Culturally Responsive Teaching and Self-Efficacy: An Examination of the Perceived Preparation of Teachers in Implementing Culturally Responsive Pedagogical Practices

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ABSTRACT

This dissertation provides an examination of teachers' perceived levels of cultural responsiveness, mindset, and self-efficacy, as well as the perceived effectiveness of their teacher preparation programs in preparing them to teach in culturally and linguistically diverse classrooms. The study was framed within the context of inequities and achievement gaps faced by increasingly diverse student populations in the United States contrasted to a historically White and monolingual teaching population and how ensuring that pre-service teachers experience diverse curricula and are exposed to diverse field experience can be instrumental in ameliorating these conditions by challenging mindsets. The study also examined how years of service influenced teachers' perceived levels of cultural responsiveness, mindset, and self-efficacy and how professional development for classroom teachers addressing cultural diversity could be instrumental in closing achievement gaps. The survey consisted of a modified instrument based on the *Common Metrics Transition to Teaching Survey* (NExT, 2016), specific questions about growth mindset based on the *Theories of Intelligence (Others Form)* scale created by Dweck and colleagues (Dweck, 2000), and self-efficacy questions based on the *Teachers' Sense of Efficacy Scales (TSES)* short-form survey, which was developed by Tschannen-Moran and Woolfolk Hoy (2001). Results indicated that teachers with diverse curricula and field experiences reported higher cultural responsiveness and self-efficacy. However, classroom teachers with more than six years of experience reported lower cultural responsiveness and self-efficacy levels, which supports the need for continued education and professional development opportunities for teachers addressing cultural-sustaining practices to increase teacher efficacy. Reflections, discussions, and implications for future research and actions are discussed.

Keywords: cultural responsiveness, growth mindset, self-efficacy, teacher education

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CHAPTER I: INTRODUCTION

In the United States, culturally responsive pedagogy, culturally relevant pedagogy, and critical race theory are at the forefront of the educational debate. Of particular relevance and interest is how these theories impact the field of education. At its core, the mission of culturally responsive pedagogy is promoting student achievement by looking at the individual's educational institutions served through a lens that ensures that all students, regardless of their cultural differences and languages, are prepared to successfully take their place as citizens of a global society.

While American society continues to become increasingly diverse, the faces within the field of education continue to be mainly White, female, and monolingual (Hattie, 2009). According to the Pew Research Center, by the fall of 2014, minorities represented 51% of public school students enrolled in pre-K through 8th grade and 48% of public school students enrolled in grades 9 through 12 (Krogstad & Fry, 2014). As of 2021, there had been an increase of 4% of minority students enrolled in public schools in the United States. The National Center for Education Statistics (NCES) reported that by the fall of 2021, approximately 55% of public school students enrolled in grades pre-K through 12th were self-identified minority students (National Center for Education Statistics, 2021). While the ethnic and racial tapestry represented in public school classrooms continues to increasingly diversify, public school teachers in the United States, both at the elementary and high school levels, are overall less diverse than their students (Schaeffer, 2021). According to the National Center for Education Statistics (NCES), during the 2017-2018 school year, roughly 79% of teachers working in public schools identified as White, about 9% of teachers identified as Hispanic or Latino, approximately 7% identified as Black, and approximately 2% identified as Asian; less than 2% of public school teachers

identified as Native American or Pacific Islander (National Center for Education Statistics, 2020; Hess, 2022). Although all students can benefit from an inclusive curriculum where they can see themselves represented, this is particularly important for those students living in urban, minority, and marginalized communities as it can impact student achievement.

The need to ensure that teachers can meet the demands of multicultural classrooms is not only important but also necessary. While most teachers recognize how multiculturalism influences and impacts their classrooms, researchers have consistently found that not all teachers have had multicultural exposure during their teacher preparation programs (Kim & Connely, 2019). Teachers need to be aware of how their personal bias, implicit and explicit, affects their teaching and perceptions. Moreover, they need to be aware of how their biases can be perpetuated by looking at some student populations through a deficit lens that can influence educational policy (Carales & López, 2020).

According to the National Council for Accreditation of Teacher Education (NCATE), accredited institutions providing teacher education programs must commit to preparing teachers for a diverse community of students (National Council for Accreditation of Teacher Education, 2008). As such, teacher preparation programs in the United States must provide preservice teachers with meaningful field experiences in diverse teaching environments (National Council for Accreditation of Teacher Education, 2008; Kim et al., 2011). Researchers agree that teacher preparation programs must ensure preservice teachers understand and develop equitable and socially just practices within their classrooms and learning communities (Bazemore-Bertrand & Porcher, 2020). However, preservice and novice teachers need to understand that their challenges will not be limited to only navigating multicultural classrooms but also engaging with the members of the communities in which they teach (Stiglitz, 2012).

Previous research on teacher preparation programs has confirmed the importance of preservice teachers being able to analyze the importance of race, culture, and ethnicity and how these factors influence their students' learning experiences (Acqua & Commins, 2013). Other researchers have focused on the importance of students being able to see themselves represented, not only in their curriculum but also by those providing instruction, and how these factors influence student achievement (House-Niamke & Sato, 2019). While there is ample evidence of the great need for preservice teachers to learn how to create and foster inclusive learning environments, there appears to be a disconnect with what happens once preservice teachers are novice teachers with their own classrooms.

This study was intended to provide a snapshot of how novice teachers navigate the challenges of multicultural classrooms and their perceptions of how their teacher preparation programs and field experiences readied them for these challenges.

Problem Statement

In the United States, public school teachers in elementary and high school settings are less racially and ethnically diverse than their students (Good, 2022). According to the National Center for Education Statistics (NCES), during the 2017-2018 school year, approximately 79% of teachers in public schools identified as White, 9% of teachers identified as Hispanic, 7% of teachers identified as Black, and less than 2% of the teacher population identified as either Native American or Pacific Islander (Good, 2022; Hess, 2022; National Center for Education Statistics, 2020). In contrast, the racial and ethnic diversity among students has continued to increase. During the 2018-2019 school year, approximately 53% of public school students in the United States identified as non-White (Schaeffer, 2021). However, as the diversity of students within public school classrooms increases, for teachers to effectively teach multicultural student

populations, they need to be aware of their own biases and have an understanding of the specific needs of the student populations and communities where they teach, which are competencies that take time to develop (Alismail, 2016). Thus, teacher preparation programs must provide preservice teachers with the necessary tools and meaningful field experiences so they can teach from a position of cultural responsiveness instead of a deficit mindset, as their attitudes, beliefs, and perceptions are constructed by their experiences and communities, which are often different from the communities they serve (Bazemore-Bertrand & Porcher, 2020; Espinoza, 2022).

Purpose of Study

In the United States, approximately half of new teachers leave the profession during their first five years, with nearly a third of those choosing to leave the profession permanently for multiple reasons (National Association of Secondary School Principals [NASSP], 2020; Graham, 2022; McCray-Davis, 2022). While some teachers will leave in pursuit of higher-paying jobs, an overwhelming majority will leave due to not being prepared to meet the needs of the populations they teach (García & Weiss, 2019). In response to the nationwide teacher shortage and the increased need for qualified teaching professionals who are able to apply culturally proficient pedagogical practices that will ensure the achievement of all students, the purpose of this quantitative study was to examine the perceptions of novice teachers on their preparedness for the challenges they face in the classroom. As part of this study, participating teachers will evaluate the perceived effectiveness of their teacher preparation program and field experiences in fostering their abilities to interact with and teach multicultural student populations.

Research Questions

1. What are the perceived levels of teachers' culturally responsive practices?
2. What are the perceived levels of teachers' self-efficacy?

3. What are the teachers' levels of growth mindset?
4. Is there a relationship between the teacher's perceived level of cultural responsiveness and self-efficacy?
5. Is there a relationship between the teachers' perceived levels of cultural responsiveness and growth mindset?
6. Is there a relationship between a growth mindset and self-efficacy?
7. Is there a relationship between the teachers' perception of culturally responsive pedagogy and their previous field experiences and classwork?

Methodology

This quantitative study aims to understand how novice teachers perceive the efficacy of their teacher preparation program in preparing them to work with diverse populations and how their readiness to work successfully with diverse learners changes over time. This study also assesses whether developing a growth mindset allows novice teachers to evolve the skills necessary to enact culturally responsive pedagogical practices that will result in sustaining instruction for all students and interrupt deficit mindsets and thinking, and teacher self-efficacy. The research study took place in urban-like, suburban, and rural school districts in three neighboring counties supported by the Midwestern Intermediate Unit IV (MIU IV) in Western Pennsylvania. The schools involved experienced high rates of mobility in the same student population due to moving in and out of the districts because of their close proximity. The study focused on novice year one and year two teaching populations ranging from kindergarten through twelfth grade in participating school districts. The survey was strictly voluntary and was sent to all teachers at the participating school districts with the permission of the districts' superintendents and building administrators and with the assistance of personnel from the

Midwestern Intermediate Unit IV (MIU IV). Surveys were delivered using the confidential SurveyMonkey platform. I collected and analyzed all data using SPSS for Survey Data Analysis.

Significance of the Study

The ability to educate all students by providing them with equitable learning opportunities is imperative to their success. In the United States, the majority of teachers do not reflect the racial or ethnic backgrounds of the populations they teach. Although the country has become increasingly diverse, the field of education has continued to be seen through the lens of the dominant culture. As such, there is a great need for teachers to have an understanding of how race, ethnicity, and cultural practice influence how students learn. Teachers also need to develop the ability and tools necessary to evaluate and dismantle personal biases in pursuing not only their students' success but theirs as well. Researching the perception of novice teachers regarding their ability to meet the demands of teaching in multicultural classrooms will benefit the districts and schools these teachers serve by providing information on how to better support novice teachers and create meaningful professional development and mentoring opportunities as they enter the profession. This research will also benefit teacher preparation programs by highlighting the gaps where foundational courses related to culturally responsive pedagogical practices can be developed in conjunction with targeted field experiences for preservice teachers in order to ensure they are prepared for the challenges they will encounter in their future classrooms. It will also provide helpful data for designing and implementing meaningful professional development opportunities for practicing teachers.

Delimitations of the Study

This study is limited to novice teachers and focuses on teaching experiences in multicultural and multilinguistic classrooms. As such, the narrow sampling selection limited the number of participants in the study. A delimitation of the study is that the demographic composition of the schools available to me might not provide opportunities for novice teachers to teach in multicultural or multilinguistic classrooms. Another delimitation is that participant teachers received pedagogical training in different institutions, which can impact research outcomes. The purposive sampling procedure of this study decreases the generalizability of findings. As this study deals with a small sample of teachers in three neighboring counties in Western Pennsylvania, it cannot be said for certain that the conclusions drawn in this study are representative of all novice year one and year two teachers, as all teachers' experiences are different as they embark in the profession.

Definition of Terms

Culturally Responsive Pedagogy - Pedagogical practices grounded in cultural understandings, experiences, and ways of knowing the world (Ladson-Billings, 2001, p. 202). For Gay (2018), it is the use of culture, prior experiences, and knowledge by ethnically diverse students to construct learning in a relevant and effective way.

Deficit Mindset - A mental model that places individuals from perceived marginalized groups at a disadvantage by perpetuating stereotypes regarding the ability of these groups to have full membership in mainstream society (Martin et al., 2018).

Dominant Culture - The cultural beliefs, values, traditions, and practices of a dominant group in society. Cultural practices are considered normal, while other practices are marginalized, thus perpetuating social inequality.

Entity Mindset - Entity theory, or having a fixed mindset, postulates that intelligence is a fixed trait and cannot be changed (Dweck, 2000, p. 2).

Equity in Education – The use of equitable strategies and practices to create classroom environments to ensure that students from all racial, ethnic, and cultural backgrounds attain the knowledge and skills necessary to function effectively to help create and sustain a just and democratic society. Creating ways by which teachers can help students become reflective and active citizens of a public and democratic society (Banks, 2007, pp. 92-93).

Global Majority - Global Majority is a collective term used to refer to individuals who have been racialized as ethnic minorities and who, globally, represent approximately 80% of the world's population (Campbell-Stephens, 2020).

