much that, okay, I'm going to learn it today, take my quiz tomorrow and I'm going to forget it. It wasn't that way; it was a quality that I was able to give them.

Richard had what he called a “smooth transition” and indicated that his only obstacle, “was getting used to the technology, especially being the person that likes learning from handwriting. And then we worked forward. One of the things that I've learned from that experience was this education forced me into technology and then it forced me to learn how much easier things can be.”

Teachers agreed that distance learning was the toughest challenge of their career; with those challenges came so many changes: learning new grading and management systems, recreating or rebuilding curriculum, finding opportunities to learn students, and an increased sense of being *without*. Teachers--and students--were without social interaction, lunch, sports, clubs, hands-on assistance and direction, and technology. But not all was lost. This group in particular, discovered some gold in terms of strategies for engaging and teaching diverse groups of students and a deeper discussion of these findings and implications will be explored in Chapter 5.

Self-Efficacy Connections to Reported Beliefs

Now, we pivot to connections between reported self-efficacy scores from the Bandura Survey (See Appendix A) and the most effective teacher reported strategies regarding teaching and engaging diverse classrooms. For this section, we will look at scores from instructional (Q3) and positive school climate (Q7) from the survey. As was mentioned in Section 1, research suggests that self-efficacy beliefs can improve educators' ability to respond effectively to stressful and challenging situations, and that they are more likely to take risks and use new techniques, both valuable characteristics for educators during traditional and distance learning settings. Table 4.6 provides the data for secondary teacher instructional self-efficacy beliefs.

Table 4.6
Secondary Teacher Instructional Self-Efficacy Data (N=6)

Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1 How much can you do to influence the class sizes in your school?	2.00	8.00	4.67	2.21	4.89	6
2 How much can you do to get through to the most difficult students?	5.00	8.00	6.17	1.07	1.14	6
3 How much can you do to promote learning when there is lack of support from the home?	5.00	7.00	6.00	0.82	0.67	6
4 How much can you do to keep students on task on difficult assignments?	7.00	9.00	7.33	0.75	0.56	6
5 How much can you do to increase students' memory of what they have been taught in previous lessons?	5.00	9.00	7.00	1.29	1.67	6
6 How much can you do to motivate students who show low interest in schoolwork?	5.00	8.00	6.00	1.15	1.33	6
7 How much can you do to get students to work together?	5.00	8.00	7.17	1.21	1.47	6
8 How much can you do to overcome the influence of adverse community conditions on students' learning?	5.00	8.00	5.67	1.11	1.22	6
9 How much can you do to get children to do their homework?	3.00	8.00	5.67	1.60	2.56	6

In looking at corresponding items 2 and 3 which target a teacher's ability to engage difficult students or students lacking support at home, we observed the following: (M=6.17, SD=1.07, $t(10) = -2.07$, $p = .64$) and (M=7.33, SD=.75, $t(10) = -.65$, $p = .52$). Data indicates strong self-efficacy feelings as it relates to perceiving their ability to engage and teach through adverse conditions; teachers demonstrated slightly higher efficacy beliefs compared to TEPs (M=6.5) when it came to being able to promote learning to students lacking support at home, but the t-test indicates no significance between the groups. But secondary teachers scored slightly lower when

compared to TEPs ($M=6.83$) in their self-efficacy regarding their ability to get through to the most difficult students. Table 4.7 provides data regarding teacher self-efficacy scores related to positive school climates. Since this group focused on varying instructional strategies, it is important to analyze scores regarding items 6 and 7. Teachers demonstrated moderate self-efficacy scores regarding their ability to motivate students who show low interest in schoolwork ($M=6$, $SD=1.15$, $t(10)=-.84$, $p=.41$).

Teachers had higher self-efficacy scores related to their ability to get students to work together. Teachers discussed varied instructional strategies at length, and group collaboration and constructivist teaching were terms used to describe those learning experiences; so, higher self-efficacy reports for items 2, 4, 6 and 7 especially underscore their ability to enact necessary changes and implement strategies that engage and motivate students, as well as cultivate a culture of learning. We will now turn towards the data regarding secondary teacher self-efficacy scores for positive school climate. A number of these items (1, 2, 3, 6 and 8) speak specifically to teachers' ability to effectively establish meaningful, trustworthy relationships with students and create nurturing, inviting spaces where students want to be present, engaged and learn, all of which were goals of teachers noted in first or second interviews. The data is represented in Table 4.7 below.

Table 4.7

Secondary Teacher Positive School Climate Self-Efficacy Data; (N=6)

Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1 How much can you do to make the school a safe place?	7.00	9.00	7.83	0.69	0.47	6
2 How much can you do to make students enjoy coming to school?	6.00	9.00	7.50	0.96	0.92	6
3 How much can you do to get students to trust teachers?	6.00	9.00	7.67	1.11	1.22	6
4 How much can you help other teachers with their teaching skills?	3.00	8.00	6.00	1.83	3.33	6
5 How much can you do to enhance collaboration between teachers and the administration to make the school run effectively?	7.00	9.00	7.67	0.94	0.89	6
6 How much can you do to reduce school dropout?	5.00	8.00	6.33	0.94	0.89	6
7 How much can you do to reduce school absenteeism?	5.00	6.00	5.67	0.47	0.22	6
8 How much can you do to get students to believe they can do well in schoolwork?	5.00	8.00	7.00	1.15	1.33	6

According to items 1 and 2 regarding making school a safe place and making students enjoy coming to school, teachers scored strongly in their conception of their ability to influence these variables ($M=7.83$, $SD=.69$) and ($M=7.50$, $SD=.96$). It is unclear whether participants felt that item 1 referred to their impact on entire school campuses, or solely their classroom or parts of campus for which they are involved, but the standard deviation (.69) was among the lowest of all survey questions. For Item 1, at a significance level of $p < .05$, there was no significant effect between responses of TEPs and teachers as $t(10) = .95$, $p = .363$. In terms of trust, teachers had strong self-efficacy scores, suggesting a perceived ability to earn the trust and build connections with students ($M=7.57$, $SD=1.11$, $t(10) = -.5$, $p = .62$). However, for item 7 and teachers' impact on absenteeism, teachers scored moderately ($M=5.67$, $SD=.47$, $t(10) = .27$, $p = .78$) with the lowest reported standard deviation of all questions. It is unclear how much teachers considered their peers on campus as contributing variables to the issue. But, for items 6 and 8 in response to reducing school dropout and getting students to believe they can do well in schoolwork, teachers scored strongly ($M=7$, $SD=1.15$, $t(10) = -1$, $p = .34$). The self-efficacy scores had primarily strong indications of higher beliefs in self, and this would correspond with the exploration and implementation of effective strategies to engage all types of students, for all capacities of school

(social, emotional, academical, aspirational), but no significance when comparing teachers to TEPs and we will dive further into the implications in Chapter 5.

Summary

This second research question addressed what pedagogical techniques secondary teachers find effective for teaching and engaging diverse classrooms. Their responses to interview questions indicated a few key strategies: the importance of visuals, role playing, varied instruction, leveraging cultural and linguistic differences and relationship-building. They also recounted experiences with least effective strategies for engaging and teaching diverse classrooms; this list included: word walls, PowerPoint saturation and KWL Charts. Interestingly enough, TEPs largely agreed with the effective and ineffective strategies in the second interview when given the opportunity to respond to findings from the teacher participant group, and also took ownership over the need for teacher education to be more relevant to secondary teachers, despite their efforts. The self-efficacy scores indicate that relative to exploration and implementation of these strategies, and ways in which they can be more meaningful, teachers showed strong levels of self-efficacy for reaching difficult students, students lacking motivation or interest in school and students lacking support at home. In most cases, with the exception of teachers' ability to reduce absenteeism, teachers scored highly.

Overwhelmingly, teachers had low spirits at the beginning of distance learning given the many challenges in front of them: adoption of new technological systems, lack of support, slack of digital literacy, absence of physical presence of students, feelings of inadequacy over curriculum implementation online and difficulties with establishing constant communication with students. Despite the many disappointments, the participants shared uplifting stories of successes they experienced upon adapting to the new online environment and “finding their

rhythm” as a few mentioned. One key idea, which seemed consistent with TEP accounts, was the need to build connections and relationships with students. It may be the case that students find it easier to build a relationship with a teacher who is *like them*. If one is a teacher where many students are not *like them* in one dimension or another (besides age and professional role), teachers will have a more difficult time building relationships and positively affecting variables that are influenced by good relationships, like a student’s resilience, willingness to participate and grades. Of course, the online environment did not provide for traditional means of relationship building, nonetheless, teachers recognized the importance of it as integral to student success and wellbeing, as well as their own, and effectively implemented new means for reaching students during a most crucial time when they really needed to know that someone cared about them and their academic trajectories.

Section 3: TEP and Secondary Teacher Perceptions of the Evolution of Economic, Readiness and Cultural Diversity

Secondary teachers and TEPs were asked to report on how their perceptions of diversity have evolved over the last 5-10 years and then more specifically, ways that cultural, economic and readiness diversity have changed and how that has impacted the strategies used to best engage with those types of diversity. In the first interview, participants from both groups were asked to describe three ways they traditionally conceive of diversity as well as pervasive domains of diversity that have evolved for them over the last decade. Part of that conversation required them to recall a student and identify the most salient aspects of their identity. In the second interview, both groups of participants were asked about traditional strategies for engaging cultural, readiness and economic diversity, and share how those strategies shifted during distance learning; they described what worked and what did not. This section is first broken up into broader categories of diversity that TEP and secondary teachers reported as evolving or growing, then the respective groups' beliefs of effective and ineffective strategies for navigating cultural, economic and readiness diversity, followed by a connection to Bandura's Self-efficacy survey.

Salient Types of Diversity and Their Evolution

Secondary teachers and TEPs were asked to think of three factors (words) that come to mind when considering the diversity of their classroom. Responses were largely one-word answers (categories), although some participants described in detail why they thought of those particular labels of diversity. We will first look at teacher responses and reactions by TEPs, and then transition to TEP responses and reactions from teachers before focusing on the three dimensions of diversity this category is concerned with. But part of this discussion is an

observation of more and less pervasive types of diversity and why some dimensions of diversity are more topical than others, especially ones targeted in this research.

Salient types of diversity reported by secondary teachers. The following were ways in which teachers conceived of diversity when thinking about their own classroom: socioeconomic status, culture, race, LGBTQ, gender, ethnicity, different foundational knowledge, multiplicity of learning styles, SPED, high achievers and unmotivated students (See Appendix G). Some of these, like culture, socioeconomic status and different learning styles, were echoed by several participants. For example, Kirk described the relevance of a few of these items of diversity, saying, “Honestly, Hispanic. Because most of my students are Hispanic. Not all of them, but a good majority of them are. Diverse. Oh gosh. Socioeconomics comes to mind. And probably culture comes to mind. And not just ethnicity, but culture as in Southern California culture and the culture of the school.” Richard named several types of diversity, first noting, “Let's see. Like, gender? All right. Sexual orientation. Ethnicity, right?”. But later in the interview, Richard would circle back adding a few more to his response, “So when we're talking about diversity, it's finally coming to me, there's a lot more words there. Everything from different levels, different foundational knowledge, to backgrounds and all of that stuff, right?” Patricia first struggled to think what types of diversity have been most pervasive in her experience, but then contributed, “Like you want just from my gut, or you want me to think about it? I think we're 95% Hispanic. So, we're not actually very diverse at all. I would say multiplicity of learning styles. And then I would say SPED [Special Education]. Like various abilities as well.” Regina would add, “Okay, like high achievers. Unmotivated students. And, oh, apathetic. Apathy?” Megan would step back from the question and remind me that diversity is defined by the definer. She had this to say:

When you say diversity, what do you mean by diversity in terms of...? I mean, are you talking about like racial diversity, cultural diversity, sexual orientation diversity, what type of diversity are we? Well, there you go. I gave you three. I mean, because there's all kinds of diversity. So, it's how do you define what diversity is.

Bill described the three most relevant types of diversity that he engages with in his classroom; he shared this:

Well, the most recent one I will say is LGBTQ. That's one that really came to the forefront this past semester. I had some teacher who was openly gay, I'm gay, and we were teaching a brand-new book, also an LGBTQ book. It was quite the experience. That is a new one I will add to the three that I teach. I think of the curriculum. I think of students who are coming not only from Mexico, but who have lived here and still struggle with English. Third marker, different learning styles. Different learning styles.

He would go on to describe an experience implementing a new text that aligned more closely with the LGBTQ population of students he serves. His experiences and openness also hint at the importance of matching students with teachers like them in different aspects of their identity. Bill offered a powerful account of the novel, challenges teaching the novel and why LGBTQ held such weight for him:

Aristotle and Dante Discover the Secrets of the Universe. It's a great book. It's approved and everything. It is. Students love it. But I did have my first pushback. In one of the chapters, there's a letter from Dante to Aristotle. Dante and Aristotle are both 15-year-old boys, Mexican boys. And so, Dante asks Ari, or Aristotle, if he had ever masturbated. There's a letter. It wasn't describing masturbation, but it was a letter asking. A parent

either heard or read it herself and called the vice principal. And luckily, it all boiled down. The vice principal defended me, and I gave the student a different text to use. I find the challenges I think I, well, we're having, my side at least, is bringing in books that are contemporary, and high interest, but also will have things that are very challenging to get across to parents. Different topics.

However, when asked to recall a student that they had in their classes from any of their years, teachers offered additional dimensions of diversity and mentioned a few that they did not note when asked to think of three words that come to mind when considering the diversity of their classroom. Some like Regina, remembered the way their students wrote, like one who had exceptionally curvy handwriting. Others, like Megan, remembered students with extremely challenging home lives, like a drug-dealing father in and out of their lives. This may suggest that the more salient aspects of student identity and diversity reveal themselves through how teachers are left to engage with it, and those interactions make lasting impacts. This will be explored further in Chapter 5, but now we turn to one particular story from Bill and memorable parts of the student's identity. Bill first recalled a student with high functioning autism, whom the class "rallied around" as he put it. But the student was memorable for these reasons:

It was a bit of a stretch to keep him in the classroom. At the beginning of the year, I remember he couldn't really control his volume, he had really bad conversational timing, he got really emotional and started crying. And I mean, not crying like... I mean, crying. But honestly, he was one of my favorite students the whole year. Sweet kid.

He would continue remembering his experience and highlighted the success that the child experienced by the end of the year:

It was one of those things where the class kind of rallied around him. And they really did. They kind of raised up. That kind of thing happened once or twice more the whole year where he kind of flipped out so much where he had to kind of step outside, gather himself, and I just kind of addressed the class like, "Guys, we know this about Justin. We still accept him, we love him, we're still going to take him back." And they did. And I remember at the end of the year, he was my favorite student by the end of the year. I mean, I don't want to say I have favorites, but he definitely etched out a little place in my, not my heart, in my mind. So anyway. So that would be a good student who sticks out. I remember emailing his case carrier at the end of the year saying, "Hey, remember how the beginning year I said he wouldn't make it? He's getting a B. He's going to finish with a B. So, I'm wrong. Go ahead and say it. I'm wrong."

TEP reactions to salient types of diversity from secondary teachers. While these were largely agreed upon, TEPs offered a few thoughts regarding some of the labels of diversity. Tom first pushed back on the term *unmotivated students*, and shared the following:

“The first one that I'm just looking at is that last part of unmotivated students. I think that's interesting the way that's phrased. Because from my perspective, it's students that aren't motivated, but rather than, it's that either the schooling system or the curriculum is not focused on them. Right. So, at least for me, that strikes me as somehow, it's the individual's fault. Rather than the other way around. So that's just one thing as I'm looking at it.”

Mason had similar feelings about the deficit-based framing of some of the types of diversity that the teachers recognized and had this to say:

Yeah. I think the three words, I started on the right side there and I was just scanning through those factors. I find those to be... Those are categorical terms or labels, to a large extent. There's not a lot of positive spin on those words and I think I've been doing a lot of work in UDL [Universal Design for Learning] over the past year. And one of the themes I keep pulling on is that diversity is an asset, it's something to celebrate and something to embrace and to further develop into the curriculum and use it as an access point for the kids. So yeah, there, I just want a, I guess I could take a deeper look. But that's my first thought on those. (you're talking about socioeconomic status, culture and the racial, right?) Yeah, yeah. And yeah, totally. I can see how those words pop into people's minds. Yeah, exactly. Considering the positive stuff too.

Blair had a similar reaction to *unmotivated students* and *different foundational knowledge* appearing in teacher responses:

I would say the unmotivated students one, and to some degree, the different foundational knowledge won't strike me as markers that surprised me. When I think of diversity, I generally think of it in terms of markers of identity. Though obviously, we talk from time to time about GATE [Gifted and Talented Education], so high achievers that might be appropriate. When we talk about differentiation of instruction, certainly that's one topic that comes up. Think about special ed students and then about high-achieving students, so I can see that. But yeah, the unmotivated students, that strikes me as odd.

Jessica agreed with the TEP sentiments regarding *unmotivated students*, commenting this:

I actually don't think there are very many unmotivated students. I think there are students who shut down because schools are not set up well for them, but I actually think that all

students care about learning. They just don't want to look bad. If they appear unmotivated, it's very often. In my experience as a middle and high school teacher, and now preparing teaching candidates, my experience is it's usually they're shutting down because they are disconnected from something in school, or they have other stuff going on.

Blair dove deeply into the responses and questioned the mislabeling of certain types of diversity, then added clarification of what he meant:

Socioeconomic, culture, racial, different foundational knowledge. That's interesting. I think in terms of the three factors, it surprises me that race doesn't come up as the top issue. In light of all the things we talked about last time, wherever people land ideologically, I'm surprised that race doesn't strike them as the most significant contemporary issue. I'm guessing that culture is, in many ways, code for religion and its interest ... I don't know who did the coding, but I'm thinking about that because I'm reading a book called *White Christian Privilege* right now. It's about the ways that racial privilege and religious privilege, particularly white Protestant privilege, overlap in American history. And part of what she talks about is the way that we often don't code topics as religious topics. So, if a Muslim gets attacked or a sheikh gets attacked because people think he's a Muslim, that will often get coded as a racial incident, but not necessarily as a religious incident. So that strikes me and then I'm struck by how near the top LGBTQ issues are and strikes me that's just a reflection of the way that this has become a topic that people are sensitive to and again, regardless of where they might land on the issue, that this is prominent for people.

Aracely felt that some of the terms used were outdated; she said, “Probably given the amount of years there, out in the field in the last 10 years, I don't see newer diversity. I don't see culturally responsive pedagogy.” She would go on to draw a distinction between teachers fresh from their teach education program and seasoned veterans in the field, sharing this:

I see LGBTQ, although now there's a number of other things that I can't even keep track of everything that comes afterwards. I think there's a little bit... Some of them, if you put them on a spectrum there, but definitely not as progressive as probably terms you would have gotten from first, second, third year teachers coming right out of the teacher ed program, regardless of what teacher ed program, because those are recent standards now.

Generally, the group was pleased by the responses despite some scrutiny of a few terms used; Emma captured this excitement of the responses stating, “Perhaps that means that teachers are becoming more aware of what students are bringing to the classroom and how that can be an asset and that is awesome.”