Growth Mindset - Incremental theory, or having a growth mindset, postulates that intelligence is a dynamic and malleable trait that can be increased through different experiences (Dweck, 2000, p. 3).

Multiculturalism - The presence and acknowledgment of cultural beliefs, values, traditions, and practices of multiple groups in society.

Novice Teachers - For the study, novice teachers refer to general education and special education teachers with one or two years of teaching experience.

Self-Efficacy – Confidence in the ability to complete a task or achieve a goal. Bandura (1997) defines self-efficacy as an individual's belief in his or her capacity to execute behaviors necessary to produce specific performance attainment.

Weaponized Education - The use of education to maintain the subordinate status of Blacks, Asians, Native Americans, and Hispanic groups regarding White society. Education was used as

a weapon to replace the "otherness" of their cultures with the culture of White Anglo-Saxon Protestantism (Spring, 2013, p. 26).

Organization of the Dissertation

The purpose of this study is to research the perceived readiness and preparedness of novice teachers to engage with and teach in multicultural classrooms. While the classrooms in the United States continue to become diverse, the field of education continues to be dominated by mainly White, female, and monolingual educators (Hattie, 2009). This study focuses on year one and year two novice teachers in small urban-like, suburban, and rural school districts in three neighboring counties in Western Pennsylvania. Understanding how novice teachers feel regarding their preparedness to teach multicultural populations is essential in order to support new and current teachers and to create opportunities for continued development and growth in the profession while ensuring student achievement.

In order to understand novice teacher readiness to teach in multicultural classrooms, there needs to be an acknowledgment of the differences they might encounter within these classrooms and how their mindset and perceived biases can influence their overall efficacy in the classroom. Chapter II presents the literature review and discusses the historical background of the purpose of education in the United States, particularly how education was used as a means to acculturate immigrant and marginalized communities. This chapter also establishes the theoretical framework for the research and explores how culturally responsive pedagogy and a growth mindset are key components of establishing and supporting equity in the classroom. Additional discussions on the importance of incorporating culturally responsive practices and meaningful field experiences for preservice teachers in their preparation programs are also discussed.

Chapter III describes this investigation's methodology, research design, and procedures. For this quantitative study, I used a five-part survey as the instrument of the investigation. The instrument was based on the Network for Excellence in Teaching (NExT) *Common Metrics Transition to Teaching Survey* and included questions regarding the respondents' level of cultural responsiveness and their teacher preparation program. I modified the instrument to include additional demographic questions, as well as growth mindset (Dweck, 2000) and self-efficacy-specific questions (Tschannen-Moran & Woolfolk Hoy, 2001).

The chapter also discusses the validity and reliability of the instrument as established by its creators, the Network for Excellence in Teaching (NExT), the Growth Mindset and Self-Efficacy Scales (Dweck, 2000; Tschannen-Moran & Woolfolk Hoy, 2001; NExT, 2016). Chosen variables, analytic strategy, and the selection of study participants are also examined in the chapter. In addition, I will talk about my role in the investigation, delimitation, limitations, and assumptions.

Chapter IV details how the data was collected with the assistance of representatives from the Midwestern Intermediate Unit IV (MIU IV), distributing the SurveyMonkey link to administrators and requesting them to share it with teachers in their districts. The chapter also examines how the data was analyzed using SPSS and the results of the analysis. In addition, the chapter will also provide a written and graphic summary of the results.

The chapter goes into descriptive statistics of the sample, as well as the results of Pearson Zero-Order Correlation Analysis and Quantile-Quantile Plot Analysis. Additionally, the chapter also discusses the results of Linear Regression analysis and the statistical significance of the model.

Chapter V is an interpretation and discussion of the results as they relate to the existing body of research related to the dissertation topic. The chapter summarizes the findings by research question and addresses the results of the linear regression progression analysis. The chapter also discusses the results and how they relate to teacher preparedness, professional development, cultural competency, and growth mindset. The chapter also outlines the study and provides suggestions for future research.

Summary

This chapter introduced the topic of novice teachers' perception regarding their ability and preparedness to enact culturally responsive practices in the classroom. Additionally, it outlined the relationship between a growth mindset, culturally responsive pedagogy, and equity in education. A statement of the problem, the purpose of the study, research questions, and the definition of terms were delineated. The chapter also presented an overview of the organization of the dissertation.

CHAPTER II: REVIEW OF THE LITERATURE

Introduction

The public education system needs to reframe its core principles in relation to the purpose of education in the United States and look at the population it serves with a broader lens. This new lens needs to ensure that all students are seen and valued and that their cultural differences and languages are celebrated as assets rather than mitigated and assimilated.

One of the most polarizing topics in current American society is the lack of cultural responsiveness in pedagogy. The students, particularly those living in urban, minority, and other marginalized communities, can benefit from the delivery of an inclusive curriculum that considers their cultural backgrounds, values, and where they can see themselves represented. This study seeks to research preservice teachers' self-reported mindsets and implicit biases regarding their understanding of how race, majority culture, demographics, and socioeconomic status all impact the educational outcomes of students in urban, rural, and suburban settings. Further discussions focus on the novice teachers' perceived ability to apply culturally responsive pedagogical practices when teaching multiple cultural and socioeconomic backgrounds in their classrooms and how implicit bias and a deficit viewpoint can affect the delivery of instruction to all students.

An area of importance in the preparation of preservice teachers is to educate them on how to be culturally responsive in their classrooms (Bazemore-Bertrand & Handsfield, 2019). This is particularly important because some preservice teachers only have a monocultural experience and view themselves as noncultural, nonethnic, and colorblind - just American (Banks, 2007; Hachfield et al., 2015). This view of being nonethnic and colorblind affects their ability to empathize and acknowledge their students' lived experiences.

According to Ladson-Billings (2021), multicultural education can be a tool for change by facilitating equality in education for students from diverse racial and ethnic groups. According to the Pew Research Center, by 2060, more than half of all Americans will belong to a minority group, particularly multi-racial, Asian, and Hispanic groups (Krogstad, 2019). Furthermore, the National Center for Education Statistics reported that for the 2017-2018 school year, approximately 79% of public school teachers were White, 9% were Hispanic, 7% were Black, 2% were Asian, 2% were of two or more races, and 1% were American Indian/Alaska Native; furthermore, teachers who identified as Pacific Islander made up less than one percent of total public school teachers (National Center for Education Statistics, 2020). Comparatively, in 2020-2021, it was reported that the percentage of White public school teachers increased to approximately 80%, while the percentages for Hispanic, Asian, two or more races, American Indian/Alaska Native, and Pacific Islander public school teachers remained unchanged. However, it was reported that the percentage of Black public school teachers decreased to 6% (National Center for Education Statistics, 2021).

Moreover, demographic changes showed that between 2009 and the fall of 2018, there was a decrease in enrollment of White students, with the population changing from 26.7 million to 23.8 million; similarly, the population of Black students decreased from 8.2 million to 7.7 million; in contrast, the population of Hispanic students increased from 11.0 million to 13.8 million (National Center for Education Statistics, 2023a). Also reported was the percentage of public school students in the United States who were English Language Learners (ELLs), which increased in 2018 to 5 million students (10.2%) from 4.5 million students (9.2%) in the fall of 2010 (National Center for Education Statistics, 2023b). This increase in diversity reflects the need to ensure preservice teachers' multicultural efficacy. According to Bazemore-Bertrand and

Porcher (2020), universities and teacher preparation programs must ensure that teacher candidates and novice teachers understand the concepts of culturally responsive pedagogy and have the necessary skills to provide equitable and inclusive teaching in their future classrooms.

Demographic shifts and increased sociocultural diversity in the United States have changed the composition of classrooms. According to Acquah et al. (2020), teacher candidates are not consistently exposed to multicultural environments, and it could be inferred that they might be unaware of the influence that their specific personal values regarding multicultural individuals have in their classrooms. To be effective in multicultural classrooms, teachers need to become aware of different cultural practices, histories, values, beliefs, and behaviors (Szcus et al., 2019).

According to Dweck (2000), individuals with entity mindsets believe that traits such as behavior and performance are fixed, which causes individuals to stereotype certain groups negatively. As reported by Carales and López (2020), this entity mindset often stems from the idea that certain societal groups lack certain qualities that prevent them from academic success. In contrast, having a growth mindset can provide teacher candidates and novice teachers who have limited exposure to other cultures with an enhanced understanding of multicultural individuals. It can also provide an understanding of opposing views or previously taught stereotypes about other ethnic or racial groups.

According to Zhao (2016), a widespread educational model is deficit-driven, where rewards are determined by standardized tests and curriculum. In this educational model, all children are deemed deficient and need specific knowledge in order to move on to the next level (Zhao, 2016). However, this model assumes that all students have the same ability to learn specific skills in the same manner without any regard for individual differences (Zhao, 2012).

Moreover, Carales and López (2020) believe that these deficit views have the power to impact the way minority students are regarded and treated within the educational system and influence educational policy.

Teacher candidates can gain a better understanding of multicultural individuals if they have a growth mindset and awareness of their biases. Kim and Connelly (2019) believe that preservice teachers recognize the impact of multiculturalism in the classroom. However, many teacher education programs continue to offer limited exposure to multiculturalism in both curriculum and available field experience sites, which would enhance the cultural competence of preservice teachers.

Theoretical Framework

Student achievement and student engagement are topics in constant review and discussion in the United States. Most scholars agree that in order to increase student achievement and engagement, it is important that students feel safe in their instructional environments and connected to those providing instruction and the materials being used. Additionally, those providing instruction must leave personal biases outside of the classroom and must believe in the potential for achievement of all students. In this theoretical framework section, theories pertaining to culturally responsive pedagogical practices and mindset will be explored, including Ladson-Billings' Culturally Responsive Pedagogy, Gay's Culturally Responsive Teaching, and Dweck's Mindset Theories.

Culturally Responsive Pedagogy

Students need to see themselves represented in the lessons and materials used to help "close achievement gaps between students of diverse backgrounds and their mainstream peers" (Au, 2009, p. 179). According to the National Assessment of Educational Progress (n.d.), gaps in

educational achievement occur when one group outperforms another, and the difference in average scores between the two groups is statistically significant. The achievement gap continues to show marginalized groups continuously falling behind when compared to their White counterparts. Although the achievement gap was lower for all groups of students in 2021, it continues to be disproportionately high for historically marginalized students (Lewis & Kuhfeld, 2021).

The debate over diversity and culturally inclusive pedagogical practices is at the forefront of educational discussions as the composition of student populations continues to become increasingly multicultural outside of large urban areas. According to Hattie (2009), in the United States, the average teacher is typically White, monolingual, female, and born and raised in a suburban or rural area. Moreover, White teachers make up approximately 79% of public school teachers in the United States and account for the majority of educators in 37 states (Schaeffer, 2021). In contrast, the National Center for Education Statistics (2020) projects that by 2029, minority students will make up approximately 57% of the nation's kindergarten through twelfth-grade students. According to researchers, the concept of race is a social construct where physical differences have been used arbitrarily to create a social hierarchy and ideology of White supremacy (Beard, 2019; Ladson-Billings, 2021). People have built social categories and organizations based on arbitrary genetic differences such as the color of skin and the texture of hair, thus creating artificial hierarchies based on these characteristics. These characteristics are further used to group people into stereotypes.

Teaching in multicultural classrooms brings challenges to both teachers and students, mainly when the teachers do not reflect the culture, race, or ethnicity of the student populations they teach. Teachers are challenged with providing students with a classroom experience that is

safe and fosters academic achievement through high standards for all students regardless of race, ethnicity, socioeconomic status, or language (Chouari, 2016). The influence of teachers' backgrounds and already-held beliefs and attitudes drives their practice; thus, it is important that they are exposed to other cultures and worldviews to understand how majority cultures and worldviews may affect minoritized populations (Edwards & Edwards, 2017). This is particularly relevant because the dominant worldview has saturated the cultural structures where students learn: the public school classroom (Tatum, 2017).

With the increasingly diverse student population within public schools in the United States, teachers' awareness of diversity is essential (Lakhwani, 2019). According to House-Niamke and Sato (2019), preservice teachers must be prepared for the reality of teaching in multicultural classrooms that are heavily scrutinized and evaluations that are based on student test scores. It is also important to note that diversity is not homogeneous in nature and that it encompasses different racial, linguistic, and cultural backgrounds as well as different disabilities or gifts (Petriwskyj, 2010). There is diversity within diverse groups, such as dialectal, racial, ethnic, and cultural differences. An example of this is Latino and Asian communities within the United States. Members of Asian or Latino communities come from various countries with different languages or dialects, ethnicities, and cultural practices. Preservice and veteran teachers need to be prepared to meet the pedagogical requirements of diverse populations to ensure their success in their classrooms (House-Niamke & Sato, 2019).

There are many definitions for Culturally Responsive Pedagogy. Ladson-Billings (2001) states that: "Culturally relevant pedagogy urges collective action grounded in cultural understandings, experiences and ways of knowing of the world" (p. 202). For Gay (2018), Culturally Responsive Pedagogy is referenced as Culturally Responsive Teaching - the use of

culture, prior experiences, and knowledge by ethnically diverse students to construct learning in a relevant and effective way for them. As expectations of equity have caused suspicion in schools due to our current political and social climate, educators and administrators need to approach education from the lens of a multicultural and mobile society with multiple points of view and values (House-Niamke & Sato, 2019; Tschannen-Moran, 2004).

While the majority of institutions of higher education's mission statements reference diversity, not all define diversity in terms of race or ethnicity (Adserias et al., 2017). In their experience as teacher educators, Adserias et al. (2017) believe that in order for preservice teachers to successfully teach in diverse classrooms, they need to be able to "define and describe" what race and ethnicity look like in practice (p. 73). In order to do this, preservice teachers need to be explicitly taught how to teach multicultural populations to interrupt bias in classrooms. Creating opportunities for preservice teachers to be exposed to urban and diverse communities as part of their field experiences allows them to enact culturally relevant pedagogical practices (Ladson-Billings, 1995).

According to Myers (2019), it is important to be able to relate content to students' experiences to help increase academic gains; however, there are arguments regarding the need for more discussions about what culturally relevant pedagogy looks like in classrooms (Sleeter, 2012). These experiences allow teachers to construct an empathetic perspective and new mindsets in the development of concrete knowledge and new schemas of understanding in order to use culturally responsive practices in their classrooms (Warren, 2018).

Growth Mindset

With the changing demographics in the United States, particularly in the field of education, closing the achievement gap in education has proven to be extremely difficult (Zhao,

2016). Most preservice teachers and current teachers have been exposed to preconceived notions regarding minorities and other ethnic communities. Research also shows that teachers' beliefs predict their classroom behavior and influence their perceptions, judgments, and practices (Nadelson et al., 2012). However, depending on the teachers' mindset, these perceptions can change.

According to Carol Dweck (2000), there are two theories of intelligence - entity and incremental theory. Entity theory, or having a fixed mindset, postulates that intelligence is a fixed trait and that it is limited, although new knowledge can be acquired. On the other hand, incremental theory, or having a growth mindset, postulates that intelligence is a dynamic and malleable trait that can be increased through different experiences (Dweck, 2000). A growth mindset is about learning: believing that abilities can improve over time and with effort and seeing knowledge as something malleable and incremental. These mindsets influence individuals' perceptions of intelligence, ability, self-esteem, and how others are judged or labeled.

When individuals function under a fixed or entity mindset, they believe that certain personal qualities or attributes are fixed, such as intelligence or talent. Having a fixed mindset regarding oneself and others directly affects how oneself and others' capabilities are perceived and do not "grant people the potential to grow" or change (Dweck, 2000, p. 88). According to Hochanadel and Finamore (2015), this fixed mindset further cements perceived negative stereotypes and how it affects individuals' behaviors toward specific groups; those who think intelligence or talent is fixed tend to be perceived as exerting less effort in developing necessary skills to succeed.

Dweck (2020) believes that individuals who function under a growth or incremental mindset believe that certain abilities can be developed through dedication and resilience. Individuals with incremental or growth mindsets believe that traits are malleable and can be developed throughout their lifetime. Teachers need to adopt this growth mindset to recognize their own biases and become agents of change, which entails using their knowledge and influence to change inequity in their classrooms.

An effect of having an entity mindset is making assumptions about others based on what is perceived as different - race, ethnicity, language, behavior, or ability (Dweck, 2020). According to Howard (2016), a growth mindset is necessary for understanding, decoding, and dismantling the dominance of the majority culture mentality and perceived privilege. Preservice and current teachers need to experience and develop growth in their vision of justice and equity as a process of systemic transformation and change and move away from a fixed mindset in order to help close the achievement gaps (O'Grady, 2014). Preservice teachers must be willing to expand beyond their immediate circles of comfort in their actions toward developing equitable classroom environments for all students (Howard, 2016).

According to Seaton (2018), teachers are not only expected to be experts in their content, but also on how to deliver this content in a way that will benefit all students and create success. As such, a teacher's own growth mindset is necessary for supporting students' development of strategies that will guide and support their learning (Seaton, 2018). Teachers do not practice in a vacuum, and for them to be successful, they need the support of school leaders and administrators. Fink and Markholt (2011) further examine the relevance and importance of school leaders in furthering teachers' professional learning and development in order to help close achievement gaps. As part of their research, they explore what happens when teachers

leave teacher-training programs and embark in the profession. The authors dispel the concept that teachers are born and provide a clear picture that for teachers to be successful, mentoring and professional development beyond teacher preparation is crucial to the growth and success of the teacher and the students' success. They further extrapolate how "...background knowledge affects what one notices" (Fink & Markholt, 2011, p. 318). It is important that all preservice teachers have the opportunity to experience meaningful field experiences within diverse communities and have the opportunity to assess their ability to positively impact multicultural classrooms and, thus, ensure the best pedagogical practices that facilitate achievement for all learners.

Conclusion

Student achievement is affected by many external and internal factors, including the preparation of teachers to interact with diverse student populations. As such, teacher preparation programs must ensure that preservice teachers are exposed to meaningful learning and field experiences where preconceived notions of achievement can be challenged and reconstructed (Ladson-Billings, 1995). By gaining awareness of personal biases and preconceived notions of achievement, preservice teachers can develop a mindset where intelligence and ability are malleable and can be cultivated by experiences and resilience (Dweck, 2000).

Figure 1

Theoretical Framework

Review of Literature

Purpose of Education

In the United States, public education was and is a social institution. In its early inception, education was based on colonial frameworks that proposed Americans as European culture's heirs and ascertained the assimilation of the immigrant populations to preserve the cultural, linguistic, and religious practices of the already established White Anglo-Saxon Protestant (WASP) community (Howard, 2016). Education was seen as a passive endeavor where the teacher deposited knowledge through lectures to disseminate particular norms, customs, and ideologies to future citizens…[the] knowledge…was determined by the dominant power structure (Popa, 2016; Brown et al., 2017).

Using this framework, Horace Mann, Henry Barnard, and other thinkers established the Common School Movement. This common school translated into what is known as the American public school system. The main purpose of the American public education system as an institution was to become the primary facilitator of the Americanization of society and to create new American citizens for the benefit of the new republic as well as halt the drift toward a multicultural society (Spring, 2013; Iacob & Groza, 2019).

The term Americanization refers to the social and religious values upheld by White Anglo-Saxon Protestant men who were considered superior to those of indigenous peoples of Africa and the Americas, as these indigenous peoples of Africa and the Americas were considered racially inferior, uncivilized, and pagan (Spring, 2013). This mindset influenced subsequent educational models. By the end of the 1800s and the beginning of the 1900s, schools were similarly structured to factories (Braster & del Pozo Andrés, 2020). Teachers trained students to produce a product and follow the rules without any room for individual expression.

This educational model is similar to what Freire (2018) refers to as a "banking education model." This model focused on drills and practices where students memorize information to complete multiple-choice assessments with little room for the development of critical thinking and autonomy. This model deems students successful when they can draw from the deposited knowledge and reproduce the expectation rather than individualized results (Brown et al., 2017). Freire (2018) further describes this narrative teaching style as one where teachers are the providers of knowledge and deposit this knowledge through their instruction. It does not foster critical thinking or actual learning, as "knowledge emerges…through invention and re-invention…inquiry human beings pursue in the world, with the world, and each other" (Freire, 2018, p. 72). While many advances have been made in pedagogical practices, this banking educational model remains in place, particularly due to most state and federal laws mandating the administration of standardized tests (Szolowicz, 2020) and the relationship of these laws to schools' ratings and funding. According to Gilmore (2016), standardized testing is not a fair indicator of a student's overall success, and it further affects the outcomes for minority students by asking questions that a specific segment of test-takers might not be able to relate to in their experiences. In order to effectively change the current public education system in the United States, the current structure needs to change from what Paulo Freire (2018) calls narrative in character to communicative, where students and teachers work together to construct meaning.

According to Carpenter and Hugues (2011), the purpose of education is to serve society, whether it is the establishment and maintenance of economic efficiency, social equality, or democratic citizenship. Although no longer in colonial times, the purpose of education has not changed much, particularly regarding expectations of assimilation toward immigrants and minority groups (Stuteville & Johnson, 2016). The public education system continues to be

geared toward the acculturation and absorption of individuals into mainstream America through the use of a common language and the adoption of cultural norms by providing examples of what it is to be an American and a contributing member of society (Lash, 2018). Nieri (2012) refers to acculturation as a process of cultural change that occurs as individuals from a minority culture are influenced by individuals from a majority culture over periods of time, usually one generation. Public schools are one environment used to facilitate these encounters and experiences in order for students to integrate into mainstream society.

As Chomsky stated in an interview (Freire, 2018), teachers need to reject the notion that education is pouring water into a vessel and should instead favor engaging students in an active quest for understanding. Moving from the prescriptive narrative approach allows teachers to prepare students for a self-managed life. Freire (2018) states that teachers need not provide education through a deficit lens but move beyond archaic methods that paralyze thinking, innovation, and creativity and foster complacency. Teachers must set aside biases to facilitate students' ability to read the world before they can read the word (Freire, 1985; Lafferty & Pang, 2014).

Bias in Education

Bias in itself is driven by social constructs, and in order to become aware of implicit biases, there needs to be a deep analysis of what is considered normative behaviors and actions and how they affect others. The cycle of bias can only be broken by gaining awareness and understanding of the biased behavior. Scholars distinguish the behaviors as either explicit or implicit (Greenwald & Krieger, 2006; Gibson et al., 2017; Starck et al., 2020). Bias, whether implicit or explicit, contributes to behavior, including judgments (Glock & Kleen, 2020).

According to Starck et al. (2020), explicit bias refers to an awareness of attitudes regarding a particular subject or subjects and the ability to alter said attitude strategically when needed. It is a conscious and well-thought-out response over which individuals have a certain amount of control and try to monitor the degree to which they reveal these biases to others (Gibson et al., 2017). Explicit bias often mirrors stereotypes and beliefs about specific groups that do not reflect the normative characteristics of mainstream society (Glock & Kleen, 2020).

In contrast, implicit bias is considered an automatic association toward a particular subject, where the teachers' understanding and attitudes toward particular stereotypes affect the teachers' unconscious actions and decisions (Staats, 2016). With implicit bias, individuals have limited awareness or control of their attitudes (Starck et al., 2020). According to Staats (2016), teachers understand their ability to influence students in their classrooms, and, as such, they need to be aware of implicit bias, which can influence and affect the culture of their classrooms. However, being that implicit bias operates outside conscious awareness; it can affect actions and outcomes by not aligning with actual intentions. This means that individuals who might claim unbiased intentions and attempt to behave toward all people impartially can continue to do so in a manner that reflects their implicit, rather than their explicit, biases.