Salient types of diversity reported by TEPs. TEPs reported similar types of diversity, but there is a distinction between responses of TEPs and those of teachers. TEPs’ list of diversity labels includes the following: culture, race, neurodiversity, personality, equality, inclusion, UDL, empathy, honest, ethnic, socioeconomic, Hispanic serving, linguistic, age, special needs, BIPOC and gender (See Appendix E). Elizabeth first shared several dimensions of diversity, a couple of them are the targets of this research:

Well cultural diversity and racial. Cultural, racial kind of go together in my mind, although they probably aren't. Neurodiversity and just sort of everybody's different regardless of their culture and their race and how their brain works. We're all unique. So,

besides all those things, there's also just personality, right? So, there's identity. Anyway. I could go on with that, but I'll stop.

Given his background in teaching SPED courses for his candidates, Mason said, “Three words or factors I want to share. Well, that's a good one. I mean, I want to say a phrase. I want to say UDL, Universal Design for Learning. I want to say inclusion. I want to say accessibility. For sure I want to say equality, that's the goal of us all, but long ways to go there.” Blair focused on the local diversity of his campus at Cal Poly Pomona commenting, “I think of ethnic diversity, class and socioeconomic diversity, and then richness really because I... Richness. Just the richness of the diversity and body that we have at Cal Poly.” Blair added, “I think of a range of cultural backgrounds, a range of learning and brain diversity. That's the special educator in me. And then, because I'm teaching teachers, there's age ranges.” Emma applied more of the local context in her response saying, “Well, in the Santa Barbara area, I would say the biggest marker of diversity would be identifying as Latinx or not, I would say special needs and accommodations, and probably also relevant to the area, socioeconomic status.”

Teacher reactions to salient types of diversity by TEPs. Though teachers primarily agreed with diversity terms from the TEP group, some had unique reactions to the findings. Bill for one, poked at the term neurodiversity commenting, “I keep seeing this term neuro-diversity popping out. I'm thinking, really? We have to go... Essentially, we're trying to say that people have an open mind, is what we're trying to say here, an open mind, keep an open mind. Yeah. It's like, "Okay, you want to go to the neurons? We'll go to the neurons, and we'll snip some off." But he would follow that up with some insights regarding other terms like gender, sexuality, culture and race. He had this to say:

And I think the gender and sexuality components of diversity are perhaps more salient now in the news, but I hate to think that there are other types of diversity that are not addressed in... I mean, right now we're being challenged on history, on what is historic and what is not in the classroom. And that sort of diversity of thought is something that's being more or less stamped out, or trying to be stamped out, or people are trying to stamp it out. So, I get why I see gender and sexuality. I don't know if in the next five, 10 years, if those will be as salient as others. Race and social justice are an ongoing two components of diversity, of course.

Some teachers were unclear on some terms used and required clarification, like Patricia and Kirk who said, "Do me a favor. So BIPOC ... I've been seeing that, and I know POC, people of color, person of color, what is BI?", to which I clarified, "Black or indigenous". Kirk also expressed confusion at the use of *neurodiversity*, and posited the following:

Okay, okay. Neurodiversity, meaning like the inherent differences in brains for groups of people, is that kind what they're saying? I would think ... hmm, I would think that would be a little bit controversial to make that claim that people are wired differently in the brain. I don't know, it seems like I'm hearing a lot of the conversation nowadays is like, we're all the same, we're all the same. And then the other people are saying no we're all different, we're all different, respect differences, like, which is it? I mean when I think of neurodiversity, I think, okay, like your brain changes over time, but differences between people groups brain, is that what they're saying? Like male brains different from female brains, is that what they're saying, or like the white brain is different from the African American brain, like what are they saying?

But upon further discussion, Kirk agreed that TEPs had the best intentions with their responses and that everyone thinks and processes information differently. Overall, teachers appreciated the recognized diversity by TEPs, and Patricia captured that sentiment expressing the following:

Yeah, that's a new term (neurodiversity) to me in terms of ... I get it, we've been talking about learning modalities forever and also everything else that they bring with us. But I've never seen that term. Been out of college classrooms for a very long time. I think it makes me feel good that the people that you have interviewed have pretty much hit the nail right on the head.

Cultural Diversity in Distance Learning

Secondary teachers and TEPs were asked similar questions with slightly different framing regarding cultural diversity and the most effective pedagogical strategies for engaging and teaching this particular type of diversity. When considering culture, both groups reflected on differences in language, learning styles, beliefs and unique cultural dynamics that impact how students interact with their learning environment and how educators can leverage those differences towards greater learning outcomes. First, we will look at responses from secondary teachers who were asked what cultural challenges they observed in students during distance learning and what teaching techniques and strategies have been successful in responding to such challenges. Following that, we will move to TEPs, and their reported strategies deemed most useful in responding to challenges of cultural diversity. Finally, we will look at ineffective and or disappointing pedagogical strategies regarding cultural diversity from both groups of participants. All responses in this section are regarding distance learning.

Effective strategies for cultural diversity from teachers. Secondary teachers shared several different experiences with culture in their classroom; concomitantly, they provided a handful of useful strategies in navigating cultural challenges, all of which were exponentially more difficult during distance learning given the limitation of resources and communication. Nonetheless, teachers implemented the following: links to resources in primary languages, positive correction or affirmation of the right information, fostering a culture of community or empowering students to be support systems to one another and reflecting upon one's curriculum and trimming the fat. Several of the participants acknowledged that due to distance learning, they could not key into some of the finer cultural nuances that they experience in a traditional face to face setting, which also speaks to the barriers to success of distance learning. But this section highlights some of the resilient efforts of educators. Patricia was the first of participants to mention EL students and how cumbersome it was to meet them where they were at. She focused on providing material to students in their primary language and utilizing the resources that we have as educators to bring us closer to students. In her case, she was able to use her husband, a native Spanish speaker, to help her communicate with some of the poorer speaking students. She shared this experience:

I had English language learners who were more recent immigrants that had either failed or got D's in first semester who got A's with me and I didn't water down my content. But those kids would ask me questions and felt like they could ask for help. So almost every day we went into breakout sessions, and I explained things. I would probably say that I have intermediate fluency in Spanish, I could communicate anything that I need to communicate. It might not be grammatically correct, but I can. So, I think that they didn't feel as uncomfortable. My husband was born in Mexico. So, if I ever had a situation

where I needed help, he would come in even with parents. So, I think because of that, they felt more open to asking me questions. So, the challenge that I think is in the first semester, they felt completely intimidated. They felt like they couldn't ask questions. And so, they would just go away and not do it, because they didn't understand it or do it incorrectly.

So, Patricia responded with compassion, understanding and sensitivity to her EL students and began translating instructions, assignments and communication to students' primary languages for her social studies classes. She continued by sharing the freedom and empowerment that students felt in responding in ways most comfortable to them:

They could respond in Spanish, they could respond in Vietnamese, I don't care how they respond to me, because guess what? I could copy and paste it into Google Translate too if it's in Vietnamese. So, I think technology was great now that we could overcome some of those challenges, but I think that teachers have to be open to those kids and the language diversity, cultural diversity that we have as well.

Patricia felt a particular connection with her EL students being that her husband came to this country at 16 years old and didn't speak any English. Her context was vital in recognizing what she had the power to do to make her students successful. Another teacher, Kirk, had a similar experience with translation for his classes; he works on a campus with over 90% Hispanic students. Kirk used google translate more in this last year than he had in any of his previous years of teaching; Kirk translated all of his mass emails into Spanish, placing the message in italics underneath the version and he would make phone calls in Spanish. Of course, this did not come without some difficulty. He captured that challenge here:

I mean, it took a little bit longer, I had to be like, ‘¡Más despacio!’ and kind of be like, okay, one moment and then type in mine. And just one of the things that happened so often when I was talking to parents in Spanish, I'd like, oh, you know [‘hablo un poco de español’ like I speak very little Spanish, and then they'd ramble off something really quick in Spanish. Like, whoa, whoa, whoa, slower please. And then they'd sprint again, nope, slower, I can understand you, you just got to talk slower. I need to hear each word individually so I can pick out where one word stops, one word begins. And I imagine that's the same thing students have with me sometimes because I notice that sometimes I get talking so fast, like during lectures, that when they try to respond back to me, respond to questions, sometimes they will say the word phonetically back to me, and they didn't say it right, but I noticed they were trying to pronounce it the way I pronounced it or something like that.

Kirk raised an important idea here through his reflection; while he and other teachers might have used google translate and means to better communicate and understand students in their primary language, we might forget that this is always their experience with us in front of the room, during lectures or otherwise. Megan also understood the importance of breaking down language and used visuals and various modes of delivery to bridge the gap for students. Megan said she is very careful with her word selection and would even simplify the number of instructions or content on assignments she gave to her students. In addition, Megan would include diagrams and other visuals where appropriate and ask students to draw diagrams with labeling. Despite these efforts, she said the language barrier is difficult to navigate nonetheless and this is especially the case “when they're not present in the classroom to really know. So, unless you have the time to sit

there and look up all the kids on Canvas, or unless you suspect, and you go look, the language barrier is hard.”

Richard also experienced cultural challenges with students, particularly the language aspect, and to combat this, he asked his students to frame their responses differently:

I think one of the things that I think there was language, I do like the notes out. I required them to write out a summary. I always tell them that they need to write up a summary as if they were trying to communicate what they learned from the standpoint of a teacher because if you were able to explain it or teach it that's when you've truly mastered it. That's one of the things that was extremely difficult for them; to repeat that information.

Overwhelmingly, cultural challenges presented themselves as language barriers during distance learning and required adaptability and flexibility by teachers to effectively navigate.

Effective strategies for cultural diversity from TEPs. TEPs discussed the power of expectations--from instructors and students--and how that impacts one's understanding of cultural challenges. Similar to teachers, language was a recurring challenge, but TEPs discussed the idea with an asset-based framework and shared some of their experiences. TEPs cited facilitating conversations revolving around cultural and linguistic expectations, transcription, personal biographies, flexibility and visuals as effective strategies ordinarily, and during distance learning to respond to cultural challenges. Tom was the first to talk about closing the distance between teacher and student in order to empower cultural differences and debunk some of the misconceptions students may have which discourage them from being who they are. Tom shared this:

So, for people who speak other than non-dominant languages. I also speak Spanish, but that language was also imposed and is also an imperial language of Spanish, robbed me from an indigenous language. Now, in the process of me learning to speak Spanish and really learning to speak English, then I also tried to then make it my own. So, part of that is learning about how to not lose your language but learning how to be able to use that in multiple spaces. So, the way that I'm going to speak at a board meeting is going to be different from where I speak to my family, the way that I speak in a class, the way that I speak with my friends. And I can operate all of them. Not that I need to contain them and be this formal language is going to be right, but I need to be able to know about how power operates in each of those contexts.

Tom highlighted the value of code switching and that though there is an expectation to sound or behave in a particular way, none of these expectations are rooted in absolutism; they are socially imposed and become socially acceptable. Tom would continue responding to

For example, my students always freak out when I start cussing and I say fuck and shit and they're like, "Wait, you're not supposed to be speaking like that," right? And so, they wonder why and how do we learn that? Who says that? What happens when I do? Am I now delegitimized? Where is that coming from? So, all these things. So, then we go through social cultural theory. So, let's learn about why we're using social cultural as a theory to think about language. And to think about language acquisition, that language is created through a group process. It's not just me sitting down and learning ... That the context creates that language for us. The context creates the meaning for it, that is in the interaction between people that we're learning the language and to use it.

Tom would go on to note that part of breaking down the apprehension behind cultural expression, linguistic differences and behaviors, is modeling authenticity and facilitating conversations regarding those differences and the power of leveraging them towards optimal learning outcomes. He advises this for his candidates, and models it as their professor. Blair was another participant to discuss the power of integrating language, or as he referred to it, “translanguaging”. He would talk about how translanguaging has become a more favored framework than code switching because it reflects the understanding of language as a spectrum of use and people who are multilingual, so it should be seen as a flexible tool and a strength. Mason was another TEP who reflected on his own identity and context and how that can be used to better understand the cultural differences of his students, as well as how he conveys those practices to his candidates. Mason discussed the cultural divide that many educators may be blind to and as a result, colors our perception of students and their nature. He shared the following:

Expectations from a home culture, do students from a Latinx background or Latino background, do they have the same level of... I'm just thinking of my wife's in-laws, they live a few miles away. And when we try to explain to them what it meant to be home and to be working on a laptop, it didn't really make as much sense as compared to some of the more educated peers that live over in the suburbs who quickly adapted to that. So, I think there's this learning phase, some people get on it quicker than others.

Despite something as pervasive as the global pandemic of Covid-19 altering the landscape for every individual, Mason acknowledged that for some, the adaptation or attunement to those changes may come faster or slower. He would continue:

The resources, linguistically, to access what we're doing online faster. I think a lot of things have gotten better, like with Otter AI and stuff. We could be transcribing as you probably are, transcribing it. But for as many technologies there are as many bells and whistles. A lot of the... I'm trying to remember the score that we have at Chico State, what it's called. But even though we have a lot of these options, they don't necessarily get deployed in time for the learner. We might just say, "Oh, check out the 50 resources at the end of this website." But people are doing all they can to just scramble and attune.

Empathy and compassion seemed to underscore this response, but Mason also hit on services like transcription, which Jessica mentioned that on Zoom users can now turn on the closed caption feature. This service, as she would continue, is a way of addressing both a language and a learning style. Although many users are not aware of this function, Jessica believes that it would be helpful for language learners, even though there are mistakes that are going to happen, they would see the language and hear it. Elizabeth, like Jessica, agreed that closed captioning and delivering interactive content in as many ways as possible is important. She also stressed that learning students and their context can drive student engagement and by extension, success. Although it may not always be feasible, Elizabeth advocated for going to see students when possible and did this with some of her own students for which she tutored during distance learning. She shared this experience:

So, I did a couple of home visits, just to see, and there's him and his twin sister and his other middle school sister and brother all sitting at the kitchen table, doing their schoolwork, each with their own device. And then their older brother in the back room, who's going to college. So, all five kids are online at once, in a lower-income home, where they don't have high-speed internet. So, just knowing those things and

understanding those things, like what's the situation and the context of the child, can make a difference. Understanding learning styles, kids that do well with having, like you have here.

Proximity to students' individual context, challenges and daily experiences helped Elizabeth to adjust her class and how she delivered information in their best interest given the distance learning circumstances. Blair also mentioned valuing students' context and actually used that information inside of an assignment where students had to write a literacy biography. He shared the experience with this assignment:

I would underscore talking about and inviting students' own background knowledge to share, to share their own experiences and their own identities. Like in my literacy class, one of the assignments that I do early on is a literacy autobiography where the candidates reflect on their own experiences with literacy and that happens really early on. So, because it's so autobiographical, it inevitably invites discussions about the cultural experiences of my students. And as they share out first in pairs and then in a larger class setting, inherently the similarities and differences between the backgrounds of all of my own candidates becomes part of the conversation. I don't know that I did that much differently in the online setting. Obviously, they were put in breakout rooms, but the conversation was similar. I think the ways people invited students to acknowledge, "Hey, if you're working from home, you might have kids that you're tending to or family members that you're caring for and I get that. So, if you need to walk away for a bit, totally do that." I think that acknowledgement of family circumstances was more explicit than would normally happen in a face-to-face class.

On top of bringing in student identity and facilitating a conversation around personal and cultural differences, Blair felt an increased need to acknowledge the nuances of distance learning and how those may impact individuals. Again, TEPs as a group iterated connections and communication, but beyond those, validating and celebrating individuality as a means for creating community and promoting learning. Destiny also yearned to celebrate and leverage student differences but did so to begin her classes. Getting to know students was one of the most difficult things to do during distance learning, but Destiny said, “I think that's still one of the most important things that teachers can do.” So, to begin class, she would ask students to share a picture of what they did this week or that was special to them in some way. She phrased it as “show me a little bit about your life through pictures”. Students shared their screens and pictures, or held their phone up, and Destiny felt it was a really cool strategy because those are the kinds of things that teachers missed out on when we could not be face-to-face. She, like others, emphasized that teachers need to understand who students are, where they come from, what their learning styles are, what their language experiences are, what their language proficiencies are, and all ideally through an asset-based lens, otherwise, it is so much harder to give students a chance. The last of insights from this group emerged from Emma; she hopes that there is permanence to the flexibility and realism exercised by educators during distance learning. She shared this:

Something I have learned since distance learning is to really take the emphasis away from how people are communicating and sharing their ideas, and that the how is not necessarily important, but it's what they're communicating. I think that school has been so focused on the type of language that a kid uses. Is it standard English or not? Is it right? All the pressure to conform to the dominant culture. I suppose it came up during distance

learning so clearly for me because suddenly, so many things didn't matter anymore, and it was just like, I just need you to stay engaged and connected, and I just need to know that you're okay, and that you're still thinking about things, and therefore showing me that your mental health is doing okay.

Emma expressed a particular passion behind this idea and continued in her response:

And so, the 'what are you saying, and what are you thinking through' became much more important than the structure through which they were communicating it. It was like, if we're just having a conversation in a breakout room about this, or about whatever we're learning, and it's really informal, that is just as good as you writing a paper on it. I don't need the paper. It doesn't matter. And so, I think the shift from ... yeah, from how are you doing it, and does it conform, to what are you actually saying, and how can we dig into what you're saying and what you're thinking, has really changed during distance learning. I hope that there is a shift in that, that I think a lot of people had to let go of during distance learning.

The TEP group of participants all felt that above all, connection and communication with students overcame most obstacles, but methods for doing so varied. Ultimately, the group hoped that some of the traditional priorities and attitudes constructing those priorities that were laid to the side during distance learning, have some kind of permanence in the return to face to face instruction.

Ineffective strategies for cultural diversity from teachers and TEPs. Both TEPs and secondary teachers experienced numerous pedagogical disappointments during distance learning. Some of these strategies had been staples of their teaching and some were newly adopted but did

not withstand the challenges of having to teach through a screen. Participants advised against treating distance learning classes as traditional online courses, overwhelming students with technology and ignoring the warning signs of students and blindly pushing forward with content. Broadly speaking, these ineffective strategies occur in the absence of what both groups deemed “good teaching”, like building relationships with students and recognizing individual needs. Culturally, the challenge of reaching students becomes increasingly difficult when dealing with individuals who “culturally, don't speak up, that aren't going to unmute themselves and say something” as Elizabeth mentioned. So, to treat distance learning courses as traditional online classes where work is assigned asynchronously and minimal dialogue exists between students and instructors, may have negatively impacted student achievement. Additionally, TEPs and teachers expressed necessary consideration of pacing and priorities when planning. As Destiny noted, “you feel more pressure to get to the content kind of thing or get to the concepts of the new learning” despite warning signs of waning engagement and the decline of work submission. Most TEPs and teachers referred to this as being present, and having eyes and ears open to how students are doing, then adjusting plans accordingly during unpredictable times such as distance learning.

Readiness Diversity in Distance Learning

Secondary teachers and TEPs were asked similar questions with slightly different framing regarding readiness diversity and the most effective pedagogical strategies for engaging and teaching this particular type of diversity. In terms of readiness, preparation levels, cognitive abilities and prior knowledge must be considered. Both groups of participants reflected on differences that impact how students interact with their learning environment and how educators can leverage those varying levels towards greater learning outcomes. First, we will look at

responses from secondary teachers who were asked what readiness challenges they observed in students during distance learning and what teaching techniques and strategies have been successful in responding to such challenges. Following that, we will move to TEPs, and their reported strategies deemed most useful in responding to challenges of readiness diversity. Finally, we will look at ineffective and or disappointing pedagogical strategies regarding readiness diversity from both groups of participants. All responses in this section are regarding distance learning.