Stereotypes and bias in the classroom. Most people, if not all, have some implicit bias related to racial or cultural stereotypes, which can be directly linked with a lack of personal awareness (Devine et al., 2011; Hirshberg et al., 2022). According to the United States Census Bureau, as early as 2040, White Americans will become a minority population in the United States (United States Census Bureau, 2020a). In addition, the majority of new teachers graduating and entering the profession continue to be white, female, and monolingual (Hattie, 2009). Although there is no standard approach to how teachers should be prepared, it is

important that efforts are made to attract diverse individuals into the profession. Additionally, all teachers need to be provided with the necessary instruction and meaningful field experiences in diverse communities and teaching environments prior to their graduation from teacher preparation programs. It is necessary to prepare "a predominantly White teaching force to work effectively with increasingly diverse student populations" (Howard, 2016, p. 4).

In their research about teacher bias and youth of color, Cherng (2017) discusses how the belief of teachers in their students' academic abilities is vital to their success. Minority students who have teachers that express confidence in their abilities benefit by having confidence in their ability to achieve academic expectations. Conversely, minority students with teachers that have biased or inaccurate perceptions of their abilities are negatively impacted and may have low expectations of their abilities to meet academic expectations.

According to Bristol and Martin-Fernandez (2019), every student can benefit from being educated by minority teachers in their classroom. For minority students, the opportunity to receive instruction from minority teachers is reflected in greater classroom engagement, increased academic achievement, and cross-cultural interactions that can dispel negative stereotypes and biases (Bristol & Martin-Fernandez, 2019). In the United States, approximately 80% of classroom teachers are White; in contrast, many of these teachers will be coming to diverse and multicultural classroom environments serving majority-minority student populations (Starck et al., 2020). In contrast, teachers of color represent approximately 20% of the teaching population, with Black teachers making up 7% of teachers (Szucs et al., 2019). However, Williams (2018) indicates that in the United States, teachers are increasingly leaving the profession altogether. Often, teachers are placed in multiracial classrooms and are expected to conduct themselves in ways that are incongruent with their cultural and social experiences and

worldviews (Nieto, 1999; Vavrus, 2010). According to researchers, several White teachers have shared that they feel unprepared to teach students of color and address some of their specific needs (Kim & Connelly, 2019; Alhanachi et al., 2021; Bazemore-Bertrand & Porcher, 2020).

According to Hattie (2009), teachers are aware of their preconceived ideas and biases, particularly when many educators work in low-performing urban or rural school settings with high turnover rates. In contrast, Lafferty and Pang (2014) discuss the lack of complexity in understanding multiculturalism and the uncritical assumptions regarding diversity and student achievement they have encountered among preservice and current teachers (p. 189). The importance of personal awareness in regard to bias is imperative to the well-being of students, and it is essential that educators listen to the perceptions others have of them as educators and of the populations they teach (Howard, 2016). It is important to understand how misperceptions, overreactions, and racial, ethnic, or linguistic discrimination can adversely affect student performance, discipline, and academic achievement (Legette et al., 2021).

Representation and bias. As of 2020, Latinos and Blacks represent the largest minority groups in the United States. Latinos represent 18.7% of the population, up 23% from 2010, and Blacks represent 12.1% of the population (United States Census Bureau, 2020b). Even though the National Education Association (n.d.) states that "every child has a basic right to a great public school education with a qualified and caring staff, including educators who look like them," a majority of teachers do not represent the race or ethnicity of the students and communities where they teach. According to Lash (2018), this lack of representation can be problematic because many teachers may not have awareness of their implicit biases due to not sharing the same social and cultural experiences as their students. This becomes further problematic because the mainstream curriculum material might only acknowledge contributions

from the majority culture rather than also acknowledge the contribution of minority groups, thereby providing educators with limited resources by which to create inclusive lessons (Lash, 2018). It can also continue to affect the overrepresentation of minority students within special education programs (Farkas et al., 2020). According to Othman (2018), limited or no understanding of cultural practices and communication cues also influences the overrepresentation and over-referral of minority students for special education intervention. Hirshberg et al. (2022) state that teacher bias could affect not only teachers' professional practice but also the achievement of their students and available academic opportunities. According to researchers, although enrollment in STEM and Advanced Placement (A.P.) programs has continued to increase nationally, minority students continue to be largely underrepresented in these programs (Ndura et al., 2003; Ramsay-Jordan, 2020). According to Van Sickle et al. (2020), the President's Council of Advisors on Science and Technology (PCAST) reported in 2012 that only 19.7% of Black, Hispanic, and Native American students obtained STEM degrees. In contrast, White and Asian students represented 72.4% of students who obtained STEM degrees in the same year.

According to Spring (2013), the use of standardized curricula prevalent in the public schools of the United States and its use of standardized testing not only advocates for schools to teach a uniform American culture but also ensures that a single culture is represented in the classroom (Spring, 2013, p. 142). Already established biases can affect how teachers interact with minority student populations and cause difficulties in communication due to home languages and cultural practices that do not align with mainstream American practices and values (Banks, 2007). This can single out students for unnecessary services or ignore students' need for services.

Deficit Thinking and Mindset

According to Martin et al. (2018), a deficit mindset places individuals from perceived marginalized groups at a disadvantage by perpetuating stereotypes regarding the ability of these groups to have full membership in mainstream society. This mindset further puts the burden of inequalities on a specific person or group of people rather than on society (Martin et al., 2018). Carales and López (2020) further refer to deficit thinking and mindset as a perception by others of something that a specific group or person lacks, such as motivation. It also blames individuals or groups for not being exposed to what is considered normative cultural knowledge or skills (Carales & López, 2020). Bazemore-Bertrand and Porcher (2020) believe that to interrupt deficit mindsets, preservice teachers need to be directly taught how to be socially just and teach from a position of cultural responsiveness. Moreover, they need to offer all students, regardless of color, ethnicity, socioeconomic background, or language, culturally sustaining instruction.

Teachers viewing students through a deficit lens tend to make the assumption that students from marginalized communities are lacking and negatively different from other peers. Macias (2013) further explains that having a constant focus on the deficits has caused the expectation of these deficiencies. Perpetuating deficit lenses are not only assumptions but also have the power to affect teachers' practices and can cause harm (Carales & López, 2020).

Overrepresentation and Underrepresentation

Over the last century, there have been monumental changes in the American public education system. Unfortunately, there continues to be a sense of disconnect between the federal government and state agencies overseeing education. Society continues to rely on public schools to develop American citizens who will integrate and conform to previously established rules and

conditions. However, the blueprint for this citizen is homogeneous in nature and has not evolved with demographic changes in the United States.

The disparity established by the influx of minority families to urban areas and White families leaving their urban communities to form more insular suburban enclaves changed urban areas' racial and ethnic landscape, particularly school districts. This contributed to inequality, which can be divided into four significant variables: social-demographic variables, general education variables, related resources inequity variables, and variables associated with the special education process (Skiba et al., 2008).

Living in poverty is associated with lower achievement and academic success (Kim, 2020). According to researchers, children that grow up in low-income families suffer from poor prenatal development, which can cause vision impairments, low birth weight, exposure to lead, and other environmental risks (Farkas & Morgan, 2018). However, it is essential to note that many assumptions, such as motivation and perceived normative cultural knowledge about race and socio-economic positions, also disadvantage minority students when making special education referrals.

One of the most relevant changes made to the American public education system was the reversal of racial segregation laws in schools through the *Brown v. Board of Education* in 1954, which outlawed racial segregation in public schools. Prior to the desegregation of schools, the education goal for minority populations, particularly the Black population, was to educate them in the industrial habits necessary for the lower-ranked positions they would hold in society (Skiba et al., 2008; Spring, 2013). This monumental societal shift allowed further changes, such as the Elementary and Secondary Education Act (ESEA) of 1965 and its subsequent reauthorization, the No Child Left Behind Act (NCLB), in 2001. The No Child Left Behind Act

(NCLB) of 2001 was further reauthorized and is now known as the Every Student Succeed Act (ESSA) of 2015. All these acts were signed into law to ensure equal opportunity for all students to receive adequate education to succeed. In 1975, the Education for All Handicapped Children Act (EHA), later known as the Individuals with Disabilities Education Act (IDEA), further ensured that students with disabilities were provided with an education tailored to their individualized needs.

All these changes to the public education system have benefited millions of students; however, disparities continue to occur in treating minority students in the United States. According to Spring (2013), NCLB has furthered inequalities in education by making English the language of schooling and promoting a single cultural curriculum by adopting the Common Core Standards. The disproportionate representation of minority students in special education programs is alarming, with minority students often being identified as having emotional and intellectual disabilities (Morgan, 2020). According to Othman (2018), the diagnoses of some of these disabilities are based on professional judgment achieved through normative social and behavioral models of the majority culture. A teacher who is not familiar with the normative behavioral and social practices of a minority group may perceive behaviors as not normative and make a referral for services; this can explain the higher incidence of minority students being referred for special education (Othman, 2018). Furthermore, Morgan et al. (2018) indicate that minority parents of children with disabilities have reported experiencing poor access to care due to language and cultural barriers. The authors further suggest that there is a need for culturally sensitive screenings and evaluations to ensure the correct interventions are established to guarantee the success of all learners (Morgan et al., 2018).

For example, in 2015, the United States Department of Education indicated that African American students ages 6 to 18 were over two times more likely to receive services for emotional disturbances and intellectual disabilities when compared to other students from racial or ethnic backgrounds (Glock & Kleen, 2020; Morgan, 2020). This over-referral and overrepresentation also affect the ability of some minority students to receive additional support and services they need.

In contrast, the enrollment of Black and Hispanic students in gifted or advanced programs is disproportionately low when compared to the average enrollment of White and Asian American students, as Hispanic and Black students represent 26% of students enrolled in gifted education programs and White and Asian students represent 70% of students enrolled in gifted programs (U.S. Department of Education, 2014; Crawford et al., 2020). This is especially troubling when compared to the overall enrollment of these groups within their schools being 40% and 55%, respectively (U.S. Department of Education Office for Civil Rights, 2023). According to the American Psychological Association (2012), this limited participation of Black and Hispanic students in gifted education programs is related to their overrepresentation in special education programs.

The achievement gap continues to widen by neglecting to include minority students in gifted programs (Borland, 2004; Ford, 2014). However, Erwin and Worrell (2012) mention how the participation of minority and other underrepresented students in gifted education or the narrowing of the achievement gap between minority and majority students has improved over the last two decades. Awareness of perceived biases and how they may influence views of minorities and other ethnic groups is important when engaging with students in order to better understand how particular behaviors and potential disabilities are displayed in various cultures (Milner &

Ford, 2007; Crawford et al., 2020). These variables directly affect the purpose of education in the United States and the delivery of equitable education for all students.

Equity in Education

Although the United States is equated with equality and opportunity, this does not mean that it is for everyone. According to Ladson-Billings (2021), race is one factor that affects academic achievement between White and students of color, with students of color scoring lower on standardized tests. Spring (2013) discusses how, historically, education has been weaponized in order to maintain the subordinate status of Blacks, Asians, Native Americans, and Hispanic groups regarding White society. Education was used as a weapon to replace the "otherness" of their cultures with the culture of White Anglo-Saxon Protestantism (Spring, 2013, p. 26). This persistent sense of "otherness," meaning not being part of the majority culture that many minority students experience, takes a toll both physically and emotionally (Tatum, 2017, p. 53). People are usually defined as others based on race, ethnicity, gender, religion, sexual orientation, socioeconomic status, age, and ability. It is necessary to understand all these identities and how groups can be systematically disadvantaged, especially regarding education.

This vision of racial supremacy creates inequalities and marginalization of minority communities (Ladson-Billings, 2021). According to Sanders et al. (2021), educational inequity is a real problem in the United States, with minority and ethnically diverse students experiencing structural disadvantages in their communities and schools. These inequities are often reflected in academic performance and achievement, such as high school graduation and enrollment, and can also determine enrollment in gifted and special education programs (Gregory et al., 2010). This problem stems from deficit thinking, by which students from historically marginalized and oppressed groups are held responsible for the inequalities they face (Patton & Museus, 2019).

Oftentimes, these disparities stem from what is considered membership in non-majority racial or ethnic groups or environments (Poon et al., 2016).