Effective strategies for readiness diversity from teachers. Secondary teachers expressed a particular difficulty with keying into readiness diversity during distance learning; they felt this way about all dimensions of diversity focused on in this research, but the proliferation of cheating during the online setting made the identification of preparation and readiness levels especially complex. This group recommended the following pedagogical strategies for responding to this type of diversity: increased time, targeting multiple modalities, equity sticks, provide examples of student work and a gradual release of responsibility. Bill first mentioned allowing more time and extending deadlines on assignments as an effective strategy in a traditional setting, but definitely during distance learning because of the lack of knowledge of students and the reduced interactions. For this reason, teachers may assume, like Bill did, that many students were unmotivated, although those students would eventually reveal readiness deficits. Students would ask for additional time and he would give it to them. He also noted that online learning is heavily slanted towards writing. So, he pondered, “I wonder for those who are kinesthetic learners, how they felt not having to build something like a diorama, or to do things with their hands, but to have to write, write, write. And that's why I had the studio feature and the Jamboard, let's discuss.” Although it was difficult to target multiple learning modalities--

challenges that will be discussed in section 4--Bill felt it is still the responsibility of teachers to find ways to reach every student in a way that best suits their expression of knowledge.

Kirk cited using equity sticks as a strategy to identify readiness levels and create opportunities to work with students who would otherwise hide behind their black screens and keyboard and would never advocate for themselves in the distance learning environment. Equity sticks are a set of sticks (usually popsicle sticks) with the names of individual students in a class or group. The teacher pulls from the Equity Sticks at random when choosing students to ensure an equal chance of participation. Kirk said, "I love the equity sticks, I love those, students hate them. I've got a wheel. I got a wheel that I put on the screen this year that would choose students, and that was fun because I love the wheel." In her math class, Regina used what she calls "the good, the bad, the ugly" to provide examples of student work to students as a ways of setting norms, expectations and making content more accessible because it is her belief that when students see student work, it is more attainable than examples provided by the instructor, even though they both arrive at the same result. Regina shared this about her experience with student work examples:

I tried to use their work as examples. 'Look at this guy without a name. This work here looks really good, this is what your work should look like. And then without a name this is what your work should not look like. Let's break it down. What looks good in this paper and what doesn't look good in this paper?' And then maybe just make really clear expectations of what I wanted from them without putting anyone on the spot. They knew it was their work, but no one else did. And so just trying to give them actual examples of good work, bad work. What did I call it? What's that guy's name? Oh, my gosh, I'm sorry. I forgot his name. It's an old actor, but The Good, the Bad and The Ugly. Yeah, it's like

let's look at the good, the bad, and the ugly. And so, we would just every so often, when they started to get bad again, when some of the work was just like this doesn't look so good, let's just take a look again, guys. Let's look at this and let's look at the good, the bad, and the ugly.

Finally, Richard recommended a gradual release of responsibility, a pedagogical principle that has withstood the test of time. Richard had this to say about the implementation:

The most difficult aspect of readiness that I've seen, which is maybe some age development issue, is getting used to that technology. But once they got used to the technology, once they had that support structure there, it just seemed to take off. Eventually it got to the point where I didn't even have to use the support structure anymore, they could just do it on their own. I think that's kind of what you want, to hold their hand a little but eventually for them to do it themselves. I was able to experience that at that particular level.

Two of the six participants in this group could not recall particular strategies in responding to challenges of readiness diversity but did advocate for communication in response to most challenges, positing that reaching out to students to learn more about their needs is always an effective way to close the gap.

Effective strategies for readiness diversity from TEPs. TEPs offered a variety of pedagogical strategies in responding to challenges of readiness. Their list included connecting to student experiences, varied ability groups, monitored or reviewed notes, differentiation, instructional patterns, recording lectures, and individualized education through compassion.

Tom first advocated for connecting material to student experiences as a way of bridging the gap and empowering students to feel confident in their insights and contributions. Tom's feeling was that if students present varying preparation levels, then they lack the confidence to advocate for themselves or participate, so it is simplest to connect the content with their experiences. He had this to say:

I think one is, what are the readings that you're picking that are going to get students to reflect on the type of issues that you want them to think about. I think that's one. Two is, what are going to be the activities, the questions that are going to then continue that initial reflection and help it connect to their own personal experiences, whether that would be to raise awareness, to critique, or to change.

Mason, Jessica and Blair shared positive experiences with varied ability grouping. Mason first commented that an important crux of meeting the needs of the readiness component is emphasizing community building as much as possible and validating the presence of each learner so that they recognize themselves as integral parts of the learning community. Mason expressed that this is best achieved in varied grouping, and that it provides psychological safety and fosters a sense of belonging. Blair agreed with the notion, commenting, "I think that the varied grouping can be helpful. I think grouping in general is helpful in-class strategy. And I think varied ability groups can be really helpful." Jessica shared that small, varied grouping gives her an insight to student readiness because she has the ability to "drop into all of those small groups and catch onto the fact that some of the students who I thought were more ready than they were, we're actually not quite ready."

Elizabeth emphasized the importance of recording lectures and maintaining instructional patterns, like regular meeting times and consistent locations for information. The former, she said, is helpful because “students that know they struggle will take advantage of that. I definitely saw that. They asked me to record stuff, and they actually watched the recordings, which was surprising to me, or flip through it, or rewatched a description.” But she quickly added, for recording videos and all other material in class, students need to be able to recognize instructional patterns or consistency with where and how to access the resources. Elizabeth shared this:

Having opportunities to revisit, like watching the PowerPoint, or if you have slides with key notes from your discussion or class meeting, where people can go back to it in accessible places. Being consistent. So, it's always a Google Slide. I always put the link in the syllabus, so they know where to find stuff. Being organized, I guess, is a huge one, so they know there's a pattern and reliability, consistency. Those are helpful.

The last of the strategies, individualizing education through compassion, Emma shared as most effective in her experience at the elementary school level as well as with her teaching candidates.

This was what she had to say:

So, really individualizing education, and understanding that kids have struggled in so many different ways over the last 18 months, and that they're going to be coming back to school with really different levels of readiness. Then they showed up on distance learning at really different levels of readiness. Even what was needed in order for them to succeed in school, and that may have been stripped away during distance learning, like having someone sit next to them a lot of the day or read the math problems for them in order to

be able to access the content, or a lot of that individualized support went away. So being really compassionate about that, and trying to find ways to individualize education, and that was so hard during distance. And I'm hoping that transfers back when kids go back to school this fall.

Emma's insight captured much of what the rest of the TEP participants expressed in their interviews in terms of doing whatever was necessary to meet students where they were.

Ineffective strategies for readiness diversity from teachers and TEPs. TEPs mentioned three specific pedagogical disappointments in responding to challenges of readiness diversity. These include a traditional reliance on prior year's data, Zoom breakout rooms and ignoring warning signs and pushing through content. Secondary teachers did not specify any particular pedagogical disappointments in responding to challenges of readiness diversity. The group did express difficulties with the use of Zoom and limited capacity to engage and assess students in ways that they are accustomed to. TEP Emma cited issues with relying on prior year's data as the primary way of moving forward with students. She commented:

I think like we talked about earlier, really getting to know our students on a different level than just, "These were the test scores from last year, and therefore I'm going to put you in this category." But really getting to know them and seeing them as full people. What I think that does is, it stops putting an emphasis on, well, you're in the third grade, but you're reading at a first-grade level and so you're behind. But how quickly ... What can we do to move the marker from that first-grade reading? You might suddenly become the most successful kid in class because you just jumped grade level in your reading in

three months. So, instead of looking at them as still behind, like, "Hey, you're kicking ass right now. This is awesome."

Emma would go on to challenge the validity of that prior year's data because of the distance learning circumstances disproportionately affecting students at varying levels and rates. Despite regular usage, Jessica noted that Zoom breakout rooms facilitate widely different experiences for K-12 teachers as opposed to TEPs. She offered this:

I think that is a huge problem during distance learning. I can totally see why because, if there's a bullying situation or someone is saying something inappropriate and you don't have enough adults for eight breakout rooms, and who would, then I can see why that's problematic.

The final ineffective strategy came from Destiny who, similar to teachers and TEPs in the previous section, recommended against being driven purely by content and textbooks. She expressed the following:

Sometimes we spend so much time on letting the content and the standards drive us, and we forget to let the students drive us. So, if we get to know who they are and what they know, then we can design our lessons around a range of readiness and preparation. Yeah. I think we spend so much time teaching kids things they already know. Because the textbook tells us that's what we're supposed to do.

The rest of the TEP participants shared a common sense of inadequacy with the capacity of Zoom and other distance learning instruments but did not specify any particular pedagogical strategies that fell flat in responding to challenges of readiness diversity.

Economic Diversity in Distance Learning

Economic disparities are always present, but perhaps this discrepancy has been no clearer and piercing than during distance learning. Students struggled with food insecurity, a lack of technological access and a lack of devices; some students picked up jobs and others moved due to job loss in their families. But overwhelmingly, teachers and TEPs expressed that economic diversity was the most observable type of diversity during online learning and most likely garnered the most social organization and mobilization of resources. So, responses in this section are indicative of pedagogical and campus wide initiatives to address the economic struggles of students. First, we will turn to responses from secondary teachers who were asked what challenges they have observed in students suffering from economic disadvantages during distance learning and what teaching techniques and strategies have and have not been successful in responding to such challenges. We will then look at responses from TEPs who were asked what strategies they felt were particularly useful in responding to the challenges of students suffering from economic hardships during distance learning. We will conclude with ineffective strategies from both groups in responding to economic diversity challenges.

Effective strategies for economic diversity from teachers. Secondary teachers recommended allocating necessary resources, additional time to complete work, empathy, and flexibility. All secondary teachers had overlapping responses to the aforementioned. Bill and Megan specifically mentioned the allocation of necessary resources to students to increase accessibility. Bill first described the conditions that many students had to work in and why it was critical to address the technological need first:

So, for a lot of them, it was a Wi-Fi issue. My school did offer hotspots, but even so, a lot of students, and I knew there was because when I would call home, their parents would say, well, we're going to get Internet connected this week or on Tuesday, and we'll get Internet. Internet issues, a major problem. Then you also had people in the same room. Sometimes loud noises in the background. I'm like, can you not realize this person is on camera, we can hear things? And so, when they would mute, I wouldn't necessarily say it's a bad thing. I would understand they're trying to not have people hear what's going on in their home. So, Wi Fi was a big problem. And I think just, well I mean a lot of students improvised, they had backgrounds with sheets or darker rooms. So, they were trying to make things where, I want to be on camera, but I have darkened my background, but after a while it was just...Yeah. So, I understood that... I mean, they weren't forced to turn on their cameras. We could have done it some more, depressed them, but not showing their face on camera was not a consequence to their grade. Like oh, you're not on camera so minus five points. No. We don't know why their cameras weren't on. So yeah, just the technological sort of issues with the Wi-Fi. Because we gave them computers, and we gave them hotspots.

Megan also acknowledged that her school and district recognized the need to resource students with technology so that they could engage in the online learning environment. She said, “but our district was really good responding to that. Encouraging every kid to have a Chromebook, which was really useful because then they all have the same technology.” Both of them would use phrases like “demonstrating empathy and flexibility” which would be echoed by the other four participants. Patricia expressed disappointment in teachers who held a kid accountable for work that they missed when they didn't have Wi-Fi, describing that behavior as

“really evil.” She said that flexibility is imperative because “it's just not fair if a kid didn't have WIFI for a month, and you're holding them accountable for past work, and they've got to do the work that they're being assigned currently. I think we have to be more flexible in this environment. Actually, flexibility is one of the keys to being a successful teacher.” Kirk seconded this, citing that for some students, there are multiple people in their house, or room even, and that impacts the nature of them learning He added that allowing them the flexibility to turn in assignments in different ways is key; for example, if he was going to say that the only way a student can turn something in is by sending him a video and the student's computer is old or it doesn't have a camera that works, or they don't have a place to shoot this video where there is not 15 people in the room, then that is inequitable on part of the teacher. But flexibility also meant allowing students more time to submit their assignments because despite the allocation of resources, technology can fail too as Bill and Paul recalled. Bill, Megan, Paul and Patricia all specifically cited allowing additional time for students. The last piece, empathy, was something every teacher in the group said was of utmost importance during distance learning, perhaps captured best by Regina who reminded me that “we don't know what they're going through.”

Effective strategies for economic diversity from TEPs. TEPs offered a range of pedagogical and institutional strategies to address challenges of economic diversity. There was some overlap with responses from secondary teachers, but it does seem that the framing of the issue or potentially each participant's conception of their role in their institutions, influenced their responses. But this will be discussed in depth in chapter 5. TEPs advocated for policy assistance, an equity lens framework, increased accessibility, communicating resources, additional time and flexibility. Mason first used the term *policy assistance* to refer to the various

means of support an institution can provide students. Where secondary teachers discussed the resourcing of technology, Mason derived the following:

I mean, we're seeing stuff from policy makers saying school lunch will now be universally free across the state for the coming year. We're seeing stimulus return. So, there's some policy assistance. And then at the university level, we're seeing assistance in the form of inflated opportunities for scholarships and for more services on campus, as well as virtual counseling, with food insecurity, with housing assistance. So, there's been more of a concerted effort there. And then there's also, just within our local school districts in the area, we're seeing similar stuff too. An infusion of grant money into the schools means that teachers can do more for trauma informed practices and can do more yoga PD or mindfulness PD, social, emotional curriculum.

He began to drift into the conversation of increasing accessibility which Blair, Aracely, Jessica and Elizabeth all cited. Blair first noted that it is his responsibility to be aware of the cost of course texts and whenever possible, rely on PDFs that everyone has access to for free. When he does a course reader, he makes sure that there is another accessible version that students do not have to pay for. Similarly, Aracely cited the campus support of offering hotspots, offering students books that could be checked out in the library, and if all else failed, sending students to the right people so that they could relay things that were available at the University of La Verne, like their food bank and different kind of financial assistance that students may qualify for. Elizabeth also mentioned hotspots and would add that the distribution of loaner laptops and shift towards online E-books--which were less expensive--were a big help. Jessica agreed that it is the responsibility of the instructor to be aware of resources available and cost whenever applicable,

but beyond that, making the students aware of those resources. She shared the following about communicating resources:

I think that's important and I'm doing that in a way that is respectful. Do you know what I mean? Some students are really proud. So just making announcements to the whole class, 'hey I just learned these things are available if you're interested'. Then when I am aware of an individual's particular circumstance, reaching out to them separately and saying this is an option for you.

In this same vein of respect for students and their economic circumstances, Destiny advocated for an equity lens with students, and additionally, challenged the use of the word "suffering" in the question. She would make the connection to the equity lens and describe the implications here:

Okay. The word suffering, to me, in that sentence really connotes a bias. I don't like the word suffering. In special ed, we have students who are like, "I know somebody who's suffering from ADHD, who is suffering from dyslexia." And I'm like, we just projected a value judgment on that person's wholeness, like who they are is this person with ADHD, or who they are is a person with dyslexia. Their very being is that they have an economic hardship, an economic difference, I would prefer, or responding to the challenges of students who have economic differences during distance learning, and that takes the value judgment out of that question. As a side note, that bothers me about the question. Some people are perfectly content to live within the place and space economically of what another person might deem a hardship. So, we've got to just be really thoughtful about that.

I responded by commenting, “I hadn’t thought about the issues with how this question is framed. I very much so appreciate you adding to this conversation just by challenging the structure of the question.” She would continue:

That said, strategies for responding to challenges who have different economic situations, I think number one is to respect all of those spaces. Respect all of those spaces and offer pride in the humanity of each person regardless of their economic space. In distance learning, there's not a classroom, per se, but a community where the value of respect exists regardless of economic situation. So, where I mentioned the friend, I have who had that beautiful pod [small cohort of students], and everyone had their own computers, and all this support, I have to be really careful not to judge that, too, because that's their space. I think if we judge economic hardship as suffering or whatever, we're stratifying and perpetuating that stratification based on socioeconomics. I think that's a really important equity lens to provide our candidates for themselves in their own communities, and then for their children in their classrooms. That came as a bit of an abstract in conceptual strategy, but I think it's really important.

Additional time and flexibility, like the secondary teacher group of participants, were strategies that often appeared married in responses. Blair mentioned approaching conversations with students to better gauge their economic circumstances so that they could arrive at a practical deadline that made sense for their particular situations. Elizabeth supported the idea of additional time and shared one experience with her flexibility of deadlines and grading practices:

They need extra time. If they have to work ... I had a poor student, she was doing her student teaching and working at Amazon warehouse at night and all weekend long. Her

mom got laid off, so she was 'it'. Giving them extra time and grace. Not having hard and fast deadlines. And I'm really good with that. And, of course, some people whine about that. They're like, "She kept changing the deadlines on things." I'm like, "I get it," but, also, they need to be flexible with me on grading because I wasn't always the timeliest grader either.

Emma was another participant to discuss the importance of flexibility as it pertains to individual students and their circumstances. She had this to say:

And so, I think having flexibility in students showing what they know, and being able to participate, and not being such a stickler about what that looks like. I also think becoming an advocate for kids and demanding that they get internet hotspots, or that they get whatever they need, whatever pencils, paper, and so forth, really advocating differently.

Broadly speaking, the group felt that communication encompassed all of these strategies and where there is a breakdown in communication, there is a breakdown in understanding; consequently, those are moments where students give up, so it is imperative that educators communicate with students to learn more about their circumstance and practical ways for moving ahead.

Ineffective strategies for economic diversity from teachers and TEPs. Neither TEP nor teacher participants named specific ineffective strategies for navigating the challenges of economic diversity. Rather, they all discussed the principle of disregard. Both groups agreed that distance learning necessitated communication and understanding of students' individual needs and circumstances. To ignore either resulted in the decline of participation, the decline of grades

and in some cases, a complete shutdown where students quit because teachers and institutions did not recognize them

Self-Efficacy Connections to Reported Beliefs

The most relevant connection to Bandura’s Self-efficacy survey (See Appendix A) falls in Q2, which asked participants how much they believed they could do to get the instructional materials and equipment they needed. Overwhelmingly, educators from both groups cited the necessary organization and mobilization of resources as a way to navigate cultural, readiness and economic diversity during distance learning. Table 4.8 demonstrates secondary teacher beliefs regarding this question.

Table 4.8
Secondary Teacher Influence of School Resources Self-Efficacy Data; (N=6)

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	How much can you do to get the instructional materials and equipment you need?	3.00	8.00	6.17	1.95	3.81	6

This question yielded one of the highest degrees of standard deviation (1.95) among all questions, and an average of 6.17, with a low score of 3 and high of 8. In general, there are strong but varying degrees of efficacy regarding teachers’ ability to get instructional resources and equipment they need which was particularly vital during distance learning. Table 4.9 shows TEP efficacy data regarding their influence to get necessary instructional materials and equipment.

Table 4.9
TEP Influence of School Resources Self-Efficacy Data; (N=6)

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	How much can you do to get the instructional materials and equipment you need?	3.00	8.00	5.00	1.63	2.67	6

Similar to the group of teachers, this question yielded one of the highest degrees of standard deviation (1.63) among all questions, and a significantly lower average of 5, with a low score of 3 and high score of 8, which shows that in general, TEPs felt even less able to retrieve the necessary resources and materials than secondary teachers. However, the results of TEPs and teacher were found not significant at a significance level $p < .05$ ($t(10) = 1.02, p = .33$). It is unclear if responses reflect distance learning circumstances or if each groups' self-efficacy perceptions are this way ordinarily. TEPs and secondary teachers scored moderately when it comes to their beliefs in their ability to get necessary instructional materials and equipment.

Summary

This third research question addressed how teacher and teacher education professionals' thoughts regarding cultural, economic and readiness diversity have evolved over the last 5 to 10 years. Both teachers and TEPs were first asked to describe how they conceive of diversity and three words that come to mind; they offered the following: socioeconomic status, culture, race, LGBTQ, gender, ethnicity, different foundational knowledge, multiplicity of learning styles, SPED, high achievers and unmotivated students. TEP responses differed slightly with the addition of some new terms: culture, race, neurodiversity, personality, equality, inclusion, UDL, empathy, honest, ethnic, socioeconomic, Hispanic serving, linguistic, age, special needs, BIPOC and gender. When it comes to addressing cultural diversity, teachers feel it is necessary to

implement the following: links to resources in primary languages, positive correction or affirmation of the right information, foster a culture of community or empower students to be support systems to one another and reflection of one's curriculum and trim the fat.

TEPs experienced success in facilitating conversations revolving around cultural and linguistic expectations, transcription, personal biographies, flexibility and visuals. Readiness diversity prompted a slightly different set of effective strategies by teachers, who advocated for the following: increased time, targeting multiple modalities, equity sticks, provide examples of student work and a gradual release of responsibility. Whereas TEPs felt more confident in connecting to student experiences, varied ability groups, monitored or reviewed notes, differentiation, instructional patterns, recording lectures, and individualized education through compassion. Economic diversity drew the most discussion from each group, but collectively teachers and TEPs advised for policy assistance, an equity lens framework, increased accessibility, communicating resources, additional time, flexibility and empathy. Each group echoed the idea that many if not all of these strategies are ordinarily useful, but never more than they were during distance learning. Ineffective strategies were not as abundant as effective strategies, but there were recurring ideas from both teachers and TEPs. They advised against the following: treating distance learning classes as traditional online courses, technological bombardment and pushing forward with content, reliance on prior year's data, Zoom breakout rooms and disregard of students' circumstances.

The self-efficacy scores indicate that in terms of the confidence to attain necessary instructional equipment and materials, both teachers and TEPs scored moderately with high degrees of standard deviation and variance. There was a clear consensus that distance learning prompted an early and pervasive technological divide, as well as learning curve and with it came

the illumination of so many challenges that required communication, understanding and adaptability by instructors and students.

Section 4: New and Old Challenges of Diversity Illuminated in Distance Learning

The final research question focused on the degree to which challenges of engaging diverse classrooms were exacerbated by distance learning under Covid-19. The second part of this question considers what new dimensions of diversity educators need to prepare for given the illumination of challenges during distance learning. Teachers and TEPs were asked to consider what they have learned from the online learning situation, how that has changed their perception and management of diverse classes, and anything they might do differently in ensuing years to adapt to said challenges. The responses of both TEP and secondary teachers will be discussed collectively and within the five major themes recategorized here: preparing content, adequate access, self-advocates and non-self-advocates, flexibility of instruction, assessment and submission and responsibility. These were the most salient responses from each group and represent new challenges as well as new dimensions of diversity that should be factored into the idealized educational experience that educators envision for students. Following a report of these five themes will be a discussion connecting scores from the self-efficacy survey to teacher and TEP findings.

Preparing Content

Both teachers and TEPs noted that within the diversity of learners are other strata or subsets of diversity that require additional consideration, one of those dimensions being content preparation. TEP Mason cited internationally renowned education consultant, Katie Novak and her work in UDL principles as intrinsically connected to considering each student and the complexity of their wholeness, and how that informs what educators do. Mason shared the following:

Katie Novak, she's sort of a big thinker in UDL, it's like preparing content, preparing instructions, like preparing a meal for a dinner party coming over. And you learn, through distance learning, that we all have very different mind states when we come to the computer to work. We all have different home situations, we have different internet speeds, we have different devices, we have different experiences. And so, it's like coming to this dinner party and some people are vegan, some people are carnivores. So, I think it's, again, you got to prepare the buffet, as Novak says, you can't prepare one course anymore. You got to really be open to everyone. It takes a lot of care and a lot of work on your garden.

Mason's distance learning experiences heightened his awareness of learner differences; he regularly instructs special education courses, and although initially stressed by the advent of distance learning, he conveyed surprise and excitement at being pushed to discover more ways to engage students and find methods that could be relayed to his preservice teachers. Tom discussed another dimension of preparing content and making sure that what he does is relevant, but there are important variables to consider. For Tom, he considered the following:

What is going to make sense with all the other competing things that they're experiencing right now? How is it going to make sense for them? What are they going to take away when people are super depressed? Like in sociolinguistics, we call that the affective filter. If they have all these other things and I'm trying to teach them this thing Right? So that, I think for me, I was constantly trying to think about what makes sense right now? How do I make it meaningful and important and how do I help them connect and understand their role as teachers within this political standpoint, and then two, thinking about their students' lived experiences?

Both Tom and Mason acknowledge the difficulty with planning instruction that reflects the geopolitical, cultural, economic--and in the instance of Covid-19--public health landscape. Elizabeth also mentioned the social consciousness that is necessary and became more apparent during distance learning. Her thoughts were that knowing the tools that one has is helpful and knowing a few key tools that help good teaching is helpful, but to not get caught up in learning every new technology out there because that's not really the ticket. Elizabeth said that the tickets to success were establishing relationships, demonstrating care, being open to students' differences, and being accepting. So, she asked herself how she factors those variables into what she does as a teacher. She further clarified, "So, it's looking at, "Okay, what is important to me as a teacher? And then how do I get that across through the technology?" That make sense? Well, then, like I said, you get caught up in teaching students how to navigate the technology, rather than the content" and unfortunately, as she would continue there are too many students with so many different kinds of circumstances and things that are more or less valuable, that energy cannot be wasted on "playing around with technology".

Energy must be spent on leveraging the differences of students, and using them to drive what you do, during a face-to-face setting and in distance learning. Science teacher, Megan, also expressed that the diversity of individualizing and differentiating instruction became much more apparent during distance learning, and so, she had to intensely consider how and what she would do to give each student opportunities to see themselves and their worlds in the content. She recalled trying a number of different ideas to preparing content for students:

I had file uploads and I used Kami; they never turned in a piece of paper to me. I wanted to see how proficient they were, how good they were using all of the different tools available to them on the different kinds of things. All of them were pretty proficient at

using technology to complete their work. When I gave notes and PowerPoints, you used to have them write them to sort of reinforce the words in their head, but it's a very low-level of learning for most kids, so it's kind of a wasteful use of time. I tried having a set of questions for every slide, well most slides, as I presented so they would have it open and answer as I'm presenting. I had much more success with students submitting their work versus, "Okay write the notes, and then write a paragraph and do the Cornell..." which I don't normally do the ²Cornell note format anyways, because I don't like it. It was really for my benefit, but they're really good with technology so that helped me a lot to understand when we do labs, I'm going to give them a piece of paper, they're going to fill it out and do file uploads because it's too dangerous to take a Chromebook to a lab station and get water all over it. And they were good with it though.

Richard also felt the need to exhaust strategies in order to appropriately and adequately prepare for his students. Distance learning prompted him to call on his teacher education knowledge to implement various strategies that would allow each student to achieve. He said that as a teacher, you are given a series of strategies in order to make sure that all students learn better. In his words:

Especially having diverse learners, we have to employ these strategies to make sure that everyone is properly supported. It provides a platform where you can individualize instructions. You can essentially provide the different level to make it more accessible. You could form that lesson so that there were working groups, maybe there's multiple ways that they communicate their learning. This education kind of allows them to do that. I think that with the technology that they have it is possible, but again, requires that structure.

Patricia and Bill also remarked that the preparation of instruction has always been a key to effective teaching, but that distance learning made it clear that students always need to have choices as Patricia put it. She reflected on her teacher education in the early 1980's and asserted the following:

I think differentiating instruction and allowing kids to have choices is key. I learned that in teachers ed in the 1980s. And it's just good education, and it works. And I use that during COVID. I feel like if you allow kids to experience learning in different ways and you allow them to make choices when they're going to show you what they know that you get a better return than traditional ways of doing it. And to be honest, differentiating instruction to me is traditional. It was all that data stuff that was not.

Bill seconded this thought and added that part of preparing content and adequately differentiating instruction is doing an effective job of scaffolding. He shared the following:

Now this answer may go full circle to what we started off with, and it comes back to scaffolding. I think that to build up the ideas like tyranny and capitalism and socialism, these isms for sophomores, they may have heard of these concepts in their history class. They have no clue about them. So, you have to build up to them. We use animals. I have little toy animals that I bought from the teacher store. So, we had animals. And so, you have to scaffold. And I think that's something that is very much needed at all grade levels. Because even though students may act like they're mature and big, they actually don't know how to grasp the essentials, in terms of, okay, we're talking about a type of government, but what does it mean to be a capitalist? What does it mean to be a tyrant? So, you use scaffolding, scaffolding, scaffolding. And I think CGU does a great job with that. And it goes back to planning, to know how much is needed because there is a

danger, and I've been very burned many times about this. You can over scaffold too.

Where you're enabling them. So, there's a danger of doing too much scaffolding as well.

Lastly, Jessica made the connection of preparing content and how technology facilitates different learning styles. So, given the knowledge of new technologies, teachers should be much more intentional about their content preparation especially if they are using technology. She had this to say:

I think the inadequate access is huge and also, for students, -- this I kind of know from parents of kids with neurodiversity--staying focused can be difficult with the distance thing. But I also think there's ... I'm hoping that some of what we've learned about offering choice to diverse learners through virtual means, even if we're all in person, that will ... I think that might address that preferred learning style. Even if the learning style thing isn't a reality, people do have preferences. So, I think the distance ... the fact that educators have had to learn all kinds of technology should change in person instruction and online instruction. So that means that we have access to lots, or that teachers should have access to presenting material to students differently and giving students different ways of showing what they know. Lots of different ways.

Scaffolding, differentiating instruction and preparing content to meet individual needs are strategies that many teacher education programs instill in their teaching candidates, but each participant in their own words, suggested that traditional face to face instruction understates the power and effectiveness of preparing content. Because so many other oppositional variables became glaringly obvious and teachers had to fight against a steeper decline of motivation, participation and engagement, content preparation became much more individualized, and appropriately so according to both groups.

Adequate Access

Access is always important, but in distance learning, technological access was a prerequisite although many went without for much longer than their peers, and teachers and TEPs felt that much of what they ordinarily ask of students might reflect deficits in our understanding of what students do and do not have in the way of access. Destiny shared her thoughts about the technological inequities that a personal experience she observed:

The immediate technology skills, but also that the inequity of our educational system is deep and will continue to be deep. We have a system that perpetuates privilege, and I think the online learning system exacerbated that even worse when it shouldn't have had to. But I have a friend who hosted the pod school in her home, and so all of those children, every day, got together for the entire pandemic. They had a one-on-one ... I can't remember what they called that ... pod teacher, a pod teacher who came in. Their real teachers were doing online learning, but they had a pod teacher right there with them every step of the way, seven kids, for the whole year. That's not how it looked for a lot of people. But there were pod schools in the most privileged spaces, and I think we continue to perpetuate the inequities in our educational system in online learning. I'm not sure that we'll learn from it as a system. It's, I think, exacerbated for those of us who are diverse. I'm going to move onto question six. I think Yeah. I think distance learning should have helped us understand the need to differentiate and given us tools to differentiate with some of the examples I've already mentioned. I don't think it changed my thinking about diverse learners, but it changed my idealism about our ability to support diverse learners. Gosh, I wish we could just dismantle the entire system. This is a perfect opportunity to do that, and we are not doing it.

Destiny advocated for change because of the major discrepancies she observed in her own teaching candidates and their attempts to just get online for regularly scheduled classes. She shared one of those experiences here:

Well, I think we have the obvious challenge of the inequity in access, so the inequity in the access of technology. I think distance learning really put an exclamation point on the inequity of educational access. I had teacher candidates without access to internet. The university did a nice job of providing hotspots, but all of that took some time to execute. Then there's the whole internet. One of my candidates would drive to the office in the mobile home park and sit in her car for class so that she could have enough internet to even be in class. I think those logistics of socioeconomic diversity, that's a really big and obvious one that, also, I think was an issue for classroom teachers, as well, and will continue to be for new teachers because even though it's real concrete ... a lack of technology, it's really concrete, I think it brought it to the forefront of our minds. Wow, we need to really understand humanity and human difference.

Distance learning was eye-opening--necessarily so--and educators were struck by student efforts made just so they could be on the same playing field as their peers. Ultimately, she feels that the flexibility of technological access to the educational community is only worth it if we are providing every student with the opportunity to participate. Mason also remarked at the margins of difference between students and their circumstances. Technological access continues to be problematic, as he said, and more than that, "The biggest challenge is just equity within that. As we've experienced on this call, my broadband is not up to snuff just even to be a YouTube guest, man. Digital divide is real." So of course, the discrepancies in access dictate more accommodations but even then, prior to distance learning, access to technology was treated as a

“you problem” as opposed to an institutional disregard of resources. Mason would remind me that some people are just able to do really basic low-tech stuff and then some people can be flying, flying high like the billionaires in space.”

Patricia and Regina were two others that remarked at the technological deficits that students faced and how much that lack of access hurt them early on and throughout the school year. As Regina said, just being able to have a connection where they can hear and see the teacher was a privilege, and students were being asked to do much more than that despite not having the resources or infrastructure necessary to meet those requirements. For this reason, and the collective educational push to integrate technology wherever possible, TEPs and teachers felt strongly about technology as a dimension of diversity that has been present, but its vulnerabilities were never more apparent than when it was education’s sole means for keeping compulsory school afloat.

Self-advocates and Non-Self-advocates

Another issue that pushed many marginalized students further into the corners of underperformance, deeper into isolation, was the social anxiety of distance learning. As a result, many students who already struggled to advocate for themselves, became completely mute in some cases, absent for weeks at a time or “ghosting” as Richard put it. Emma shared the ease with which so many students went quiet and would not be heard for weeks at a time, if ever, because in a physical space there were so many cues that affirmed or validated what they had to say or who they were, and that absence pushed them deeply and emotionally into feeling alone. She shared this:

I think the verbal interaction has been what has been the most disappointing that it just doesn't work. And so, the people who are feeling unsure seem like they feel more unsure

because now they don't have anyone to talk to or listen to, to feel more confident about their idea, or think through their idea more. Or if they're struggling or don't understand, I get very few questions like that now, where it's like, "Wait, I don't understand what you mean by that, or what we're supposed to be talking about, or ..." So, I never really know if people are confused or know what's going on. They just accept it. I saw that with my pre-service teachers in elementary settings, too. The kids just stopped asking questions. That curiosity was really taken away, and so strategies to build on that curiosity were really hard over Zoom. It's just so easy to not say anything. Just mute yourself and get through it. It's a bummer.

Where the physical face to face instruction at least allowed the reading of body language or “pulse of the room” as some might call it, students had the ability to hide during distance learning, shielding themselves from their teachers, their peers and ultimately this conditioned students to feel that they were stuck with whatever their situation was, when in reality, resources were available to them. Elizabeth also experienced this issue and commented on one student of hers that did advocate for herself. This was her experience:

Well, certainly, you have to be more attentive to it because, again, they're out there, on their own, at home, on their computer, and you don't really know necessarily, unless they're forthcoming, what they're getting, how they're getting it, what difficulties they're having. So, teaching them to advocate for themselves and stand up. Like my one student who's dyslexic, she had no problem. She'd unmute and go, "I don't get it. Hey, did you turn on Record yet?" I mean she was not shy, which got to be a pain in the ass, but was also good because it's good. That's what you need to do, I mean you should do, and that's what we want. She just did it every five minutes. Better than the kid hiding behind their

screen the whole semester, and then saying, "Teacher sucked, I hated her, didn't learn a thing." I mean that doesn't help me; I can't do anything for you at the end of the semester.

So, I guess it's reiterating that there's space for this, "If you need help, contact me."

Elizabeth would continue her response, saying that if she could make a change, it would be creating opportunities for check-ins to validate students who are trying to advocate for themselves and find students who are struggling to do that:

I need to figure out ways, like maybe do check-ins. I did one first semester, I didn't do one last spring. I should have, like, "Sign up for a day to meet with me where we can just sit down, have a one-on-one, just tell me your story, what's going on." Yeah. So, I'm going to make sure to do that this semester, maybe two if I can.

Patricia shared a somewhat positive experience with students advocating for themselves on Zoom and would also comment that her students do not seem to advocate for themselves nearly as much in traditional face to face settings.

And so, second semester, there were two younger new instructional aides, they needed a place, and I took them on. And having that extra support for those kids was great because I could say, "You need to go on a breakout session with so and so and so and so and so and so and ensure that they understand this." So, I was able to do that within the class. It was just great. It worked out well with that additional support. I could do it too, because of those breakout sessions but having the ability to direct those instructional aides to take so and so into the room ... Even if they had to do it 10 times before the kids got it, that's okay. So, I think I became more aware of the support that they really do need, that I wasn't so aware of until this period of distance learning And I think they're [students] afraid in the regular classroom. They don't want to be the kid who's always getting help.

But on Zoom, there wasn't that public shame. Maybe we keep them on computers in the classroom and we still do breakout sessions. But the other kids don't know, and the instructional aide is on their computer in the classroom talking. We'll have to figure that one out.

All of the participants agreed that because of the moving pieces of distance learning technology, that building curriculum, personal wellness and the wellness of their classes, and all of the other aspects associated with being an effective teacher remotely, recognized what students needed was not as easy as they were accustomed to in traditional classrooms. By extension, students who would never advocate for themselves, would get lost in the shuffle online. Teacher and TEP responses suggest a special attention or concerted effort be taken with identifying self-advocating and non-self-advocating students by providing regular opportunities to check in and communicate their needs.

Flexibility of Instruction, Assessment and Submission

Teachers and TEPs also recognized the need to differentiate their processes for instruction, assessment, and submission. While educators in this group might not have anticipated the need to vary all of these means of their pedagogy, distance learning facilitated numerous situations in which students required different means of receiving information, and alternative means for demonstrating their knowledge. The key word in this type of diversity is *flexibility*, a word uttered time and time again by both groups of participants in previous questions. Aracely recounted experiences with trusting students and utilizing both her knowledge of the content and their prowess with technology to create alternative opportunities for assignment submissions and assessments. She had this to say when asked what she recommends to new teachers in managing diverse classrooms in the online environment:

Oh, man. I used to say, "You have to be the F word, flexible." Well, it's the capital F now. I had to be really flexible. It's like okay, let's see. I have to move things around and get into breakout groups. I have learned to be extremely flexible. I have learned to stay calm because I wasn't at first. I have learned to try to put myself in the shoes of my students and try to... From their perspective... I have just learned so many things. Humble. Humility. I really have. Again, what I said is I learned that it's a reciprocal process that teaching and learning, that I became a student, and they became the teachers, and it was going back and forth. I'm good at my content, but they were good at technology. If we were going to survive, we had to work together.