Teaching for equity ensures that all students have the tools they need to engage in their own education and succeed (Franco et al., 2011). It comes from the understanding that students come from all backgrounds and abilities and can be successful with the necessary support. Faircloth (2018) discusses how to foster equity and equality; students and families need to be treated with the same level of understanding and respect regardless of their race, ethnicity, socioeconomic status, language, or gender. It is important for preservice teachers to be able to understand the composition of their multicultural classrooms and how they need to be intentional about their commitment to developing the achievement of all students (Nasir, 2020).

According to Dewey (1923), schools are democratizing institutions, great equalizers, that allow citizens to partake equally and equitably in society. However, race, ethnicity, and citizenship are at the forefront of inequality in the United States. When the Declaration of Independence was signed, stating "all men are created equal," it referred to only White men (Spring, 2013, p. 7). This also determined who was eligible to become a citizen of the United States; this was highlighted by the Naturalization Act of 1790, which excluded anyone not White and considered Native Americans as domestic foreigners (Howard, 2016; Spring, 2013). The Naturalization Act of 1790 was used until the 1950s to deny citizenship to other immigrant groups in the United States. According to Tatum (2017), prejudice is the "preconceived judgment or opinion, usually based on limited information," and racism is "prejudice plus power" (Tatum, 2017, p. 85). Moreover, moving beyond the structural and psychological limitations imposed on groups, while possible, is not easily achieved (Tatum, 2017).

Even though segregation in schools has been illegal in the United States since 1954, school districts in communities of color, particularly in the Southern United States and urban areas, continue to see a lack of resources when compared to the resources available to more affluent and White school districts (Spring, 2013). Throughout the United States, individuals can see segregated communities, not by laws but by financial circumstances (Ladson-Billings, 2021). As wealthier, usually White families can move out of urban and rural areas, they leave behind struggling communities with struggling schools (Tatum, 2017). These urban schools that primarily serve minority students are increasingly underfunded when compared to more affluent suburban schools (Crawford et al., 2020). This, in turn, perpetuates a social system that maintains the privilege of some at the expense of others (Nasir, 2020).

According to Ushomirsky and Williams (2015), the Education Trust reported that nationally, districts that serve mainly minority students receive approximately 15% less funding per student than districts serving fewer minority students. These inequalities directly correlate to the achievement gap in educational outcomes among the different racial groups in the United States, with White and Asian students achieving at the top and Black and Hispanic students at the bottom (Nasir, 2020). Given these inequalities, students attending schools whose race, language, and values match the majority culture have better chances of successfully transitioning out of high school (Miller, 2010). Furthermore, while funding for schools in some states continues to be based on percentages achieved in standardized tests, these tests are designed with a particular ethnic and racial group as the population sample, White and monolingual, while most classrooms are racially mixed (Tatum, 2017).

Teacher Education and Curriculum

In the United States, the National Council for Accreditation of Teacher Education (NCATE) provides accreditation to institutions of higher learning preparing teachers. As such, it requires that teacher preparation programs provide teacher candidates with the necessary tools and skills to ensure that all students learn (National Council for Accreditation of Teacher Education, 2008, p. 1). Accredited institutions must guarantee that preservice teachers complete the necessary content, pedagogy, and professional knowledge and skills to work with all students. As classrooms become more diverse, there is an increased urgency to ensure teachers can work effectively with minority students (Moore et al., 2021). With the population of the United States becoming more linguistically, racially, ethnically, and culturally diverse, preservice teachers need to be prepared to work with diverse student populations. Culture largely impacts teaching and learning; therefore, preservice teachers must gain awareness and understanding of different cultural characteristics that they will encounter in their classrooms (Szucs et al., 2019).

In addition to receiving the tools and skills necessary to ensure the academic success of all students, the NCATE standards for preparing educators require that teacher preparation programs train preservice teachers on how to meaningfully assess all students, provide meaningful and diverse field experiences, and ensure that preservice teachers can apply diverse pedagogical practices (National Council for Accreditation of Teacher Education, 2008, p. 12). According to Ladson-Billings (2014), culturally relevant pedagogy entails teachers helping students achieve academic success while acknowledging their students' cultures and viewing social inequalities crucially. Furthermore, Gay (2003) states that teachers can help students succeed by designing instruction that uses their previous knowledge, experiences, and frames of

reference to be taken into consideration and valued. Ladson-Billings (2009) expands this by saying that teachers need to be able to bridge students' home and school lives in a way that makes the curriculum meaningful and valuable.

Due to this continued shift in demographics, preservice teachers must graduate from their programs prepared to implement culturally responsive teaching practices in their classrooms that can address the educational needs of their students (Moore et al., 2021). Preservice teachers need to recognize that in one single classroom, they could potentially encounter rural, suburban, immigrant, and minority students and will need to adapt materials used to deliver instruction in a way that will be comprehensible for all students in a respectful manner. Haberman and Post (1998) agree that it is vital for teachers to learn the dynamics of the communities in which they teach. It is also vital that they be aware of how their preconceived notions of familiar structures might not be the standard within the community they teach and adapt accordingly (Moore et al., 2021).

Preservice and practicing teachers can benefit from identifying their own biases. As previously mentioned, everyone has biases, but teachers can be instruments of change once these biases are recognized. Establishing open communications can facilitate eliminating these biases in an effort to construct inclusive and equitable learning environments. According to Gorski and Pothini (2018), teachers have the ability to offer students new options for how they interpret what they see and hear and establishing open communication channels within their classrooms is a powerful tool for the identification of biases and understanding cultural differences. It further allows teachers to understand how students live outside of the classroom - "the repression their families face, the inequities with which they contend and how they inform the way they experience us and school" (Gorski & Pothini, 2018, p. 5). Furthermore, it allows teachers to

establish relationships and learn about the students, families, and communities where they teach (Bazemore-Bertrand & Porcher, 2020). There is a need for increasing teachers' efficacy in teaching students different from themselves. However, there appears to be a lack of consensus regarding what constitutes culturally relevant pedagogy and what it looks like. In their study, Foster et al. (2020) found that experienced and preservice teachers struggled with the lack of guidance on how to implement culturally responsive pedagogical practices in their classrooms.

As teachers enter multicultural and multilingual classrooms, they need to be aware of and understand the skills necessary to fight against bias and inequity in the areas they can influence (Gorski & Pothini, 2018). According to Bazemore-Bertrand and Porcher (2020), teacher preparation programs have the responsibility to ensure that preservice teachers develop a deep understanding of equitable and socially just practices that will allow them to create a culturally responsive classroom environment. Unfortunately, race and institutionalized racism are significant factors that influence the interactions of students and teachers who are from different cultural and racial groups (Stiglitz, 2012). Some barriers in student and teacher interactions are partially due to the injustices that have been historically suffered by individuals of color, minority groups, and other marginalized communities at the hands of these institutions. Policing agencies have an even more difficult history among communities of color. Perhaps students have not directly suffered at the hands of institutions, but it is very probable that a family member has, and many communities have long memories and, oftentimes, fear is passed down through generations, causing tension and cultural discontinuity between the home and school (Howard, 2016).

According to Ladson-Billings (2001), teachers using culturally relevant pedagogy enacts actions within the classroom that are grounded in cultural understandings, experiences, and ways

of knowing the world of their students. Teacher preparation programs need to provide opportunities for preservice teachers to critically analyze the importance of race, culture, and ethnicity and how these important concepts mold students' learning experiences (Howard, 2003; Acqua & Commins, 2013; Ramsay-Jordan, 2020). In order to achieve this level of cultural awareness, it is important that preservice teachers are exposed to minority communities and different instructional environments. In particular, the biggest allies for teachers can be those members of the community who are aware of the limitations faced and work within the community to surpass these limitations.

It is also important that efforts are made by institutions to attract candidates to the profession that represent diverse populations (House-Niamke & Sato, 2019; Szcus et al., 2019). Representation is important and matters in classrooms all across the United States (House-Niamke & Sato, 2019). However, according to the National Center for Education Statistics, Black and Hispanic teachers collectively comprise approximately 12.6% of the total teacher population in the United States (National Center for Education Statistics, 2020). As Tatum (2017) discussed, other people are the mirror in which individuals see themselves, and research has shown that racially and ethnically diverse teachers are better able to relate to and meet the needs of the students they will encounter in multicultural classrooms (Nadelson et al., 2012; House-Niamke & Sato, 2019).

According to Tanase (2020), preservice and current teachers need to understand that their job has morphed in the 21st Century, moving from merely molding citizens to fit within the already established parameters of American society to preparing and nurturing students to be able to critically examine the community in which they live and work for social change and the betterment of society. Moreover, Banks (2007) states that the education of citizenship in the

United States has historically reinforced the majority mentality in society, and it is up to teachers to be the instruments of change in their classrooms by providing activities in which students can develop critical thinking and evaluative skills in ways that are accessible and meaningful to them.

According to research conducted by Ramsay-Jordan (2020), participants reported on the ongoing challenges of preservice teachers to enact critically responsive pedagogical practices and dismantle dominant cultural narratives. Various study participants continued to formulate racial and cultural assumptions about their students rooted in White cultural norms that lacked diverse perspectives and saw their students' differences as barriers and deficits (Ramsay-Jordan, 2020). These findings strongly suggest the need for teacher education programs to examine prospective teachers' perceptions regarding diverse populations via the examination of their own biases and how they can impact their ability to teach equitably (Nasir, 2016; Ramsay-Jordan, 2020).

Orfield and Frankenburg (2014) point out how generations of institutional racism have resulted in a disparity of available resources and educational opportunities in the United States, perpetuating the cycle of minority students living in poor communities being relegated to struggling schools. Teaching and learning are shaped by cultural influences, and preservice teachers need to be able to develop a cultural understanding of their students in order to minimize conflict and ensure the success of all students in their classrooms (Ladson-Billings, 2009; Gay, 2018).

According to the National Center for Education Statistics (NCES), as of 2020, there were 1.5 million faculty teaching at universities or colleges in the United States. Of these 1.5 million professors, 74% identified as White, 12% identified as Asian/Pacific Islander, 7% identified as

Black, 6% identified as Hispanic/Latino, less than 1% identified as Native American, and less than 1% identified as two or more races (National Center for Education Statistics, n.d.) their research, Bazemore-Bertrand and Porcher discuss how many higher learning institutions in the United States, particularly their teacher preparation programs, include terms such as diversity, equity, and social justice as part of their mission statements. However, while the use of these terms provides an inclusive vision, it is at times difficult for institutions to operationalize these terms (Bazemore-Bertrand & Porcher, 2020). Therefore, established dominant patterns and mindsets must be challenged and reconstructed in ways that provide avenues for action in diversity, inclusion, and social justice.

In the United States, the public school system is linked to the success of its citizens and the well-being of its society. However, much of the media coverage today focuses on criticism of the educational system in the United States. Moreover, there seems to be a disparity in the coverage of the historical steps teacher preparation programs and higher education institutions have taken and continue to take to prepare teachers to succeed in the Nation's classrooms.

Before the 1980s, much of the focus of teacher education programs was on foundational or methods courses geared toward the philosophical and theoretical background of education (Evans et al., 1991; Carmi & Tamir, 2022). This approach positioned prospective teachers to accept knowledge rather than construct knowledge (Yeh & Heng, 2022). Additionally, prospective teachers had field or clinical experiences toward the end of their preparation programs, and they were limited to a single assignment (Wilson, 2014).

Over the last thirty years, there has been increased awareness regarding the link between student success and teacher preparation (Carmi & Tamir, 2022). However, the focus of many teacher preparation programs has been to prepare prospective teachers to become intellectuals

and critical thinkers (Giroux, 2013). Since the mid-to-late 1980s, there has been a call to adopt a framework that allows students increased hands-on experiences and expanded field opportunities in addition to theoretical curricula, thus providing prospective teachers with a more in-depth bridge between theory and practice (Rust, 2019; Carmi & Tamir, 2022).