Emma also remarked that if there was one takeaway from distance learning, it was the dissection of what it means to be flexible. Emma felt that distance learning allowed many students to realize their full potential, maybe more than a traditional face to face setting. She had this to say:

I think distance learning actually provides diverse learners better opportunities to reach their potential. Well, because with the distance learning, as a teacher, I was able to make individual adjustments on the assignments for kids based on their individual needs, much more readily. The kids who could read faster could finish quicker, and the kids who read slower had more time. The kids who had chaos in the morning but quiet in the evening. I had kids turn in their work at 3:00 in the morning. I had some students who worked from 1:00 to 5:00 AM. You saw the time stamps and they did really good work, and they were in class. For the distance learning they didn't necessarily ask a lot of questions, but they were always present. It provided that flexibility for the kids to do better if the child tried. So, it was really up to the child.

Because teachers could provide only so much structure, the online environment encouraged students to develop their own structure and means for regulating and organizing their learning. Emma and others agreed that if educators care about student outcomes, then they have to be flexible with when students choose to work, how they will demonstrate what they know, what they can do to demonstrate their knowledge and alternative means for assessing their proficiency. Regina was another participant who commented on the necessity of flexibility, saying that students want to be appealed to, so it is on educators to be more creative and flexible. The prospect of flexibility in the touch and go world of online teaching may be intimidating to many educators, like Kirk who shared his aversion to online teaching when asked if he would want to become a full-time online instructor. But after the distance learning experience, he sees the value of modifying everything he has ever done in class to create a “hybrid of hybrid” as he calls it, allowing some of the lessons learned in this time to have permanence upon a return to traditional instruction.

Responsibility

Educators are moderately aware of the responsibilities that students have; in general, teachers acknowledge that students have lives outside of their classrooms. But many students faced an increased role of responsibility in their households during distance learning. Many students merely continued tending to responsibilities they always had. Even still, distance learning highlighted the energy expenditure of students and obligations in response to incredibly unfortunate crises in their families, which dwarf the priority of submitting a homework assignment. TEPs and secondary teachers commented on the diversity of responsibility that existed among their students and how that influenced how they planned instruction, assessment and created individual learning goals for students. Patricia had a unique experience with this type

of diversity in her senior level social studies class. It is not unusual in her upper-level class to have students working, but distance learning highlighted a couple issues that Patricia had with the structure of school and waste of time and resources:

Seniors in high school want to work and that's not a bad thing. That they're out making money and helping the family. Instead of being tied to six periods a day in high school. I had a lot of kids that were working. That's not a bad thing. I think we should restructure school in a way that allows for 17-year-olds, 18-year-olds who are seniors in high school to have a transitional period where they're doing both. We need more apprenticeships and more internships. Why sit in a classroom when you could actually be out in a workplace learning on the job? ROP is great but it needs to be training kids in the areas that interest them and getting them out there. I think that I've learned because so many of them had to go to work during distance learning. I had kids working full time. Seniors who were working full time and then going to school. And I think that was a disservice to them. But senior year, what are you doing in a food class, unless you're going to be a chef kind of thing? Just go and get a job. Go get behind a counter and work or learn a skill. Hands on. I think we need to restructure, especially senior year.

Aracely also witnessed students having to work to compensate for job loss in their families; of course, those demands increased the challenges of school for students and that also required a special care and communication from her as their instructor:

There was a health challenge. There was a challenge of no access to the Internet. The challenges of poverty. Along with poverty, just people losing their jobs. My students were not able to attend because their parents got sick, and they had to work. So, it was this cycle that my candidates and some of them, and we saw with the new teachers too,

where students weren't showing up. In high school, I talked to the high school teachers, students, especially juniors and seniors, just dropped out because they had to go work. I think there were some same challenges for the new teachers, but we know that this pandemic was particularly hard on our students of color and students who struggled monetarily. We had to try to be a little more accommodating and understanding with the students.

The increased role that many students took on as a result of harsh economic conditions caused by the global pandemic, calls into question how else educators can first identify the extenuating circumstances of students, as well as do a better job of individualizing the educational experience for those students so that the expectations and outcomes are equitable.

Self-Efficacy Connections to Reported Beliefs

This section discusses the self-efficacy scores for both TEPs and teachers for relevant areas from Bandura's self-efficacy survey (See Appendix A). This section will be divided into four subsections regarding TEP and teacher perceptions of their ability to influence or confidence levels with the following: Decision Making (Q1), Instruction (Q3), Enlist Parental Involvement (Q5) and Enlist Community Involvement (Q6). The chosen sections of the survey have direct impacts on educators' abilities to influence the dimensions of the topic in question to create optimal learning environments and outcomes for students; distance learning reified the need for all these subsections in question.

Efficacy to influence decision making (Q1). Teachers and TEPs expressed an importance around autonomy in their classes and schools and being able to communicate the needs of their students to their administration. Both groups felt that distance learning was a particularly vital time to recruit the thoughts of faculty in efforts to provide the best educational

experience for students and teachers. So, we will first look at self-efficacy scores from secondary teachers in Table 4.10.

Table 4.10
Secondary Teachers' Influence of Decision-Making Self-Efficacy Data; (N=6)

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	How much can you influence the decisions that are made in the school?	4.00	7.00	5.33	1.25	1.56	6
2	How much can you express your views freely on important school matters?	5.00	8.00	6.67	1.11	1.22	6

Teachers scored moderately in their perceptions of their ability to influence decisions in school (M=5.33, SD=1.25) and strongly in how freely they feel in expressing their views on important school matters (M=6.67, SD=1.11). It is unclear if this represents their feelings ordinarily, or if these scores reflect their experiences during distance learning. These scores rate higher than the TEPs represented in Table 4.11.

Table 4.11
TEPs' Influence of Decision-Making Self-Efficacy Data; (N=6)

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	How much can you influence the decisions that are made in the school?	5.00	7.00	6.00	0.63	0.40	5
2	How much can you express your views freely on important school matters?	3.00	8.00	5.67	1.49	2.22	6

TEPs scored moderately in both perceptions of their ability to influence decisions in their schools (M=6, SD=.63) and in how freely they feel expressing their views on important school matters (M=5.67, SD=1.49). While there was much variation between teacher responses, TEPs had lower scores of 5 and 3 respectively.

Instructional self-efficacy (Q3). Teachers were then asked to determine their confidence levels with varying aspects of instruction. These questions ranged from their ability to influence class size, to more personal and student driven questions of their influence on motivation and completion of assignments. Table 4.12 captures secondary teacher data from this section.

Table 4.12
Secondary Teachers' Instructional Self-Efficacy Data; (N=6)

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
9	How much can you do to get children to do their homework?	3.00	8.00	5.67	1.60	2.56	6
8	How much can you do to overcome the influence of adverse community conditions on students' learning?	5.00	8.00	5.67	1.11	1.22	6
7	How much can you do to get students to work together?	5.00	8.00	7.17	1.21	1.47	6
6	How much can you do to motivate students who show low interest in schoolwork?	5.00	8.00	6.00	1.15	1.33	6
5	How much can you do to increase students' memory of what they have been taught in previous lessons?	5.00	9.00	7.00	1.29	1.67	6
4	How much can you do to keep students on task on difficult assignments?	7.00	9.00	7.33	0.75	0.56	6
3	How much can you do to promote learning when there is lack of support from the home?	5.00	7.00	6.00	0.82	0.67	6
2	How much can you do to get through to the most difficult students?	5.00	8.00	6.17	1.07	1.14	6
1	How much can you do to influence the class sizes in your school?	2.00	8.00	4.67	2.21	4.89	6

Secondary teachers had varying levels of self-efficacy; this group scored strongly on items 4, 5 and 7 that target the teacher's ability to keep students on task ($M=7.33$, $SD=.75$), increasing student memory of previous lessons ($M=7$, $SD=1.29$) and getting students to work together ($M=7.17$, $SD=1.21$). But teachers scored much lower on items with more external influences like item 1 which asked how much teachers can do to influence class sizes ($M=4.67$, $SD=2.21$) and item 8 which asked how much teachers can overcome adverse conditions on students' learning ($M=5.67$, $SD=1.11$). Table 4.13 displays instructional self-efficacy data from the TEP group.

Table 4.13
TEPs Instructional Self-Efficacy Data; (N=6)

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
9	How much can you do to get children to do their homework?	5.00	7.00	6.33	0.75	0.56	6
8	How much can you do to overcome the influence of adverse community conditions on students' learning?	5.00	8.00	6.50	1.26	1.58	6
7	How much can you do to get students to work together?	7.00	9.00	8.00	0.58	0.33	6
6	How much can you do to motivate students who show low interest in schoolwork?	5.00	8.00	6.67	1.11	1.22	6
5	How much can you do to increase students' memory of what they have been taught in previous lessons?	7.00	8.00	7.50	0.50	0.25	6
4	How much can you do to keep students on task on difficult assignments?	4.00	9.00	6.83	1.57	2.47	6
3	How much can you do to promote learning when there is lack of support from the home?	4.00	9.00	6.50	1.50	2.25	6
2	How much can you do to get through to the most difficult students?	6.00	9.00	7.50	0.96	0.92	6
1	How much can you do to influence the class sizes in your school?	2.00	8.00	3.33	2.21	4.89	6

Item 1 appears consistent with secondary teacher data as TEPs scored very low in their perception of their ability to influence class size (M=3.33, SD=2.21) despite a relatively high standard deviation. They also scored strongly, much like secondary teachers, for items 4, 5 and 7 which targeted TEPs ability to keep students on task (M=6.83, SD=1.57), increasing student memory of previous lessons (M=7.50, SD=.5) and getting students to work together (M=8, SD=.58) with greater higher scores of 9, 8 and 9 out of 9 respectively.

Efficacy to enlist parental involvement (Q5). Teachers and TEPs acknowledged the absence of support systems in many cases during distance learning and traditional instruction, and in others, how important it was to have dialogue with parents to better understand the circumstances of students. We will first look at secondary teachers’ perceptions of their ability to enlist parental involvement in Table 4.14.

Table 4.14
Secondary Teachers’ Influence on Enlisting Parental Involvement Self-Efficacy Data; (N=6)

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	How much can you do to get parents to become involved in school activities?	3.00	7.00	4.67	1.49	2.22	6
2	How much can you assist parents in helping their children do well in school?	4.00	7.00	5.83	1.34	1.81	6
3	How much can you do to make parents feel comfortable coming to school?	4.00	9.00	7.00	1.53	2.33	6

Teachers scored moderately low in the perceptions of their ability to get parents to become involved in school activities (M=4.67, SD=1.49) and in assisting parents to help their children do well in school (M=5.83, SD=1.34). But the group scored strongly in how much they believe they can make parents feel comfortable coming to class (M=7.00, SD=1.53), which is most likely the result of having control over their classroom and their presentation of self, whereas items 1 and 2 require a coercion or parenting suggestion which may not be received well. We’ll now look at TEP data regarding their confidence levels in enlisting parental involvement in Table 4.15.

Table 4.15

TEPs' Influence on Enlisting Parental Involvement Self-Efficacy Data; (N=6)

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	How much can you do to get parents to become involved in school activities?	3.00	8.00	6.00	1.63	2.67	6
2	How much can you assist parents in helping their children do well in school?	5.00	8.00	6.33	1.11	1.22	6
3	How much can you do to make parents feel comfortable coming to school?	5.00	9.00	6.83	1.46	2.14	6

TEPs scored much higher than their secondary teacher counterparts' items 1 (M=6.00, SD=1.63) and 2 (M=6.33, SD=1.11) and slightly lower on item 3 which asked how much they can do to make parents feel comfortable coming to school (M=6.83, SD=1.46). TEPs have much more infrequent interactions with the parents of students, so this data does suggest that there are other factors at play in self-efficacy levels that extend beyond their roles and proximity to variables in questions.

Efficacy to enlist community involvement (Q6). The final section of the self-efficacy survey to be analyzed asked participants to evaluate the degree to which they feel they can enlist community involvement to support students. One recurring theme in the interview questions was the necessity to organize and mobilize resources into communities to bridge the gap for students lacking various kinds of access during distance learning. TEPs and teachers also noted the importance of knowing and learning about the communities that they served in as part of understanding the students they teach. We will first look at data from secondary teachers represented in Table 4.16.

Table 4.16

Secondary Teachers' Influence on Enlisting Community Involvement Self-Efficacy Data; (N=6)

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	How much can you do to get community groups involved in working with the schools?	1.00	6.00	4.33	1.70	2.89	6
2	How much can you do to get churches involved in working with the school?	1.00	7.00	3.50	1.89	3.58	6
3	How much can you do to get businesses involved in working with the school?	2.00	5.00	4.00	1.15	1.33	6
4	How much can you do to get local colleges and universities involved in working with the school?	4.00	9.00	6.33	1.49	2.22	6

Teachers scored strongly only in one area of their self-efficacy in recruiting community involvement in item 4, which asked participants to determine how much they can get local colleges and universities involved in working with the school (M=6.33, SD=1.49). But teachers scored low in items 1, 2 and 3 which asked how much they feel they can get community groups (M=4.33, SD=1.70), churches (M=3.50, SD=1.89) and businesses (M=4, SD=1.15) to get involved in working with the school. It is unclear if these are the feelings ordinarily associated with their perceptions, or if these were influenced by conditions of the global pandemic. We will now look at TEP data in Table 4.17 demonstrating their self-efficacy perceptions as it relates to enlisting community involvement.

Table 4.17

Secondary Teachers' Influence on Enlisting Community Involvement Self-Efficacy Data; (N=6)

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	How much can you do to get community groups involved in working with the schools?	5.00	9.00	6.50	1.61	2.58	6
2	How much can you do to get churches involved in working with the school?	2.00	5.00	3.00	1.00	1.00	6
3	How much can you do to get businesses involved in working with the school?	3.00	6.00	4.50	1.12	1.25	6
4	How much can you do to get local colleges and universities involved in working with the school?	3.00	8.00	6.00	2.08	4.33	6

TEPs scored higher than teachers in their confidence to get community groups to work with schools (M=6.50, SD=1.61) and slightly lower in the teacher group's highest scoring item 4 of getting local colleges and universities involved in working with their schools (M=6.00, SD=2.08). But, consistent with teacher data for items 2 and 3, TEP had low self-efficacy in

getting churches ($M=3.00$, $SD=1.00$) and businesses ($M=4.50$, $SD=1.12$) involved in working with schools.

Summary

Secondary teachers and TEPs were asked to consider and evaluate to what degree have challenges of engaging diverse classrooms been exacerbated by distance learning under Covid-19. Additionally, they had to determine if there are new dimensions of diversity that incoming teachers should prepare for. Teachers and TEPs identified a handful of dimensions of diversity that have always had a role in consideration of how they performed their duties but affirmed that these dimensions took on greater meaning in students' lives, and greater significance in the planning and implementation phases of their pedagogical response. Emerging dimensions of diversity included content preparation, adequate access to technology or other necessary resources prescribed by the learning environment, self-advocates and non-self-advocates, flexibility in instruction, assessment and submission and finally, responsibility.

Much of what both groups of participants shared was an acknowledgement of the presence of all of these dimensions prior to having to operate solely through distance learning, but an exacerbation of the reliance on some of these, as well as the pervasiveness and how that impacted student outcomes. Self-efficacy scores suggest high confidence levels with areas that educators can immediately impact and that are impacted by few, if any external variables, like motivating students, keeping students on task and creating safe and comfortable environments for parents when visiting school. But both groups expressed lower confidence levels in areas of freely expressing opinions on important school matters, getting communities involved in working with schools and influencing decisions on important matters at school. All of these have greater implications during distance learning due to extenuating social and economic

circumstances that make the obligations of school easier for some and more challenging for others.

Summary of Results

The findings related to the four research questions of the study suggest some consistent beliefs in terms of effective pedagogical strategies to engage diverse classrooms. Teachers and TEPs differentiated strategies dependent upon the dimension of diversity that was being discussed. For example, teachers and TEPs noted how important it was to leverage students' backgrounds and contexts, and in some cases, allow to them to drive the direction of content so that they see themselves in the work that they are doing. In terms of readiness, TEPs and teachers advocated for varied ability groups, monitored or reviewed notes, differentiation, recording lectures increased time, equity sticks, provide examples of student work and a gradual release of responsibility. In general, participants found these strategies ordinary and during distance learning, but economic diversity brought about nuanced ways of thinking about our role as educators and institutional roles in equitizing the access for students. Due to the economic challenges brought on by Covid-19, both groups noted the importance of institutions in equipping students with adequate access to technology and internet. However, the self-efficacy survey revealed that teachers and TEPs scored moderately on Bandura's Survey in self-efficacy related to getting necessary materials and equipment, which was especially important during distance learning. Additionally, t-test performed at $p < .05$ demonstrated no significance between teachers and TEPs in their survey responses. Findings are illustrative examples of strategies to engage diverse classrooms and should not be taken as assertions of truths, but rather experiential practice. In addition, teachers largely expressed underwhelming or somewhat unhelpful teaching training experiences. For some, they have spent so many years out of their teaching education

that recalling valuable nuggets from their training was difficult. For others, they expressed disappointment in what they did learn in their teaching training. While disappointed in these reported feelings, TEPs agreed that much more could be done to make teacher education more meaningful and useful upon entering the field, as they even expressed the same about their own teacher education experiences. Despite this, teachers and TEPs reported strong self-efficacy scores in their ability to engage and teach the most difficult students, those lacking resources and those lacking interest in school.

Broadly, TEPs and teachers identified two key strategies that they said are good teaching in traditional face-to-face instruction and during distance learning, varied instruction and building strong relationships with students. Teachers especially made clear that in cases with unmotivated or struggling students, seeking to build relationships, learn about students and where they come from, often resulted in improved achievement, participation and engagement. TEPs agreed that relationship building is an integral part of effective teaching and something they impart on their pre-service candidates. Additionally, when given the opportunity to respond to findings from their peers and the other group of participants, teachers and TEPs gave praise to what their fellow educators had to say and expressed isolation and difficulty with the challenges of distance learning, despite being pushed out of their comfort zone to try new things, lean on the tech savviness of their students, and reevaluate the importance of much of the curriculum they traditionally teach.

CHAPTER 5

Overview

This qualitative research study involving secondary teachers from Chaffey Joint Union High School District and teacher education professionals from Central to Southern California teacher education programs examined most effective pedagogical strategies for engaging diverse classrooms with a particular emphasis on cultural, readiness and economic diversity, and shifts in these strategies during distance learning. Survey responses from 12 of the 14 participants and two semi-structured interviews both groups revealed some overlap in the beliefs of the most effective techniques for teaching and engaging diverse classrooms, and also shed light on new dimensions of diversity that prompted a different set of challenges during distance learning. Analysis of survey data and interview data with regard to the four research questions of the study suggest consistent pedagogical strategies that transcend distance learning and traditional instruction and overlap with several dimensions of diversity with some exceptions that call for more institutionally based support vs. instructor-based practices. Key findings point toward implications for policy, practice, and future research. This chapter also situates the findings of the current study within the literature on diverse classrooms in theory and in practice and acknowledges its limitations.

Key findings

The key findings from the study are discussed with respect to the four research questions. Also noted are points on which the survey and interview data failed to suggest a clear finding or were contradictory.

TEPs' Recommendations for Engaging Diverse Classrooms: Research Question One

Teacher education professionals--and teacher education as a whole--have been criticized for their disconnect from practitioner's views of effective classroom strategies. Years outside of a K-12 classroom create distance from what works in theory and what is most effective in practice. And to make the challenge more complex, meeting students at their social, cultural and academic levels is becoming increasingly difficult to do given the rapidly shifting demographics over the past few decades, and in a distance learning environment that revealed new dimensions of diversity and facilitated new challenges. Would TEPs agree on effective strategies? Would they frame the notion and manifestation of diversity the same way? TEPs identified two umbrella categories, the art and science of teaching, wherein they defined what those two concepts look like in practice. One key finding from this research question was the continuity among the professionals: the belief in effective visuals, differentiated instruction, role playing and inquiry-based learning which the group called the science of teaching, and relationship building, which they considered to be the art of teaching. This coincided with stronger self-efficacy scores in areas of motivating students who show low interest, are difficult to engage or struggling because of adverse environmental conditions. This is particularly important during distance learning, a time where many educators felt isolated and as if they needed to start over because of the tall task of digitizing everything they had been doing. When TEPs are confident in their autonomy and in their ability to innovate and adapt according to students needs and social conditions, they

are able to still have a positive impact on student learning outcomes, the future teachers of the world.

Building relationships appeared most frequently among participants; it was mentioned by all eight TEPs. Ordinarily, there is a value in establishing rapport with students; it creates trust, and that trust is a student belief that the instructor has their best interest in mind and makes their best effort to connect their content to a student's learning in a way that is meaningful, valuable and transferable to the locality of their experiences. TEPs remarked at how much more convenient it is to build solid student relationships during a face-to-face setting because there are so many social cues to utilize and pick up on that inform how one conducts themselves in front of a classroom or engages individually with a student. But it was Emma that noted how easy it is to just be silent, a mute all year long during distance learning. So, if TEPs were not intentional in creating opportunities to get to know their students and build connections, then there was a chance that they never saw more than their blank profile pictures or initials on Zoom. Consequently, many of these students succumbed to these feelings and began to participate less, attend class less and as a result, many high schools experienced a 200% and 300% increase in failures from previous years (Dorn et al. 2020; Thompson 2020).

While relationship building is not solely to blame for these results, the absence of it definitely contributes to a student's willingness and motivation to engage in their own learning, particularly in an online space where they have to regulate their time and organization much more than a traditional bell to bell school day. Connection and strong relationships were especially important during distance learning because students in general felt *without* and alone; many of these students come to school for the social aspect and are just appreciative to hear their name announced by a teacher during attendance because it is the only time in their day that they

feel recognized as an individual. So of course, in a setting where their only means of communication was through a screen for a school year, there was value in reaching out to students, establishing regular dialogue or a form of check-in as Elizabeth indicated she would utilize moving forward.

Varied instruction and the use of visuals also garnered support from most of the participants, mentioned by seven of the eight TEPs and all six teachers. Participants discussed the need for students to receive information in as many different ways as possible, which was difficult during distance learning, but TEP Destiny was one participant who asserted that despite challenges to give students “a variety of ways to show their knowledge, and then we're naturally differentiating from all these students who come with very different skills, very different readiness or learning preferences.” Tangible applications or programs that worked better or worse for TEPs in differentiating instruction were absent in this section. Instead, they used the word *flexible* to describe their ability to adapt to individual student needs as they arose, and then modified content from that point on. Aracely offered one such example of leveraging her “knowledge of content with students’ prowess with technology” to create alternative methods for assessment and assignment submission types. TEPs largely agreed through time that the priorities and parameters that they traditionally submit to, fell to the side; communicating with students and creating multiple types of opportunities where students could submit work in a way that was most feasible for them were priorities that became more apparent very quickly in distance learning. This is somewhat surprising given that TEPs have another set of standards to adhere to with their teaching candidates than secondary teachers; but it is encouraging that if this group felt confident enough to enact the creativity necessary to “meet students where they were” as Emma put it, then communicating that same autonomy to teachers would be especially

effective since they are responsible for class sizes two to three times larger than TEPs with potentially more complex types of diversity to interact with. The findings from this research question suggest equal attention be paid to both the art and science of teaching in teacher education, but what remains unclear is how to assess for the former despite all of the participants noting very observable differences in students who know they said feel cared for and valued, in contrast with ones that felt isolated and unsupported.

Secondary Teachers' Recommendations for Engaging Diverse Classrooms: Research Question Two

There is wide speculation about the most effective ways to engage and teach diverse students in K-12 classrooms. Effective teaching, effective teachers and effective strategies for diverse classes have some overlap in the literature, but still some discord remains in terms of how academia defines each of these. Ladson-Billings (2000) first discussed teaching and learning as symbiotic events, each constantly informed by the other, and it would prove to be the case for this group of teachers, especially during distance learning. Interestingly enough, teacher reported strategies overlapped with TEPs; both mentioned varied instruction, visuals, role playing and relationship building, and teachers added leveraging cultural and linguistic differences to the catalogue. During interviews, all of the teachers expressed sadness and regret, even isolation and feelings of inadequacy at the onset of distance learning because everything was new, and for this group, they would be asked to learn a new grading and learning management system (Canvas) over the course of a few days prior to the semester beginning. Despite the challenges of new technology and distance learning, teachers persevered, and this was reflected in their self-efficacy scores. Teachers scored strongly on Bandura's Survey in perceptions of their ability to engage students who lacked interest, support systems and

motivation. This is encouraging because distance learning--as teachers would note during interviews--exacerbated the lack of motivation and consequently, engagement and attendance.

The most prominent strategy seemed to be relationship building, which coincided with what TEPs reported. Destiny, Jessica and Emma gave specific praise to the teacher group when they reviewed their responses from the first interview; relationship building has always been a driving factor of student outcomes, but distance learning illuminated the emotional and social need to feel connected, so, as Destiny commented, educators had to be “much more conscious with structuring relationship building time.” However, as participants like Bill noted, traditional relationship building strategies would be difficult to implement in the online setting, prompting “frustration, sadness and disappointment” in some cases.

Another interesting finding that emerged from this research question was leveraging linguistic and cultural differences. It began with a couple of participants sharing examples about experiences they had in which they assumed that their colloquialisms or “language of the dominant academic culture” as Emma referred to it, would be common knowledge and understood by students. To their surprise, so much of what they communicated had been misunderstood, opening the door for them to use the cultural and linguistic differences of their students to drive the content of their classes and build relationships of trust and reciprocity simultaneously during a distance learning period where students were deprived of validation and representation because of the limitation of technology.

One area of interest from this section that drew the attention of TEP Blair, were the helpful and unhelpful strategies reported by teachers. There was one instance where a participant noted inquiry-based learning as an effective strategy but absent in the rest of responses were

strategies like “learning by design, backwards planning, essential questions” which Blair feels are intimately entangled in inquiry-based learning, a strategy that teachers determined was very effective in their experiences with diverse classrooms. Broadly speaking, he thought of those strategies as being really crucial for engaging and teaching in diverse classrooms, so he asked this, “I wonder if there's a divergence between what teachers are thinking when they think of rich and engaging instruction and what they think of in terms of engaging diverse classrooms. And it feels like there's a bit of a bifurcation there more than maybe there should be.” Blair was particularly struck by this because up until this point, teachers reported all of their strategies as *good teaching* across the board, whether it be in distance learning or face to face instruction, whether it is a monoethnic class or the diverse classrooms of today, so his thoughts suggest the need for investigation into the validity of diversity-based practices vs. rich and effective classroom strategies. There is a preliminary examination of this idea in section three of this research study which explores what each group of participants found most and least effective in engaging cultural, readiness and economic dimensions of diversity.

Evolving Perceptions of Diversity: Research Question Three

This section tackled several dynamics; first, teachers and TEPs were asked to reflect on what they think when they consider diversity in their classroom. Naturally, there were over a dozen markers of diversity that teachers and TEPs identified respectively, and there are key differences between the responses of the groups that indicate closer proximity to academia. Every teacher in this group was at least 10 years removed from their teacher education, whereas the TEP group is expected to understand and communicate many of these new markers of diversity that have gained prominence in the last decade or two, like neurodiversity, BIPOC and LGBTQ+, all of which were terms that teachers expressed awareness of, but they did not receive

formal training with these concepts. Second in this section, both groups were asked to discuss their experiences with effective and ineffective strategies to respond to challenges of cultural, readiness and economic diversity. While both groups believe in the philosophy that “good teaching is good teaching”, different strategies and approaches were taken with different kinds of diversity challenges. For instance, the question of economic diversity was a hot-button issue. Every participant expressed a particular heaviness with some of the stories students shared and how the Covid-19 pandemic affected their families, and consequently their educational environment. Some families were displaced, but at the minimum, many students shared the difficulties following the loss of jobs, the contraction of Covid-19 and loss of family members, or the lack of access to necessary resources, primarily technology. In response, every participant cited the most crucial need for students during this time was to increase access, so that took several different forms. For some like what Aracely, Elizabeth and Bill shared, it meant equipping students with hotspots and laptops. For others, it meant communicating the availability of resources like Jessica prioritized or providing lunch that was offered at Megan’s campus for food-insecure students. Regardless, the strategies in response to economic diversity were more institutional support than pedagogical, but participants did share that it was ineffective to disregard students’ circumstances, which is to say that at minimum, students needed to be validated and understood and teachers needed to model flexibility and adaptability given the unprecedented and unpredictable nature of distance learning and the social, health and economic ripple effects of Covid-19. Ironically, teachers and TEPs scored moderately on Bandura’s Survey in self-efficacy related to getting necessary materials and equipment. Organizing and mobilizing resources was an “all hands on deck” situation as Blair called it, and for there to be such a high degree of variance and standard deviation suggest that this particular group of educators--which

may be representative of a larger population of educators--did not feel supported or empowered, or aware of how to increase access to resources as demand by students increased. These indications are on par with the saturation of messaging and communication that took place earlier in the school year and which frustrated teachers and TEPs in the academic and moral responsibilities to students' outcomes and wellness.

Readiness and cultural diversity indicated a clear division between diversity-appropriate pedagogical strategies. For instance, both groups mentioned flexibility and trimming the fat of their content, but teachers advocated for links to resources in primary languages, positive correction or affirmation of the right information and fostering a culture of community or empowering students to be support systems to one another. TEPs advised facilitating conversations revolving around cultural and linguistic expectations, transcription and personal biographies. Some of these strategies do double-duty, like personal biographies. Blair shared his experience beginning the school year with personal biographies in which students share a bit of who they are, what they value and where they come from, socially, geographically, culturally and otherwise. This provides students with the opportunity to engage with the content in a way of their choosing, using language that is comfortable to them, which validates their backgrounds and contexts while simultaneously providing a critical opportunity for relationship building and to learn who his students are. Another aspect of cultural and readiness diversity that Kirk raised, is the fluidity. In certain parts of the school year that relied more on a math base of knowledge, students who performed weaker in their math classes struggled exponentially more in his science class. But, when his class required more expression of thought and writing skills, strong English performers fared the best; student readiness was determined by the nature of current content and content-related skills and knowledge they required to perform well. This was starkly the case

because of the weight that writing held in distance learning. The same held true for culture; he shared that an estimated 80-90% of his students are Hispanic and because that is a population that he has consistently taught, that he felt comfortable with his knowledge of Hispanic culture. However, much of his knowledge was outdated, and so he surmised that, “culture is fluid; it changes, and reflects whatever era you end up teaching in.”

One point of this section that should raise the eyebrows of educators was what Emma shared in education’s reliance on previous years data. Ordinarily, she feels that data tends to mislabel or limit students because it reflects an incomplete understanding of their abilities, but this is never more the case than following 18 months of distance learning. When asked what strategies she found ineffective in navigating readiness diversity, she cited a reliance on previous year’s data. At face value, this is reasonable, but it sparks curiosity as to how education plans to adequately assess student readiness moving forward given the seismic nature of the pandemic, which inevitably has disproportionate impacts on different students. Do the standards remain the same? Does digital literacy become part of the conversation of readiness? Emma--and others--suggested that communication and relationship building with students can compensate for shoddy data, but the slippery slope comes in how much education is able to individualize the learning experience while still recognizing standard based assessment, or at least the pursuit of it in theory.

Challenges and New Dimensions of Diversity in Distance Learning: Research Question

Four

In response to the fourth and final research question, teachers and TEPs were asked to reflect on their teaching experience during distance learning and share what new challenges they experienced or envision for the future of teachers. In addition, they recognized new dimensions

of diversity that may have always been present, but no formal teacher education has ever required the intense consideration of these types of diversity. In general, teachers and TEPs expressed sorrow in remembering May 13, 2020, which was the first day that they realized they would take everything they were doing and move it to the online setting. But it paled in comparison to the challenges of a whole year of school that was ahead of them. Students lacked technological access, safe and consistent learning environments, support systems and consequently, many chose not to advocate for themselves and instead, participated less, attended infrequently and in some cases, were never heard from. Each group expressed an acute perspective that they were given that was otherwise not available to them during face-to-face instruction because the conditions never illuminated the issue in an observable, or confrontational way. For example, Patricia was one teacher who discussed the nature of students who work; of course, this number increased and the reliance on students working heightened as many parents lost their jobs, family members passed, and economic conditions necessitated additional income to offset some of the setbacks of lockdowns that shutdown entire marketplaces, for many, their livelihoods. So, she probed, what kinds of expectations are in place for students that incurred a larger role in their families? What about the students who always bear these types of responsibilities? Her answer was flexibility; teachers--especially during the 18-month period of distance learning--needed to demonstrate compassion, flexibility and understanding, none of which were possible without communication and check-ins with students. But beyond that, identifying support systems became key. Unfortunately, teachers scored moderate to low in their self-efficacy regarding their ability to enlist parental and community involvement. TEPs scored slightly higher in these areas, which is interesting given that TEPs have consistently fewer interactions with parents than do secondary teachers because of the

structure of the levels of education that they teach. However, both sets of data indicate that educators in general, feel unsupported in efforts to recruit parental and community assistance, and this was the same for their perceptions of their ability to get necessary materials and equipment. Now, it is unclear if their responses are indicative of their ordinary capabilities, or from the period of distance learning. Nevertheless, a lack of confidence--which in this isolated setting of distance learning is more of a helplessness-- means that much more needs to be done to support educators to support their students, from a community level to the institutions.

Another emerging dimension of diversity was the flexibility of instruction, assessment and submission. Admittedly, all of the participants acknowledged adjusting their assignment types, assessments or instruction in some way that catered more to the circumstances of individual students. In traditional face to face instruction, educators call these modifications or differentiation. But there was something different about how this manifested during distance learning. Emma noted that she quickly realized “what mattered and what did not” and while she and others had envisioned specific parameters for their assignments, she became receptive to students demonstrating their knowledge in alternative ways that were feasible given their individual circumstances, and in alignment with the established objectives she had. This informed how she and others would then deliver the content; students need to receive information in as many feasible ways as possible, as most of the participants would advocate for. This includes not only content delivery, but assessment and assignment types.

So born out of this question is the realization that students--either due to their socioeconomic circumstances and access or academic experiences and preferences--require different modes of instruction as well as practice, which upends many current educational ideologies that mandate the streamlining of education. Destiny felt that there was no better time

than the present to dismantle the structure of the education system given “glaring deficits” as she called them. Her sentiments underscore implications and recommendations that will be discussed in a later section. Elizabeth shared potentially the most appropriate comment for findings in this section, positing, “When I started teaching, diversity was pretty much based on culture and race and ethnicity, and now there's a much broader definition, which is good, there should be.”

Secondary teachers and TEPs were asked to consider and evaluate to what degree have challenges of engaging diverse classrooms been exacerbated by distance learning under Covid-19. In some cases, distance learning reduced some of the challenges of diversity. Additionally, they had to determine if there are new dimensions of diversity that incoming teachers should prepare for. Teachers and TEPs identified a handful of dimensions of diversity that have always had a role in consideration of how they performed their duties but affirmed that these dimensions took on greater meaning in students’ lives, and greater significance in the planning and implementation phases of their pedagogical response. Emerging dimensions of diversity included content preparation, adequate access to technology or other necessary resources prescribed by the learning environment, self-advocates and non-self-advocates, flexibility in instruction, assessment and submission and finally, responsibility. Much of what both groups of participants shared was an acknowledgement of the presence of all of these dimensions prior to having to operate solely through distance learning, but an exacerbation of the reliance on some of these, as well as the pervasiveness and how that impacted student outcomes.

Self-efficacy scores suggest high confidence levels with areas that educators can immediately impact and that are impacted by few, if any external variables, like motivating students, keeping students on task and creating safe and comfortable environments for parents when visiting school. But both groups expressed lower confidence levels in areas of freely

expressing opinions on important school matters, getting communities involved in working with schools and influencing decisions on important matters at school. All of these have greater implications during distance learning due to extenuating social and economic circumstances that make the obligations of school easier for some and more challenging for others.

Discussion

One issue with asking TEPs and secondary teachers about their beliefs of the most effective pedagogical strategies for engaging diverse classrooms is that this question presumes that the participants share identical notions of diversity. As literature has pointed out, the demographics of education have shifted over the last several decades, and with that have come even more complex understandings of how diversity takes form in our classrooms (Kirschner & van Merrinboer 2013; Juvonen et al. 2019). However, as Kirschner would submit, despite the differences of students, there is no validity to the student learning style conversation as it would suggest a number of possible combinations of learning styles that supersedes the number of people that exist. Yet, with each of these participants, regardless of their preferred learning style, and despite the learning taking place entirely through a computer, each group would offer distinctly appropriate strategies that interacted with different dimensions of diversity. This idea connects back to what Hansen and Chennapragada (2018) would define as *superdiversity*, the multidimensional, multilayered complexity of diverse student identities that teachers require specific pedagogical preparation to attend to. While not every teacher will have a class of such high variance in diversity, every teacher has to be equipped with the appropriate pedagogical skills to engage and effectively teach those classes because inevitably, they will prompt a wide variety of challenges unique to the local situation.

This discussion returns to focal points of the literature review in situating the findings of this study in the current context of teacher education, perceptions of diversity and teacher effectiveness, and an urge to dimensionalize diversity and appropriate pedagogical strategies. It begins by highlighting pedagogical strategies indicative of effective, culturally responsive educators (Ellerbrock et al. 2016). These recommendations correlate with many of the responses of participants in this study, for both face to face instruction and in the distance learning environment. Focus then turns to the importance of building relationships and the belief that the most effective educators do more than educate (Robinson & Lewis (2017). The theoretical framework for this study, self-efficacy, is then discussed as an indicator of teacher education program effectiveness and teacher effectiveness. The discussion concludes with a reflection on how this study both complicates and contributes to observations of teacher effectiveness and multidimensional challenges of diverse classrooms.

Educator Preparation for Different Types of Diversity

The first two research questions of this study focused on what secondary teachers and TEPs find to be the most effective pedagogical strategies for engaging diverse classrooms. A recurring theme was varying instruction and asset-based frameworks, essentially, using student experience and contexts to drive the content. This could be done through role-playing, inquiry-based learning, or other means that leverage the cultural and linguistic differences of students. In terms of varying instruction, both TEPs and teachers placed a priority on varying instruction and giving students multiple ways of interacting with material, an emphasis that is consistent with the literature (Ellerbrock et al. 2016; Lee & Picano 2013). Kulik and Lou (1991) determined that student gains were greatest when instructional materials are varied for different instructional groups, rather than using the same materials for all groups.