The approach of increased hands-on and field experience teaching methods, therefore, allows prospective teachers to experience theory in action, allowing extensive opportunities to be in contact with potentially diverse populations, reflect on their practice, collaborate with mentors, and gain practical experience (Carmi & Tamir, 2022). The 1990s saw an increase in alternative teacher preparation programs such as Teach for American (TFM) and The New Teacher Project (TNTP), which put college graduates, not necessarily in education, in the classrooms after having a brief summer teacher institute to provide these teachers with the foundations of education (Wilson, 2014). While these types of programs target high-needs areas, their approach to teaching and learning focuses on raising standards and style education as a technical matter (Yeh & Heng, 2022). Furthermore, there is no substantial data that supports their consideration of the cultural, emotional, and developmental needs of students in their implementation or success rate (Wilson, 2014). This is despite literature that asserts that to be successful, teachers need to be able to create and adapt curricula that match their students' needs, abilities, and interests in a society that is constantly evolving; thus, teachers need both extensive knowledge and practical application that allows them to be reflective practitioners (Wilson, 2014; Howell et al., 2016; Yeh & Heng, 2022).

Currently, teacher education programs are focusing on training models that balance knowledge and skills relevant to supporting students learning (Yeh & Heng, 2022). To this end, many programs are adopting frameworks that allow prospective teachers to experience various

diverse field experiences throughout their programs and support these prospective teachers to connect curriculum with practice in a reflective manner (Yeh & Heng, 2022). Moreover, teacher preparation programs are slowly increasing focus on providing prospective teachers with the necessary tools and experiences that will prepare them to effectively meet learners' social and emotional needs in diverse educational settings (Culp et al., 2023).

As previously mentioned, preservice and current teachers need to use a variety of resources and teaching techniques. According to Moore et al. (2021), teacher preparation programs need to provide preservice teachers with authentic opportunities that will prepare them with the necessary skills and abilities to teach and interact with diverse student populations. These opportunities need to further emphasize teaching practices that will support the learning of preservice teachers and foster a commitment to culturally responsive teaching (Moore et al., 2021). While teacher preparation programs are designed to adhere to traditional methodologies previously established by a homogeneous colonial society, it is imperative that antiquated social norms that perpetuate mindsets of inequity are eliminated and that the diversification of American society is accepted (Shields, 2019). As the pursuit to reframe normative social practices and new objectivity standards and measures are established, it is of importance that society stops viewing anything that deviates from those previously established standards as problematic and ineffective (Tintiangco-Cubales et al., 2020).

The days of rote memorization and drills are gone, as students learn best by doing and applying knowledge and skills (Bradberry & De Maio, 2019). Perhaps it is time to move from frameworks that emphasize fragmented concepts without opportunities for real-life application, better known as emphasizing the *how* at the expense of the *what* (Rata, 2019; Young, 2010). While collaborative activities are essential for all learners, these collaborative activities are

particularly important for communities of color, where collaborative problem-solving is essential and has a central role in their learning styles (Tanase, 2020).

Summary

The role of education in the United States has evolved through the centuries. It can also be agreed that education's purpose is to serve society's needs (Carpenter & Hugues, 2011). Teachers are essential in transforming the public education system as instruments of change. They are instrumental in moving education from a framework tasked with assimilating multiple groups into one American cultural identity under a common language to a system where diversity is considered an asset rather than a deficit. Teachers facilitate a system where students learn how to apply these cultural, racial, ethnic, and linguistic abilities to develop critical thinking and problem-solving skills for the betterment of society. However, while the composition of our student population continues to diversify, the teacher population continues to steadily remain the same: monolingual, White, middle-class, of European ancestry, and female (Banks, 2007).

Although the demographics in society have evolved, some 40% of schools in the United States have no teachers of color, reflecting that the frameworks established and used to educate the masses have remained stagnant (Howard, 2016). Similarly, higher education institutions also lack diversity within their ranks, as over 70 percent of professors identify as White (National Center for Education Statistics, n.d.). According to Bazemore-Bertrand and Porcher (2020), this lack of diversity broadens the gap between theory and practice regarding equity, diversity, and social justice practices. The public education system needs to reframe its core principles and look at the individuals it serves with a broader lens. A lens that ensures that all students are seen and

valued and that their cultural differences and languages are celebrated as assets rather than mitigated and assimilated.

CHAPTER III: METHODOLOGY

Introduction

The primary purpose of this study was to provide a snapshot of novice teachers' perceptions about how their teacher in education programs and field experiences prepared them to work in multicultural classrooms and their perceived effectiveness in interacting with and teaching diverse student populations. According to the National Association of Secondary School Principals (NASSP), approximately half of the new teachers entering the profession will leave the classroom within their first five years of employment in the education field (NASSP, 2020). One of the main reasons is not feeling prepared to meet the needs of the populations they teach (García & Weiss, 2019).

The methodology outlined for this study included research questions, variables, instrumentation, validity, reliability, participants, research design, participants, the role of the researcher, data collection, description of variables, analytic strategy, limitations, and summary.

Research Questions

1. What are the perceived levels of teachers' culturally responsive practices?
2. What are the perceived levels of teachers' self-efficacy?
3. What are the teachers' level of growth mindset?
4. Is there a relationship between the teacher's perceived level of cultural responsiveness and self-efficacy?
5. Is there a relationship between teachers' perceived levels of cultural responsiveness and growth mindset?
6. Is there a relationship between a growth mindset and self-efficacy?

7. Is there a relationship between novice teachers' perception of culturally responsive pedagogy and their previous field experiences and classwork?

Variables

Approximately half of the novice teachers in the United States leave the profession during their first five years, and nearly a third choose to leave the profession permanently (Graham, 2022; McCray-Davis, 2022; NASSP, 2020). Most teachers leave the profession due to unpreparedness to meet the needs of the populations they teach (García & Weiss, 2019). As part of this study, I seek to better understand novice teachers' perceptions of the effectiveness of their teacher preparation programs and field experiences in fostering the ability to teach and interact with diverse student populations.

I used seven questions to guide the study to examine teachers' perceived cultural responsiveness, growth mindset, and self-efficacy. The research questions also examined how teachers' preparation programs contributed to their perceived ability to enact culturally responsive practices. The proposition was that coursework related to diversity and equity, combined with field experiences that provide exposure to racially, ethnically, and linguistically diverse populations, increase teachers' understanding of the unique perspectives and needs of diverse individuals and provide the framework for an inclusive classroom community and the actualization of culturally relevant pedagogical practices. In addition, these diverse experiences and curricula increase teacher confidence in their abilities to teach all students, challenge deficit mindsets and implicit biases, and result in the professional success of teachers in the classroom. Table 1 summarizes the alignment of the research questions and survey instrument.

Table 1

Summary of Research Questions, Variable, and Instrument Items

Research Question	Variable	Instrument Items
1. What are the perceived levels of culturally responsive practices?	Cultural Responsiveness	Level of Cultural Responsiveness: Items 1-10 (10 items total)
2. How can exposure to diverse populations increase teacher self-efficacy?	Self-Efficacy	Level of Self-Efficacy: Items 1-8 (8 items total)
3. Is there a relationship between the novice teacher's perceived level of cultural responsiveness and self-efficacy?	Cultural Responsiveness and Self-Efficacy	Level of Cultural Responsiveness: Items 1-10 and Level of Self-Efficacy: Items 1-8 (18 items total)
4. How does having a growth mindset influence teachers' ability to teach and engage culturally diverse populations?	Growth Mindset	Level of Growth Mindset: Items 1-6 (6 items total)

Research Question	Variable	Instrument Items
5. Is there a relationship between a growth mindset and cultural responsiveness?	Growth Mindset and Cultural Responsiveness	Level of Growth Mindset: Items 1-6 and Level of Cultural Responsiveness: Items 1-10 (16 items total)
6. Is there a relationship between a growth mindset and self-efficacy?	Growth Mindset and Self-Efficacy	Level of Growth Mindset: Items 1-6 and Level of Self-Efficacy: Items 1-8 (14 items total)
7. What is the relationship between novice teachers' perception of culturally responsive pedagogy and their previous field experiences and classwork?	Program Preparation	Teacher Preparation Program: Items 1-7 (7 items total)

Instrumentation

I modified an instrument designed by the Network for Excellence in Teaching (NExT) *Common Metrics Transition to Teaching Survey* (NExT, 2016) to include specific questions about growth mindset and self-efficacy. Growth mindset questions were part of the *Theories of*

Intelligence (Others Form) scale created by Carol Dweck and her colleagues (Dweck, 2000). Self-efficacy questions were part of the *Teachers' Sense of Efficacy Scales (TSES)* short-form survey, which was developed by Megan Tschannen-Moran and Anita Woolfolk Hoy to provide a measure of teacher efficacy as it relates to instructional practices, student engagement, and classroom management (Tschannen-Moran & Woolfolk Hoy, 2001). I also aligned survey questions to the Pennsylvania Department of Education's Chapter 49 and Act 55 of 2022.

The *Common Metrics Transition to Teaching Survey* (NExT, 2016) was designed to analyze how well novice teachers feel prepared for teaching positions and related responsibilities. These instruments were created to identify what learning opportunities and practices teachers found effective in their teacher preparation programs and the extent to which they feel prepared for their teaching responsibilities, and their perception of the quality of the preparation received. Survey data was used to create professional development opportunities, as well as curriculum design updates in teacher preparation programs at 14 colleges and universities in Minnesota, North Dakota, and South Dakota (NExT, 2022). This instrument was appropriate for this study as it provides an in-depth questionnaire where participants need to analyze their preparation and capabilities in areas such as instruction and assessment, diversity, and inclusion. Permission was requested to use the instrument, and the author permitted me to use all or portions of the instruments for teacher subjects (See Appendix A).

The modified survey consisted of 41 total items. Ten items collected demographic data and 31 items were rated on a four-point Likert scale: "Agree," "Tend to Agree," "Tend to Disagree," and "Disagree." This particular Likert scale did not provide the participants with a neutral option. Thus, participants had to provide an opinion in alignment with Krosnick's (2002)

assumption that by not providing a neutral option, participants would be more thoughtful in their answers. The following were the demographic survey items:

- Gender Identity
- Race/Ethnicity
- How would you describe the community in which you live?
- What frequency of interaction have you had with individuals of other races, ethnicities, and cultures?
- Please describe your current employment situation
- Type of school in which you are employed
- School Geographical Location
- What grade levels are you teaching?
- How long have you been teaching?
- Type of teacher-preparation program

Validity

The Transition to Teaching Survey (TTS) was developed by NExT as a tool to collect data from novice teachers and inform common language for discussions and continuous teacher preparation program improvements in NExT-affiliated institutions (NExT, 2016). As such, in 2020, a factor analysis was conducted using data from TTS Part B, "Your teacher preparation (coursework and field/clinical experiences): What were you prepared to do?" and Part C, "Your school context: What is your school like?" Varimax rotation was used to compute factors and ensure clear delineations of factors (NExT, 2020).

The original researchers used the determinant, Kaiser-Meyer-Olkin (KMO), and Bartlett's test of sphericity to test assumptions and whether items were too similar for the

analysis to be an effective tool. The KMO ensured that enough items were predicted by each factor, and Bartlett's test of sphericity determined if the items were sufficiently correlated to conduct the factor analysis. The factor analysis indicated which items could be eliminated from each section based on how they aligned with the section's construct. Similar items were classified under different constructs measured as closely related (NExT, 2020).

There were six emerging factors under Part B, "Your teacher preparation (coursework and field/clinical experiences): What were you prepared to do?", which represented 67.11% of the variance. The Pearson's correlation ranged from 0.331 to 0.8433 Part B, Section 1; 0.304 to 0.858 for Part B, Section 2; 0.422 to 0.768 for Part B, Section 3; and 0.410 to 0.731 for Part B, Section 4 (NExT, 2020). There were two emerging factors under Part C, "Your school context: What is your school like?," which represented 57.1% of the variance. Part C had a bivariate Pearson's correlation ranging from 0.333 to 0.634 for Part C, Section 1; 0.244 to 0.572 for Part C, Section 2; and 0.407 to 0.558 for Part C, Section 3 (NExT, 2020). According to Field (2018), correlations between variables below 0.3 indicate a low correlation and the researcher should consider excluding them. Based on Pearson's correlation ranges, it was determined that items in Part B and Part C were sufficiently correlated and could be retained in each section; therefore, these contributed to the overall understanding of the construct.

The *Teachers' Sense of Efficacy Scales (TSES)* short-form was selected because the instrument was specifically designed to measure the sense of efficacy of teachers in areas that are critical to master: instructional strategies, classroom management, and student engagement (Tschannen-Moran & Woolfolk Hoy, 2001). The construct validity for the TSES short-form survey was assessed using the correlation of the measures with existing measures and was as follows: overall .90, efficacy in instructional strategies 0.86, efficacy in classroom management

0.86, and efficacy in student engagement 0.81 (Tschannen-Moran & Woolfolk Hoy, 2001). In addition to questions from the TSES short form, the instrument also included questions from the *Theories of Intelligence (Others Form)* scale developed by Carol Dweck and colleagues (1995). Dweck et al. (1995) confirmed that implicit theories about diverse human characteristics were statistically independent of one another; furthermore, validity addresses the alignment between test items and the content or subject area they are intended to assess (Dweck et al., 1995).

Reliability

The original researchers that developed the Transition to Teaching Survey (TTS) assessed reliability using Cronbach's alpha, and all coefficients were greater than 0.7. In Cronbach's alpha equation, a variance-covariance matrix is constructed of all items. The top half of the equation is the number of items squared and multiplied by the average covariance between items; the bottom half is the sum of all variances and covariances (Field, 2018). It is generally at minimum accepted to have a cut-off for Cronbach's alpha of 0.7 to 0.8 (Field, 2018).

The Cronbach's alpha for Part B, "Your teacher preparation (coursework and field/clinical experiences): What were you prepared to do?" was 0.978, and for Part C, "Your school context: What is your school like?" was 0.880 (NExT, 2020). This indicated good internal consistency for the established constructs. The results are further illustrated in Table 2.

Table 2

Reliability Analysis

Part	Scale	Cronbach's Alpha
B	Preparation for Teaching	0.978
	Instructional Practice	0.901
	Diverse Learners	0.944
	Learning Environment	0.933
	Professionalism	0.911
	Instructional Practice for Diverse Learners	0.931
	Technology and Resources	0.816
C	School Context	0.880
	School Environment	0.852
	Resources	0.796

Note. Adapted from *TTS 2020 Validity and Reliability Analysis* (NExT, 2020)

In the original study, questions from the *Theories of Intelligence (Others Form)* scale developed by Carol Dweck and colleagues (1995) showed high internal reliability of the implicit entity theory measures; α ranged from .94 to .98 for the implicit theory of intelligence scale (Dweck et al., 1995). In addition, over a fourteen-day interval, the test-retest reliability was .80 for the theory of intelligence scale. These results present high reliability for the selected items included in the modified instrument. Items in the original *TSES* short form were specifically designed to understand and measure teacher efficacy and aligned to a study's research questions.

In addition, the modified instrument was examined by content experts. The questions in the instrument were further organized to better align with amendments made to Chapter 49 and Act 55 of 2022 of the Pennsylvania Department of Education (PDE). These amendments require PDE to identify competencies and develop educator training in literacy, culturally relevant and sustaining education, and professional ethics (Pennsylvania Department of Education, 2023). Within the survey, items 1 through 10 were demographic questions, and items 11 through 41 were organized by subheadings and renumbered, and participants were asked to answer using a four-point Likert scale in each section: Level of Cultural Responsiveness – Items 1-10; Level of Self-Efficacy – Items 1-8; Level of Growth Mindset – Items 1-6; Teacher Preparation Program – Items 1-7.

Participants

I used purposive sampling strategies to identify the target sample of novice year one and year two teachers to participate in the study (Trochim et al., 2016). The participants of this study consisted of public school teachers in 30 school districts in three counties in Western Pennsylvania – Mercer, Lawrence, and Butler counties. According to the National Center for Education Statistics (NCES), as of the 2023 school year, in Mercer County, there were a total of thirteen school districts composed of 39 schools; in Lawrence County, there were a total of nine school districts composed of 29 schools, and in Butler County, there were a total of eight school districts composed of 37 schools (National Center for Education Statistics, 2021).

According to the Center for Rural Pennsylvania (CRP), the designation for a rural county is when the number of people per square mile within the county is fewer than 291 (Center for Rural Pennsylvania, n.d.). As of 2020, the population of Butler County was 233 people per square mile; the population of Lawrence County was 254 people per square mile, and the

population of Mercer County was 173 people per square mile (Center for Rural Pennsylvania, 2020). Furthermore, the counties of Butler, Lawrence, and Mercer Counties in Western Pennsylvania were considered part of the "Rust Belt" and were affected by the economic collapse of the steel industry in the 1980s and the loss of approximately 23,000 jobs (Venkatu, 2018, p. 2). Many of the communities in these counties continue to struggle with the aftermath 40 years later. These communities have unique geographical locations and border larger urban areas of Youngstown, Ohio and Pittsburgh, Pennsylvania. As reported by the United States Census Bureau (2022), the racial composition of these counties is predominantly White. Table 3 illustrates the racial composition across the three counties (United States Census Bureau, 2022).

Table 3

Demographic Information of Butler, Lawrence, and Mercer Counties

Demographic Information	Butler County, Pennsylvania	Lawrence County, Pennsylvania	Mercer County, Pennsylvania
Population			
Population, Census, April 1, 2020	193,763	86,070	110,652
Population, Census, April 1, 2010	183,862	91,108	116,638
Age and Sex			
% Persons under 5 years	4.7	5.0	4.8
% Persons under 18 years	18.9	19.8	18.7
% Persons 65 years and over	20.8	23.4	23.3
Race			
% White alone	95.2	92.5	91.1
% Black or African American	1.4	4.3	5.7
% American Indian and Alaska Native	0.2	0.2	0.3
% Asian	1.7	0.5	0.7
% Native Hawaiian/Other Pacific Islander	0.001	0.001	0.001

Demographic Information	Butler County, Pennsylvania	Lawrence County, Pennsylvania	Mercer County, Pennsylvania
% Two or More Races	1.4	2.6	2.2
% Hispanic or Latino	1.9	1.9	1.7
% White alone, not Hispanic or Latino,	93.7	91	89.8
% Language other than English spoken at home	3.1	3.8	3.6
Income & Poverty			
Median household income (in 2021 dollars), 2017-2021	$77,065	$53,106	$52,810
Per capita income in the past 12 months (in 2021 dollars), 2017-2021	$41,955	$29,832	$28,977
% Persons in poverty	8.5	12.2	12.9

Note. U.S. Census Bureau, 2022.

As shown in Table 3 above, the racial composition of all three counties is similar; however, Butler County has a larger population than Mercer (110,652 residents) and Lawrence (86,070 residents) counties, with approximately 193,763 residents. In addition, reported poverty rates are lower in Butler County (8.5%) compared to the rates reported for Mercer (12.9%) and Lawrence (12.2%) counties (U.S. Census Bureau, 2022).

These three counties were chosen due to being part of the Midwestern Intermediate Unit IV (MIU IV) in Pennsylvania, which is the agency that ensures the implementation of programs mandated by the Pennsylvania Department of Education, the State Board of Education, the General Assembly, and the U.S. Department of Education in these counties. In addition, given the close geographical proximity of these counties, there is a lot of mobility of families in and out of neighboring districts. Furthermore, each one of these counties has schools categorized as rural, suburban, and urban-like by the Pennsylvania Department of Education.

As previously mentioned, I attempted to survey novice teachers employed in public schools in three counties serviced by the MIU IV in Pennsylvania, including public charter schools and public cyber charter schools. I contacted each of the 104 district superintendents to obtain permission and cooperation to recruit and distribute the surveys to the teachers in their districts. Surveys were distributed to a total of 1,568 teachers across the three counties. The survey was distributed to all teachers in the selected districts, with the assistance of building administrators and representatives from MIU IV; only surveys completed with answers to all 41 items were analyzed as part of this particular study. According to Fowler (1984), based on the number of surveys distributed, the required sample size for this study is 759 respondents, which would provide a 95% confidence level with a 5% margin of error.

Role of Researcher

According to Trochim et al. (2016), researchers need to be careful regarding the protection of the privacy and confidentiality of study participants. To ensure the ethical approach of this study, I submitted the research instrument, detailed study information, and supplementary documents to the Youngstown State University Institutional Review Board (IRB) for approval before beginning the study. Potential survey participants were provided with a detailed overview

of the project and why their participation benefited me. Additionally, participants were made aware that their answers were strictly confidential and that no personal identifiers would be used as part of the reporting of the study. I strived to maintain the participants' anonymity by using the confidential platform SurveyMonkey to deliver the instrument. All subsequent data was uploaded to IBM SPSS Statistical software for analysis. As part of the study, I was tasked with analyzing the data to provide evidence-based recommendations regarding the need for and importance of providing preservice teachers with diverse field experiences and curriculum that explores diversity and equity in education, as well as subsequent support once they are in the classroom through professional development opportunities.

Data Collection

I used the directory of schools served by the MIU IV to identify districts and to obtain permission from district and building administrators to contact participants. Using the available list, I emailed district administrators requesting permission to contact potential participants. Once approval was received, I worked with district and building administrators and representatives from MIU IV to send an initial recruitment email detailing the scope of the study to potential participants (See Appendix B). In the email, potential participants were directed to a SurveyMonkey link to complete the survey. The research instrument, study information, and applicable documentation were submitted to the Youngstown State University Institutional Review Board, and the study was approved on May 10, 2023.

Participants were provided the Informed Consent Form (see Appendix C) as an embedded document at the beginning of the survey. They were asked to acknowledge reading the document as the first item in the survey. No email addresses were collected from respondents; however, demographic information, such as gender and ethnicity/race were items in

the survey. Upon completing the survey, respondents were directed to a page thanking them for their time.

Analytic Strategy

I delivered the survey to participants through a link distributed via electronic mail. The study was conducted using a survey instrument created using SurveyMonkey during the 2022-2023 school year. The participants had a two-week window to complete and return their surveys and could only submit answers once. Once the window for completion closed, I collected participants' responses and uploaded them to IBM SPSS for analysis. Of the potential 1,568 surveys distributed to public school teachers in three Western Pennsylvania counties – Mercer, Lawrence, and Butler counties; a total of 53 surveys were received. Only the surveys of participants who answered all 41 items were further analyzed.

The data was analyzed for completeness, and only surveys with all 41 items completed were further analyzed. The data was first examined for normality using descriptive statistics and histograms. Descriptive statistics were employed to analyze the data set and provide a general summary of the participant population (Kaliyadan & Kulkarni, 2019). Descriptive statistics included the discussion of the total respondents, their demographic information, and statistical methods – predictor variables, criterion variables, frequency calculations, and distributions of Likert-scale responses and how they related to each category of questions – Level of Cultural Responsiveness, Level of Self-Efficacy, Level of Growth Mindset, and Teacher Preparation Program.

Pearson's Zero-order correlation analysis was conducted to examine multicollinearity and the relationship of each assumption to the criterion variables – the ability to adopt culturally responsive practices, self-efficacy, growth mindset, and program preparation. The predictor

variables were field experience and years of service of respondents. In addition, a Q-Q Plot analysis was conducted to assess the normality of the distribution of dependent variables of cultural responsiveness, growth mindset, self-efficacy, and teacher preparation.

The study analyzed the effect of the predictor variables over the criterion variable – the ability to adopt culturally responsive practices. The predictor variables were diverse field experience, teacher preparation, and years of service. Skewness and Kurtosis analyses were conducted to determine acceptable ranges and tenability based on distribution guidelines of |2.0| and |5.0| for skewness and kurtosis (Field, 2018).