This idea was further complicated by the introduction of specific elements of diversity: culture, readiness and economics. Economic diversity drew responses advocating for more institutional and community support, as opposed to pedagogical strategies. Adequate technological access was key, and because of the adjustment to the online environment, one in three schools are keeping distance learning as an option going forward (Kaufman et al. 2021). This connects back to what Emma and a couple other participants mentioned in terms of some of the new adaptations of distance learning being lessons to learn from and having permanence beyond the distance learning period prompted by the global pandemic of Covid-19. However, in terms of cultural and readiness diversity, both TEPs and teachers prescribed practices that reflect the science of teaching and the art of teaching, indicating that it is equally important for educators to know their content, methods for delivery and assessment, as well as the relational aspect of teaching. This idea was succinctly analogized by Aracely who said, “It's like a diet. You don't want to just eat the same thing all the time, right?” She and others would mention the importance of being receptive, leveraging student differences and giving students chances to interact with material in as many ways as possible, like visuals, role-playing and inquiry-based learning, all strategies that the literature recognizes as effective for engaging diverse groups of students (Ellerbrock et al. 2016; Shin & Koh 2009; Lee & Picano 2013).

Building Relationships with Students

Perhaps the most impassioned recommendation was the value of building strong relationships with students. Emma, Patricia and a few other participants commented on the lack of interest and motivation coming in part because of a lack of communication with students, or the demonstration of concern or care for them. Jessica said, “The relationship building is still really key. No matter if you're in person, online, hybrid, whatever, the relationship building, I

think is the difference maker. Whether you're in person or online, you have to build those relationships, or it just doesn't happen.” She was referring to the absence of student success and motivation if teachers are not intentional with building relationships. Both groups of participants noted the difficulties of building relationships online. Emma recalled the difficulties of such but said that it was key to be intentional with creating meaningful interactions and opportunities to check in with students and get to know them. She and the rest of participants expressed the deeply rooted connection between student-teacher relationships, and positive student outcomes, especially during distance learning given the isolationist nature of the online environment and inability to see and interact with others in way that educators have grown accustomed to; this corresponds with literature demonstrating clear connections between stronger student-teacher relationships and student achievement (Martin & Dowson 2009; Murray & Zvoch 2011).

This focus on relationship building underscores a greater need to equip teachers with the confidence and strategies to engage with students in ways that are personal, reliable and reciprocal. Several participants noted relying on communication with students to provide constant evaluation of their abilities, readiness and access, and as a result, built stronger relationships through that constant contact. It was Cheruvu (2017) who studied teachers' conceptions of their ability to leverage knowledge of diverse learners into a meaningful curriculum. It was this same study that indicated that pre-service teachers were able to develop teaching goals that were related to different students' ability levels, but less able to transform those goals into specific strategies, materials, and assessments; additionally, teachers had acquired basic abilities but had lesser knowledge in applying more complex tasks and asking complex questions of their students (Cheruvu 2017, Rahman et al. 2017). The literature and

findings both suggest a need to research practical strategies for not only identifying diverse learners, but also applying that knowledge in creating rigorous content.

Self-Efficacy and Teacher Effectiveness

Part of the conversation of resilience during this distance learning period has been a story of confidence in oneself and self-efficacy. Distance learning facilitated a different set of priorities for many teachers; as both groups of participants would indicate, it made clear early on what mattered and what did not, so for most, maintaining contact with students, retaining high levels of engagement, and getting students excited about learning were key factors in distinguishing between effective and ineffective teaching during this time. Figure 5.1 represents the components of self-efficacy that lead to specific outcomes. For example, given the unprecedented nature of distance learning, performance accomplishment would be a difficult element of efficacy to leverage for informing future behaviors being that none of the participants--or any teachers for that matter--had past experience in distance learning and the required technology of learning. The same goes for vicarious experiences, none of the participants had other experiences to draw from, to learn from or to build upon. It was only after months of school passing that best and worst practices, and effective and ineffective technology were shared among educators.

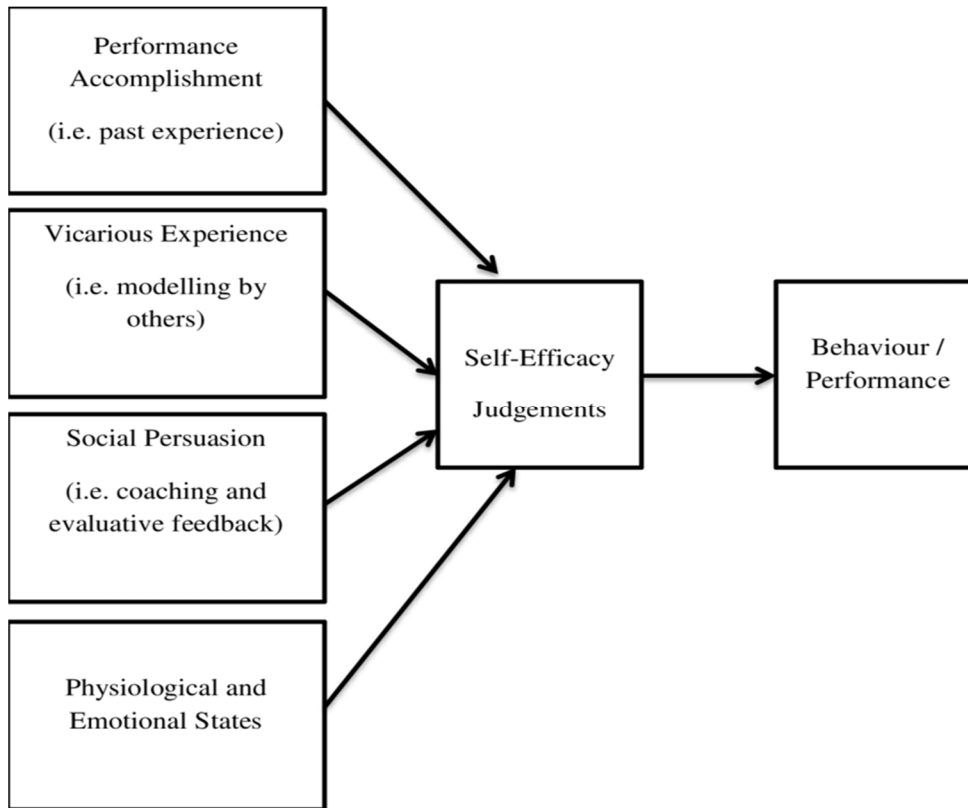


Figure 5.1 Components of self-efficacy theory leading to expanded practice & policy implications.

However, teachers and TEPs that solicited feedback from their students, like the examples that Emma, Aracely and Elizabeth offered, were then able to utilize the feedback from students, adapt their ideas and work towards greater learning outcomes. TEPs and teachers said that they built connections over this type of communication and honesty, and this translated to student engagement, students demonstrating resilience because they recognized that their teachers were being flexible, and ultimately, educators learned that they know their students and their circumstances best. So even if there were objectives at the beginning of the year, through constant communication and evaluation with students, teachers and TEPs would reassess the

practicality of those objectives or the means for achieving them, and instead, use their agency to make learning realistic, feasible and meaningful. This corresponds with self-efficacy scores because although every participant reported high feelings of inadequacy, uncertainty or disappointment early on in distance learning, both TEPS and teacher scored strongly in perceptions of their ability to reach difficult students, students lacking support or motivation, and students affected by adverse conditions. However, the adverse conditions that distance learning brought on set in motion a chain of challenges that teachers had to adapt to, and only through a virtual environment. As such, teachers continued to experience an increased sense of responsibility as it related to job performance while still being required to produce at the same level with relation to student performance. Consequently, teachers experienced an increase in personal stress and lowered feelings of self-worth, having a negative impact on service delivery to children and overall job performance, which as literature shows has a connection to student achievement (Eberle 2011; Freeman 2008; Shahzad & Naureen 2017). Findings here point towards necessary research exploring additional methods of institutional support, as well as teacher education preparation to equip educators with skill sets and autonomous confidence to take the reins of their instructional circumstance and quickly attune their teaching to meet the needs of their students as learning conditions permit.

Complications and Contributions

Findings in this study suggest two potentialities. The first is that educators conceive of effective or rich pedagogical strategies as different from effective strategies to engage diverse classrooms. However, teachers and TEPs consistently leaned on the phrase that “good teaching is good teaching”, and this is supported by consistent overlap of several pedagogical strategies, even when differentiated by specific dimensions of diversity, and content area.

The second potentiality is the move into the future. It is evident that so much can be learned--and is still being learned--from the experiences of teachers and students during distance learning. There are insights to be gleaned from this period of education, and that reveal new dimensions of diversity that pose noteworthy challenges to educators and suggest formal training or teacher education. Although there were six teachers and eight TEPs that participated, their anecdotes represent experiences of so many other teachers and TEPs across the country in response to a global pandemic that impacted education in every school and in every home, and which introduced new technologies, and the open embrace of flexibility and adaptability.

Implications and Recommendations

Implications and recommendations are combined in this section. Where appropriate, the recommendations are directed at decision-makers and those with the power to implement changes to the field experience to improve teacher preparation regarding diversity and in light of new challenges that distance learning raises.

Policy

Although many of the findings in this study necessitate changes inside of teacher credential and education programs, some of the responses from participants highlight institutional or community deficits that have significant and long lasting effects if left unaddressed. As such, this study recommends policy change as it relates to the integration of technology, collaboration between TEPs and teachers--specifically secondary teachers for this study-- and practitioner tracking.

Integrating technology. For the last two decades especially, school districts have pushed teachers to integrate technology into their instruction; of course, teachers' challenges arise in finding technology that fits their classroom and that is appropriate for their students. However, distance learning illuminated an issue regarding access. It seems that it has become common nature to assign work that necessitates certain technologies (smart phones, laptops, adequate internet access) and as such, students that are without some or all of these resources, struggle mightily to keep up with work, and this creates a larger margin of achievement between the haves and have nots. During distance learning, teachers and TEPs shared accounts of their institutions and districts recruiting and mobilizing adequate technological resources because of the sole reliance of technology for student education. But, if education always leans on technology, then technological assessments that research the degree of access to the internet, devices and technological literacy should not be tools used only during times of crises. Educators and institutions should always be evaluating the technological equity of their students and mobilizing necessary resources and funds to meet those needs, because it is wildly unfair to penalize students for inadequate access that falls out of their control and presumes that students have proportional and equal economic circumstances. Additionally, educators from both groups mentioned the learning curve with technology. Distance learning thrust everyone into the digital space and forced educators to become technologically savvy. However, technological proficiency did not take place overnight, and in some cases, teachers expressed a frustration with limited opportunities to learn how to appropriately implement technology in their classrooms. If there is a responsibility on part of the educator to meaningfully integrate technology in the classroom, then they must be provided with ongoing tech support and professional development opportunities that address big picture technology integration, as well as content specific gold

nuggets that can be used more carefully and purposefully in the classroom. CJUHSD provided one model early in the first semester of distance learning where content specific instructional coaches were made available through the district and regularly hosted workshops where teachers could attend, receive personal instruction and feedback on digital strategies they found helpful and unhelpful, and get time to play around with potential technologies. Of course, opportunities like this are only feasible if the educator's time is considered first. So, these workshops generally fell on Mondays, which were non-student preparation days for teachers. Ordinarily, these events take place during prep periods which can already be packed with responsibilities and leave the teacher having to decide between new learning and tending to current duties.

Collaboration among TEP and Teachers. TEPs are consistently criticized for their theoretical pedagogy given their distance and time away from K-12 classrooms. In the same vein, teachers are often scrutinized for operating off of outdated or obsolete strategies and frameworks. The idea is clear that TEPs and teachers should always be in constant dialogue. Participants in this study noted that their favorite part of this process was the opportunity to engage with findings from their respective group, but even more so from the other group of peers in the second interview. This segment allowed reflection and a role-based conversation where teachers on the ground level with students could share their experiences with TEPs who offered research-based solutions, both being continually informed by what works in practice and sounds effective in theory.

Practitioner tracking. Working tandem with the previous policy recommendation, is a plausible solution maintaining ongoing communication with teachers once they begin their practitioner careers. Teacher education programs benefit from teachers coming back into teacher education classrooms and sharing the current, real-world challenges of students with pre-service

teachers. There should be a relationship between teachers and the institutions from which they came to leverage new knowledge and experiences and offer teaching candidates the opportunities they need to solicit feedback, ask questions, and role-play, a strategy that both TEPs and teachers said students need in order to understand the other, as Bill put it. So, institutions should make a concerted effort--through their outreach and alumni programs--to invite teachers back to contribute new, valuable and relevant knowledge.

Practice

Technology of learning and flexibility. Teachers in this group had a unique set of challenges ahead of them when they began distance learning. They were tasked with learning and uploading all of their material to a new grading and learning management system. Through trial and error, communication with students and the reduction of some of their plans, teachers were able to find meaningful technology that fit their class needs. More than that, both teachers and TEPs softened the parameters of their assignments which allowed students to submit work in a myriad of ways; some used Canvas studio, others relied on discussion boards, and of course Canvas external tools provided them a wider tool belt to pull from. The value in their technological exploration came in reprioritizing learning objectives and student access. This group focused on what students were able to communicate and less on how they were able to do so. Ordinarily, extenuating circumstances are the rare situations in which educators make exceptions to assignments, so if there is one key takeaway from their experiences, it is to reevaluate instructor goals and objectives, and as a result of that reflection, enact a flexibility that gives students multiple kinds of opportunities to engage with the content and demonstrate their knowledge, particularly in situations where social conditions lessen the feasibility of meeting certain assignment criteria.

Importance of building relationships. Another point of emphasis driven home by both TEPs and secondary teachers, was the value of building relationships. Although the literature supports this idea (Roehlkepartain et al. 2017; Juvonen et al. 2019), several of the participants noted that only in the absence of physical contact and communication did they truly understand how pivotal relationships are to personal wellness, motivation and ultimately, resilience. Patricia captured the efficacy of relationship building precisely:

It doesn't matter who those kids are sitting in front of you, but when you can build that rapport with your students and they know that you are there because you care about them and you care about their education, being able to have great student-teacher relationships, I think that is what makes a successful teacher from the get-go.

Traditionally, relationship building is key to establishing trust and fostering an environment where students feel part of the learning community; but if distance learning revealed anything, it is that intentionality is critical when creating opportunities to get to know students and utilizing that information in transformative ways that extend beyond first and second day icebreaker activities. When teachers focus more on students and their wellbeing, they learn so much more about what is going with them, what they value, and it is precisely at that point that that information can drive content, which was a goal shared by a handful of the participants. Richard offered this note on his unique perspective coming from teaching in Korea, to what it means to teach in the United States:

A lot of times as a teacher, when I went into this profession, teaching in another country as well, we're literally just people who delivered content. Like, especially when I was in Korea, I wouldn't ever have to exercise anything remotely close to being a parent in that

version. And over here, it requires just a little bit more. That's one of the things that I learned from the online situation is that sometimes kids need that structure and need that support, not just that I'm a person that has knowledge that gets delivered but we're a lot more than just that. We're advocates.

Research

Self-efficacy and decision-making during crises. A valuable area of study would be the exploration of educators' perceptions of their ability to influence decision making during the 18 months of distance learning. It was a time of crises and overwhelmingly, participants mentioned uncertainty and isolation, and not solely as the result of being stuck behind a screen. Exploration into self-efficacy and effective teaching is two-fold. Teachers, primarily, indicated a voicelessness; fortunately, they would use their autonomy to adapt their classrooms to fit the needs of their students, so first, research into the confidence that educators felt in freely communicating their thoughts and being able to weigh in on crucial decisions, may illuminate a gap that exist between the realities of K-12 classrooms and day to day instruction, and the top-down perspective that administrations and districts are criticized as leaning on.

Secondly, social studies teacher Patricia shared her beliefs that part of being a good teacher is being born with the intangibles that grant educators the ability to do the best job. Some teachers and TEPs felt that for many, this is a calling, and that educators come into the profession with a certain set of skills that make them more effective in the job. Others, like Elizabeth, remarked that the most optimal characteristics can be built upon or developed through teacher training. So secondly, research into what traits facilitate the best possible student outcomes is of high importance. The most reported characteristics among TEP participants were

honesty, empathy and open-mindedness. But no participants discussed how one acquires any of these traits or even if their programs make it their mission to instill these qualities in pre-service candidates. When asked what TEPs felt were the most critical aspects of their role, they expressed that building empathetic, honest and openminded teachers was of utmost importance. Without concrete evidence of their pre-service candidates' outcomes and the outcomes of their students, it is difficult to take these qualities as anything more than potentialities. However, there is value in examining what teacher credential programs can do to focus in on these specific characteristics, as well as how they correlate with building stronger relationships with students and stronger feelings of self-efficacy. For example, there is the chance that more honest, empathetic and openminded teachers establish stronger relationships with students, especially diverse groups of students. In return, those relationships might facilitate greater academic outcomes, or socioemotional development for students. It may also be valuable to explore whether all teachers feel that these characteristics serve teachers best, or if those reported traits vary according to differences in the educator, whether it be racial, experience or even content area.

TEP and field supervisor responsibilities. Tom, a TEP at UCLA, shared an interesting structure that his teacher education program utilizes. He acts as a foundational instructor and simultaneously, as a field supervisor. He is constantly in K-12 classrooms, on campuses, connecting with his own pre-service teachers and those neighboring. Ordinarily, duties of site supervisors and teacher educators are separated, the former is often filled by an entirely different pool of retired educators. When asked how he feels about having such heavy responsibilities, he commented that though he does burn quite a bit of gas in commuting, he cannot see teacher education functioning in any other way. It would be valuable to research the practicality of

programs like this. How are responsibilities determined? How are funds allocated? How is the workload distributed in a way that does not overburden the TEP, but still provides meaningful 1:1 feedback and communication for the student? Programs like Tom's could be a window into addressing the issue of dialogue between TEPs and teachers mentioned earlier in the Policy section, fostering an organic feedback loop between theory and practice, teachers and TEPs.

Limitations

As is the case with all research, this study was subject to threats to credibility and validity. I made every effort to mitigate these limitations and reflect on my own biases during the research process. As an educator with only seven years of experience in a public high school and impassioned opinions about diversity and pedagogy, it was important to be as neutral as possible during interviews while still extrapolating as much value as possible from participants and within survey data. Additionally, though interviews were rich in value, they were free of evidence about whether their adaptations actually improved student outcomes, so readers are left to estimate the scale and applicability of these strategies in their individual contexts. In this section I acknowledge the limitations to this study and efforts to compensate for any bias.

A Note on the Data

As will be explained more in the Limitations, the TEPs and secondary teachers who participated in this research had different regional demographic profiles than what might be more representative of the population of California. Additionally, the organization and mobilization of resources may have differed from other districts and institutions who moved slower or quicker in their response to distance learning needs. As such, their recommendations were appropriate to the resources they had available to them at the time and should be taken as illustrative examples

of pedagogical strategies that can be used, not as evidence of prescribed practice for all educators.

Differences in recruitment

This study relied on participation from six secondary teachers which all belong to the Chaffey Joint Union High School District. However, the eight TEPs came from teacher credential programs throughout southern California, with the exception of one, Mason, who works at an institution in central California. The differences in participant profiles present a tradeoff of a regional scope with a more robust southern section approach. Another issue with recruitment came in making sure that both interviews took place within a three-month window, so as to not gain the insights of challenges or solutions that became apparent with the beginning of a new school year, after the 18-month distance learning period. Although this was the case, a couple of participants had been teaching summer school during the process of interviews and consequently, may have had experiences inaccessible by the rest of participants.

Survey Sample size and Response Rate

A significant limitation of this study is the response rate for the survey and resulting sample size. Although the survey was given to all 14 participants, all six teachers and only six of the eight TEPs completed the survey. Consequently, it is difficult to determine if data--especially responses with strong and weak standard deviation and variance--would have been impacted significantly. Additionally, all the participants in this study work in California, with the majority coming from southern California, so that may limit the generalizability outside of the state. Overall, 14 participants are a relatively small sample size and findings here are more illustrative of potential approaches than cemented practice.

Instrumentation

Although analyses of Bandura's Self-efficacy survey reveal strong consistencies among TEPs and teachers, the reliability of the instrument is weakened by misunderstandings of time. Some of the data appears to have a weak connection or appear contradictory with what was shared during interviews, and this may be the result of participants answering the survey questions in light of distance learning as opposed to regular face-to-face instruction which was the original intent of the survey.

Selection Bias

Recruitment of participants for interviews relied primarily on emails; those were sent directly to participants and in some cases, distributed again by department chairs of their respective institutions. In either case, the responses of participants were likely influenced by their motivations to join the study. However, upon finishing the second interview, every participant remarked that they had forgotten about the incentive noted in the original consent form, which suggests a genuine interest in contributing their experiences to the research. But it is also reasonable to infer that participants were motivated to join the study because of the spectacle of distance learning and the opportunity to share insights from an emotionally complex period.

Conclusions

This study was made possible through cooperation from university-based teacher credentialing programs that allowed access to teacher education professionals and by Chaffey Joint Union High School District that consented to the use of their high school teachers. Several participants quickly expressed interest in the scope of the research and asked to be sent findings

upon completion. Despite volumes upon volumes of research into teacher effectiveness and diversity, these concepts are further complicated by a unique focus on cultural, economic and readiness diversity, and the landscape-shifting global pandemic of Covid-19, which prompted an 18-month period of distance learning. Though interviews reveal overlapping beliefs of effective pedagogical strategies for engaging these dimensions of diversity-- and diverse classrooms as a whole--the world is still learning about the degree of learning-loss, and the social, emotional and behavioral implications of distance learning. At the same time, teachers have newly restored empathy, flexibility and understanding into the complex lives of students, what motivates them, what they value and how that can be leveraged to work towards optimal outcomes. Both TEPs and teachers acknowledged the need to be creative, vary instruction and connect with students, but it is the hope that this study sheds light on what educators can do ordinarily, and in moments of crises, to engage students, *meet them where they are*, as Emma noted, and continue to promote innovation and dialogue to expand the catalogue of effective pedagogy, for every classroom and every student.

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Appendix A

BANDURA'S INSTRUMENT TEACHER SELF-EFFICACY SCALE

This questionnaire is designed to help us gain a better understanding of the kinds of things that create difficulties for teachers in their school activities. Please indicate your opinions about each of the statements below by circling the appropriate number. Your answers will be kept strictly confidential and will not be identified by name. Use the following scale:

1	2	3	4	5	6	7	8	9
Not at all		Very Little		Some Influence		Quite a Bit		A Great Deal

Q1 Efficacy to Influence Decision making

1. How much can you influence the decisions that are made in the school?
2. How much can you express your views freely on important school matters?

Q2 Efficacy to Influence School Resources

3. How much can you do to get the instructional materials and equipment you need?

Q3 Instructional Self-Efficacy

4. How much can you do to influence the class sizes in your school?
5. How much can you do to get through to the most difficult students?
6. How much can you do to promote learning when there is lack of support from the home?
7. How much can you do to keep students on task on difficult assignments?
8. How much can you do to increase students' memory of what they have been taught in previous lessons?
9. How much can you do to motivate students who show low interest in schoolwork?
10. How much can you do to get students to work together?
11. How much can you do to overcome the influence of adverse community conditions on students' learning?
12. How much can you do to get children to do their homework?

Q4 Disciplinary Self-Efficacy

13. How much can you do to get children to follow classroom rules?
14. How much can you do to control disruptive behavior in the classroom?
15. How much can you do to prevent problem behavior on the school grounds?

Q5 Efficacy to Enlist Parental Involvement

16. How much can you do to get parents to become involved in school activities?
17. How much can you assist parents in helping their children do well in school?
18. How much can you do to make parents feel comfortable coming to school?

Q6 Efficacy to Enlist Community Involvement

19. How much can you do to get community groups involved in working with the schools?
20. How much can you do to get churches involved in working with the school?
21. How much can you do to get businesses involved in working with the school?
22. How much can you do to get local colleges and universities involved in working with the school?

Q7 Efficacy to Create a Positive School Climate

23. How much can you do to make the school a safe place?
24. How much can you do to make students enjoy coming to school?
25. How much can you do to get students to trust teachers?
26. How much can you help other teachers with their teaching skills?
27. How much can you do to enhance collaboration between teachers and the administration to make the school run effectively?
28. How much can you do to reduce school dropout?
29. How much can you do to reduce school absenteeism?
30. How much can you do to get students to believe they can do well in schoolwork?

Appendix B

Interview Protocol #1

Teachers:

1. What subject matter do you teach?
2. How do you ethnically identify?
3. How many years of teaching experience do you have?
4. Where did you complete your teacher education?
5. What grade level(s) do you work with?
6. What three factors (words) come to mind when considering the diversity of your classroom?
7. One of the tasks that teachers face today is educating a very diverse classroom. What's an example of a strategy that you did not know when you began your career that has been really successful for you in terms of engaging and teaching diverse classrooms?
8. Can you describe any examples of strategies you learned in teacher education that have worked or have been helpful to you in terms of engaging and teaching diverse classrooms?
9. Can you describe any examples of strategies you learned in teacher education that have not worked or have been disappointing to you in terms of engaging and teaching diverse classrooms?
10. How do you feel your perceptions of diversity have evolved over the last 5-10 years?
11. Can you think of any instances that you feel have contributed to changes in your perception of diversity?

12. What have your experiences taught you about what is most valuable for the preparation of incoming teachers and the challenges posed by diverse classrooms?
13. Think of a student, current or past: what were the most salient aspects of their identity that contributed to who they were as a whole student?
14. Is there anything else that you feel teacher education professionals or future teachers should know about teaching diverse classrooms from your experience?

Teacher Education Professionals:

1. How do you ethnically identify?
2. What course(s) do you traditionally teach?
3. How many years of teaching in teacher education have you completed?
4. How many years of teaching experience do you have in total?
5. Where did you complete your teacher education?
6. What three factors (words) come to mind when considering the diversity of your classroom?
7. What do you believe are the most critical aspects in your role as a teacher education professional?
8. One of the tasks that teachers face today is educating a very diverse classroom. What do you believe are the key elements of a successful teacher education experience for pre-service teachers working in diverse classrooms?
9. Can you describe some of the experiences or knowledge that you attribute to these identified elements of a successful teacher education experience in consideration of diverse classrooms?

10. What skills, lessons or experiences do you believe were most influential from your own teacher education in terms of engaging and teaching diverse classrooms?
11. What have your experiences taught you about what is most valuable for the preparation of incoming teachers and the challenges posed by diverse classrooms?
12. Think of a student, current or past: what were the most salient aspects of their identity that contributed to who they were as a whole student?
13. How do you feel your perceptions of diversity have evolved over the last 5-10 years?
14. Can you think of any instances that you feel have contributed to changes in your perception of diversity?
15. Is there anything else that you feel teacher education professionals or future teachers should know about teaching diverse classrooms from your experience?

Appendix C

Interview Protocol #2

Teachers: In addition to discussing some of the findings from my first round of interviews, we will pivot to a more specific conversation concerning what we've learned during this Covid-19 distance learning & teaching setting.

1. Do you have any experience with any of the strategies discussed in the first round of interviews?
2. How would you describe your teaching experience during this distance learning setting?
3. How much do you believe it is within your power to overcome the influence of adverse conditions on students' learning (Bandura 1997)?
4. Do you have any experience implementing any of these strategies during distance learning, if so, can you describe how that has gone for you?
5. Can you describe new challenges that distance learning has raised in terms of managing the diversity of your classroom?
6. What are you learning from the online situation?
7. How has distance learning changed your thinking about diverse learners?
8. What strategies do you recall from your teacher education that has been particularly useful in teaching diverse classrooms during this online setting?
9. Can you describe any strategies from your teacher education that have been particularly disappointing in teaching diverse classrooms during this online setting?
10. What have your distance learning experiences taught you about what is most valuable for the preparation of incoming teachers and the challenges posed by diverse classrooms?

11. I now want to shift to a specific focus on three dimensions of diversity this research explores. What challenges have you observed in students suffering from economic disadvantages in distance learning?
 - a. What teaching techniques and strategies have and have not been successful for you in responding to such challenges?
12. What cultural challenges (language, learning style, etc.) have you observed in students during distance learning?
 - a. What teaching techniques and strategies have and have not been successful for you in responding to such challenges?
13. What challenges have you faced with diverse readiness and preparation levels of students during distance learning?
 - a. What teaching techniques and strategies have and have not been successful for you in responding to such challenges?
14. Is there anything else that you feel teacher education professionals or future teachers should know about teaching diverse classrooms from your experience?

Teacher Education Professionals: In addition to discussing some of the findings from my first round of interviews, we will pivot to a more specific conversation concerning what we've learned during this Covid-19 distance learning & teaching setting.

1. Do you have any experience with any of the strategies discussed in the first round of interviews?
2. How would you describe your teaching experience during this distance learning setting and what you have shared with pre-service teachers?

3. How much do you believe it is within your power to overcome the influence of adverse conditions on students' learning (Bandura 1997)?
4. Can you describe new challenges that distance learning has raised in terms of managing the diversity of your classroom?
 - a. Do you believe these are the same challenges for new teachers? Why or why not?
5. What are you learning from the online situation?
6. How has distance learning changed your thinking about diverse learners?
7. I now want to pivot to a specific emphasis on the three dimensions of diversity in question: cultural, readiness and economic. What strategies do you feel are particularly useful in responding to the challenges of cultural diversity (language, learning styles, etc.) during distance learning?
8. With every classroom full of students at varying levels of readiness, what strategies do you feel are particularly useful in responding to the challenges of readiness and preparation diversity during distance learning?
9. What strategies do you feel are particularly useful in responding to the challenges of students suffering from economic hardships during distance learning?
10. Can you describe any traditional strategies that have been particularly disappointing in teaching diverse classrooms during this online setting, for you or your pre-service teachers?
11. What would you do differently if you taught this course a year from now?
12. Is there anything else that you feel teacher education professionals or future teachers should know about teaching diverse classrooms from your experience in distance learning?

Appendix D

Claremont Graduate University
Consent to Act as a Research Subject
*Preparing Teachers & Teacher Education
Professionals for the Dimensions of Diversity*

You are being asked to participate in a research study. Before you give your consent to volunteer, it is important that you read the following information and ask as many questions as necessary to be sure you understand what you will be asked to do.

Investigators: The main person conducting the study is Rocky Blessey-Bragg, a Ph.D. candidate in education at Claremont Graduate University. The faculty advisor is Dr. Robert Klitgaard.

Purpose of the Study: The purpose of this study is to identify elements of pedagogy that secondary teachers and teacher education professionals believe are most effective in engaging and teaching diverse classrooms. This study will also explore how both groups engage and teach diversity and how their conception of it has evolved through the distance learning setting that Covid-19 has created.

Description of the Study: If you choose to participate you will be asked to take a 30 question-scaled survey about self-efficacy. It is estimated it will take no more than 20 minutes to take the survey including the time to read this consent form.

At the conclusion of the survey, you will also be invited to participate in **two** interviews about your experiences. You may only take the survey if you are able to participate in the interview(s). You will have the option of completing the interview over the phone, or via Zoom, or other similar internet methods.

What is Experimental in this Study: The only experimental aspect of this study is the gathering of information for the purpose of analysis.

Risks or Discomforts: Because the interview will ask about your experiences regarding teaching diverse classrooms and transferable knowledge from your teacher education, you might feel uncomfortable answering some of the questions. You may choose to stop the interview at any time. You may also skip any questions on the survey or interview you do not wish to answer.

Benefits of the Study: The main benefit is identifying the most effective practices secondary teachers use for teaching and engaging diverse classrooms and reported beliefs on effective strategies from teacher education professionals. Participants in this study might benefit from reflecting on their teaching experience and add new strategies or perspectives to their catalogue. I cannot guarantee, however, that you will receive any benefits from participating in this study.

Confidentiality: Survey responses will be collected using Qualtrics. The only identifying information collected is the IP address of the computer where the survey was taken. Because the

survey includes potentially sensitive questions, you may wish to take the survey in a private setting. It is also good practice to close the browser window when done and log off the computer.

You will have the option to provide your first and last name initials. If you choose to opt in for the matching comparison your responses will remain confidential. They will not be shared with anyone other than the researcher developing the survey. All survey responses will be kept in a password-protected Qualtrics account and will remain confidential. The content of the interviews will be available only to the principal investigator. The audio recording and transcripts will be kept in password-protected files and devices. The names of real people and places mentioned in the interview will be redacted or replaced by pseudonyms. You will be able to review the audio records and transcription at any time.

Incentives to Participate: At the conclusion of the 2nd interview, you will receive a \$50 Amazon gift card. Participants will receive their gift cards via email.

Voluntary Nature of Participation: Participation in this study is voluntary. Your choice of whether or not to participate will not influence your future relations with the university or your school site. If you decide to participate, you are free to withdraw your consent and to stop your participation at any time without penalty or loss of benefits to which you are allowed.

Questions about the Study: If you have any questions about the research, please ask. You may email me, Rocky Blessey-Bragg, at rocky.blessey-bragg@cgu.edu. If you have questions later about the research, you may contact me via email or at (909-277-0091).

Consent to Participate: The Claremont Graduate University Institutional Review Board has approved this consent form, as signified by the Board's stamp. The consent form must be reviewed annually and expires on the date indicated on the stamp.

Your signature below indicates that you have read the information in this document and have had a chance to ask any questions you have about the study. Your signature also indicates that you agree to be in the study and have been told that you can change your mind and withdraw your consent to participate at any time. You have been given a copy of this consent form. You have been told that by signing this consent form you are not giving up any of your legal rights.

Name of Participant (please print)

Signature of Participant

Date

Signature of Investigator

Date

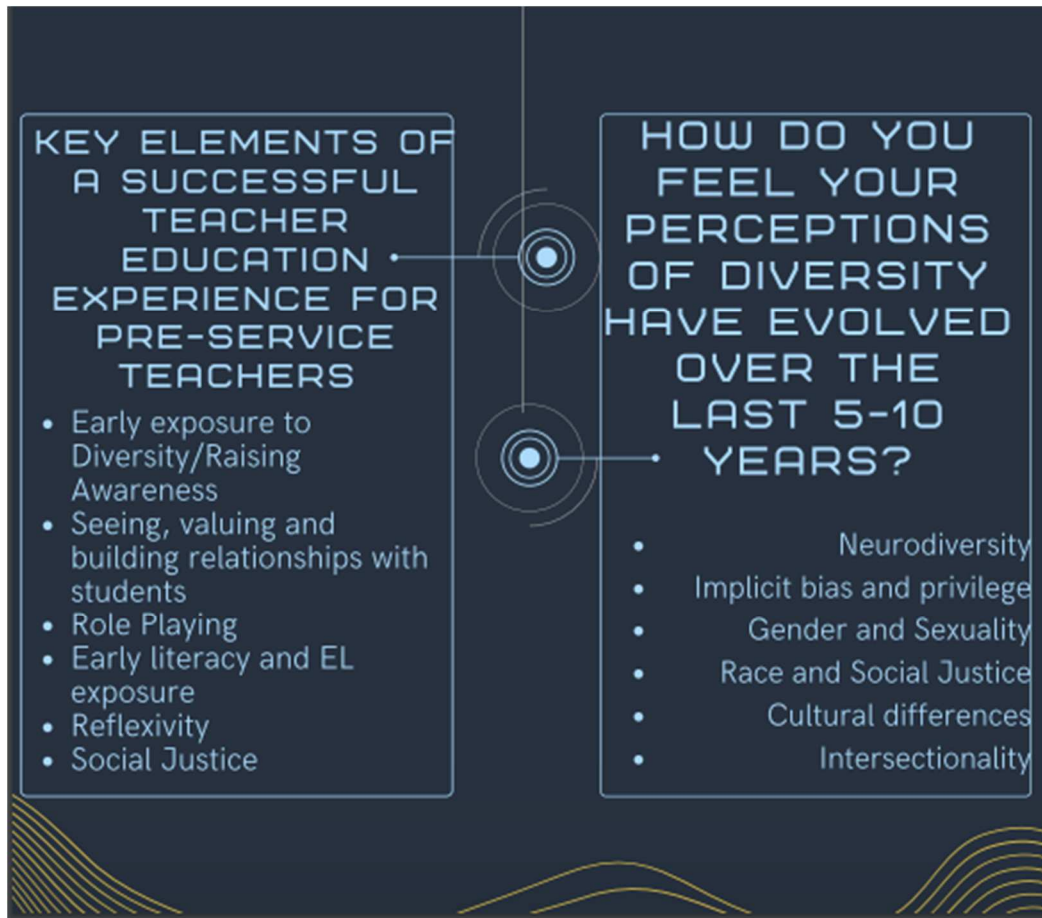
Appendix E

1st Round of TEP Findings
(Graphic used in 2nd Interview)



Appendix F

1st Round of TEP Findings (Graphic used in 2nd Interview)

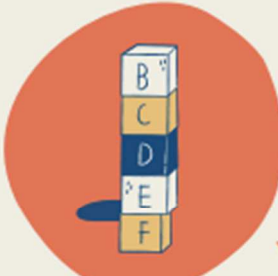


Appendix G

1st Round of Teacher Findings (Graphic used in 2nd Interview)

1st Round Teacher Findings

12 years
The fewest years of teaching experience among participants





What three factors (words) come to mind when considering the diversity of your classroom?

- Socioeconomic status
- Culture
- Racial
- LGBTQ
- Gender
- Ethnicity
- Different Foundational Knowledge
- Multiplicity of Learning Styles
- SPED
- High Achievers
- Unmotivated Students

What's an example of a strategy that you did not know when you began your career that has been really successful for you in terms of engaging and teaching diverse classrooms?

- Special consideration of language and assumed understanding
- The importance of visuals
- Learning the complexities of student identities
- The value of role playing with students
- The importance of varied instruction
- Value of heterogeneous grouping
- Differentiated Assessment (Authentic Assessment)
- Importance of relationship-building
- Inquiry Based Learning



Appendix H

1st Round of Teacher Findings (Graphic used in 2nd Interview)

Can you describe any examples of strategies you learned in teacher education that have worked or have been helpful to you in terms of engaging and teaching diverse classrooms?


- Differentiated Instruction
- Group Collaboration
- Awareness of Cultural and Linguistic differences
- Teacher Education was not helpful in any way
- Underestimation of all teaching strategies learned

Can you describe any examples of strategies you learned in teacher education that have not worked or have been disappointing to you in terms of engaging and teaching diverse classrooms?

- Word Walls/NEWSLA
- Constructivist teaching
- High Performer/Low Performer Pairing
- Direct Instruction/Powerpoint
- Saturation
- KWL Charts

How do you feel your perceptions of diversity have evolved over the last 5-10 years?

- Ethnic/Cultural/Racial Stratification (Just how different we are inside of broad labels)
- LGBTQ Awareness
- BLM Awareness and overt support
- Losing Diversity-evolving into homogenous populations
- Readiness



What have your experiences taught you about what is most valuable for the preparation of incoming teachers and the challenges posed by diverse classrooms?

- Classroom Management
- Communicating and demonstrating love for students
- Be authentic
- Be flexible
- Learn who your students are
- Find peer support