The data was further analyzed using linear regression to examine the relationship between predictor and criterion variables – cultural responsiveness, diverse field experiences, self-efficacy, growth mindset, and teacher preparation. There were four assumptions: the first was that teachers provided with diverse field experiences and curricula related to diversity and equity were better prepared to teach diverse student populations. The second assumption was that teachers who have had an opportunity to interact with individuals of other races were better prepared to recognize bias and enact culturally responsive practices. The third assumption was that teachers experience greater self-efficacy when exposed to diverse field experiences and curricula and had the opportunity to interact with individuals of other races and backgrounds. The fourth assumption was that teachers with a growth mindset and who were exposed to diverse field experiences, curricula, and interaction with multicultural groups experienced greater degrees of self-efficacy in the classroom. The data was further analyzed to determine the relationship, if any, between years of service with the previously mentioned assumptions.

The study analyzed the effect of the predictor variables over the criterion variable – the ability to adopt culturally responsive, self-efficacy, growth mindset, and program preparation.

The predictor variables were years of service and diverse field experiences and curricula. Skewness and Kurtosis analyses were conducted to determine acceptable ranges and tenability

Variable Descriptions

Approximately half of the novice teachers in the United States leave the profession during their first five years, and nearly a third choose to leave the profession permanently (Graham, 2022; McCray-Davis, 2022; NASSP, 2020). Most teachers leave the profession due to unpreparedness to meet the needs of the populations they teach (García & Weiss, 2019). As part of this study, I sought to better understand teachers' perceptions of the effectiveness of their teacher preparation programs and field experiences in fostering the ability to teach and interact with diverse student populations.

Delimitations, Limitations, and Assumptions

This study was limited to novice teachers and focuses on teaching experiences in multicultural and multilinguistic classrooms. Although the survey was distributed via email and with administrative approval at the participating school districts, the timing of the survey administration coincided with the end of the school year, which may have affected the participants' response rate. I understood that not all teachers would answer and that it could take multiple reminders for teachers to participate, affecting the sample size. As such, the narrow scope of the study, novice teachers, would further affect the number of participants in the study as not all districts would have teachers who fall within this category.

A delimitation of the study was that the demographic composition of the schools available to me might not provide opportunities for novice teachers to teach in multicultural or multilinguistic classrooms. The three counties chosen for this study were classified as rural; however, some were in close proximity to larger metropolitan areas and could have experienced

migration shifts throughout the year. Another delimitation was that participant teachers received pedagogical training in different institutions, both in the state of Pennsylvania and other states, which could impact research outcomes. In addition, I am employed as a teacher and teacher mentor in one of the schools selected in the study, potentially impacting participant answers. The purposive sampling procedure of this study decreased the generalizability of findings. As this study dealt with a sample of teachers in public schools in three specific counties in Western Pennsylvania, it could not be said for certain that the conclusions drawn in this study were representative of all novice teachers across the United States, as all teacher experiences can be different as they embark in the profession.

Summary

This chapter discussed the research methodology used in the design and analysis of the study. I used a quantitative method of factorial design to analyze the relationship between variables – cultural responsiveness, diverse teacher preparation and field experience, frequency of interaction of participants with individuals of other races, ethnicities, cultures, and bias awareness and its influence on novice year one and two teachers' ability to enact culturally responsive pedagogical practices. I used a 41-item survey distributed to 1,568 teachers across 30 different school districts in three counties in Western Pennsylvania – Butler, Lawrence, and Mercer. The results of this study will be discussed in Chapter IV.

CHAPTER IV: FINDINGS

Introduction

This quantitative, non-experimental survey study provided a snapshot of teachers' perceptions about how their teaching education programs and field experiences prepared them to work in multicultural classrooms and their perceived effectiveness in interacting with and teaching diverse student populations. I used a five-part survey based on the Network for Excellence in Teaching (NExT) Common Metrics Transition to Teaching Survey (NExT, 2016), which included an overview and informed consent, ten demographic questions, ten questions regarding the respondents' level of cultural responsiveness, eight questions regarding their level of self-efficacy (Tschannen-Moran & Woolfolk Hoy, 2001), six questions regarding their level of growth mindset (Dweck, 2000), and six questions regarding their teacher preparation program. The modified survey consisted of 41 total items, with 10 items collecting demographic data and 31 items using a four-point Likert scale.

This chapter describes the level of response from the participants and their demographics. I describe the results of the survey instrument, statistical analysis of variables, and analysis of the research questions:

1. What are the perceived levels of teachers' culturally responsive practices?
2. What are the perceived levels of teachers' self-efficacy?
3. What are the teachers' perceived levels of growth mindset?
4. Is there a relationship between the teacher's perceived level of cultural responsiveness and self-efficacy?
5. Is there a relationship between teachers' perceived levels of cultural responsiveness and growth mindset?

6. Is there a relationship between a growth mindset and self-efficacy?
7. Is there a relationship between teachers' perception of culturally responsive practices and their previous field experiences and classwork?

Sampling and Data Collection

I collected data in accordance with the conditions set forth by the Youngstown State University's Internal Review Board. A voluntary online survey was delivered with the assistance of representatives from the Midwestern Intermediate Unit IV (MIU IV) to the administrators of 105 schools in Mercer, Lawrence, and Butler counties in Western Pennsylvania. The administrators were then requested to share the survey links with their teachers. The survey contained five sections in addition to an informed consent section. The respondents answered questions related to their levels of cultural responsiveness, level of self-efficacy, level of growth mindset, and about their teacher preparation programs. In addition, survey respondents also answered several demographic questions.

I collected and analyzed the data utilizing the secure online platform SurveyMonkey. As part of the informed consent agreement, I indicated that I would not collect individual or personal information, email addresses, or IP addresses. A total of 58 responses were received. The survey links were distributed to districts in two waves due to state testing and end-of-the-year activities. The first wave of surveys went to administrators on May 12, 2023, and a second wave went out on May 26, 2023. The original closing date for the survey was extended to June 16, 2023, to accommodate for districts' year-end activities.

The data was analyzed for completeness and examined for normality using descriptive statistics and histograms to provide a general summary of the participant population (Kaliyadan & Kulkarni, 2019). Only the data from respondents who answered all questions was further

analyzed using factorial design to examine the relationship between the predictor and criterion variables.

I relied on representatives from the Midwestern Intermediate IV (MIU IV) and district administrators to distribute the survey link; therefore, the number of teachers who received the survey link is unknown. Of the 58 respondents, only 41 answered all questions, and data was further analyzed.

Descriptive Statistics

Demographic Information

The demographic information illustrated below consisted of ten questions. Data were collected regarding gender, race/ethnicity, type of communities where they live, frequency of interaction with other races/ethnicities, employment situation, school district typology, type of school, grade levels currently teaching, years of service, and teacher preparation program.

Gender Identity

The survey question gave respondents five choices to report their gender identity: woman, man, transgender, non-binary/non-conforming, and prefer not to respond. Of the 41 respondents analyzed, five identified as male (n = 5, 12.2%), and thirty-six as female (n = 36, 87.8%).

Race/Ethnicity

Table 4 represents respondents' reported race/ethnicity. The survey question gave respondents seven choices to report their race/ethnicity: Hispanic or Latino, American Indian/Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, White, or Race/ethnicity unknown. The respondents identified themselves as Hispanic or Latino, Black or African American, or White. No respondents identified as American

Indian/Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, or Race/ethnicity unknown.

Table 4

Respondents Reported Race/Ethnicity

Race/Ethnicity	n	%
Hispanic or Latino	1	2.44%
Black or African American	5	12.20%
White	35	85.37%

Respondents' Communities of Residence

For this study, teachers were asked to describe the type of community in which they lived. Most responding teachers lived in suburban communities (n = 24, 58.5%). The remainder of the responding teachers identified their communities as rural (n = 13, 31.7%) or as urban (n = 4, 9.8%).

Level of Interaction with Individuals of Other Races, Ethnicities, and Cultures

Participants were asked how frequently they interacted with individuals of other races, ethnicities, and cultures. The survey question gave participants four response options: very often, often, rarely, or never. Most responding teachers answered very often (n = 30, 73.2%). The remainder of the responding teachers reported their interaction with individuals of other races, ethnicities, and cultures as often (n = 8, 19.5%) or as rarely (n = 3, 7.3%).

Current Employment

Participants were asked about their 2022-2023 school year employment situation. The survey question gave participants five response options: employed as a full-time classroom teacher, employed as a part-time classroom teacher, employed as a full-time building substitute

teacher, employed as a casual day-to-day substitute teacher, or employed as a long-term substitute teacher. Most responding teachers identified as being employed as a full-time classroom teacher (n = 39, 95.1%). The remainder of responding teachers identified as being employed as a full-time building substitute teacher (n = 1, 2.4%) and employed as a long-term substitute teacher (n = 1, 2.4%).

School Typology

For this study, participants identified the type of school where they taught and its location. The survey question about the type of school gave participants four response options: traditional public school, public charter school, cyber charter school, and private school. The survey question about the school's geographical location gave participants three response options: urban or urban-like, rural, or suburban. Table 5 illustrates the distribution of these variables.

Table 5

School Typology

Variable		n	%
Type of School	Traditional public school	41	100.0%
	Public Charter School		
	Cyber Charter School		
	Private School		
School Geographical Location	Urban or Urban-like	21	51.2%
	Rural	3	7.3%
	Suburban	17	41.5%

As illustrated in Table 5 above, all respondents reported teaching in traditional public schools (n = 41, 100.0%). Approximately 51% of participants taught in urban or urban-like public schools, and approximately 49% of participants reported teaching in suburban or rural schools.

Respondents' Current Grade Level

Participants identified the grade levels they taught. The survey question gave participants four response options: early childhood, elementary, middle or junior high, and high school.

Table 6

Grade Level

Grade Level	n	%
Early Childhood	1	2.4%
Elementary	15	36.6%
Middle or Junior High	5	12.2%
High School	20	48.8%

As illustrated in Table 6 above, approximately 49% of respondents were high school teachers, and approximately 37% were elementary school teachers. Of the 41 respondents, approximately 12% identified as middle or junior high teachers, and approximately 2% identified as early childhood teachers.

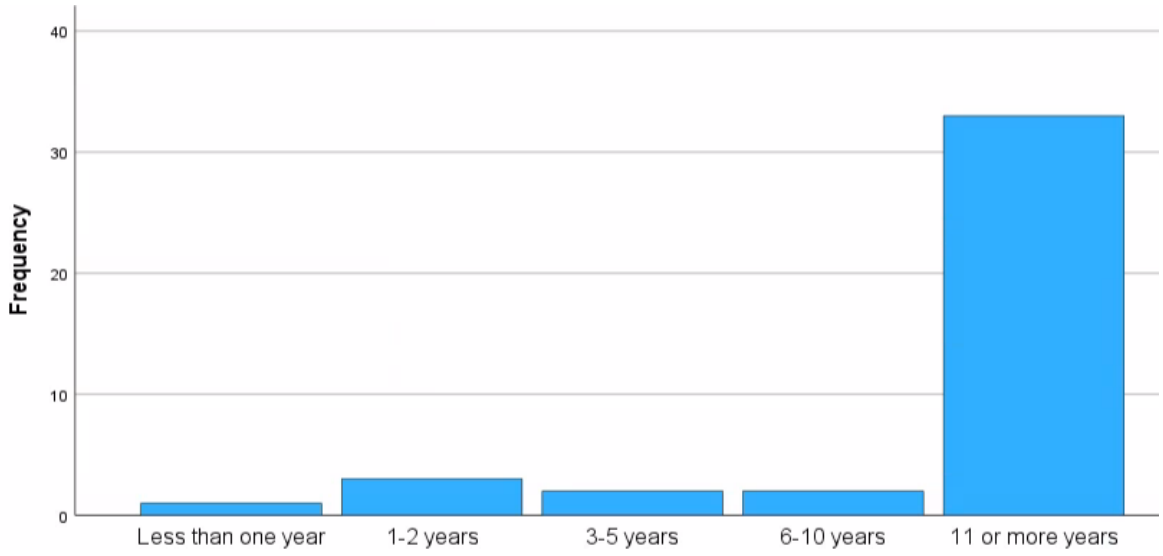
Years of Teacher Experience

The respondents were asked how long they had been teaching. The survey questions gave participants five response options: less than one year, 1-2 years, 3-5 years, 6-10 years, and 11 or more years. Approximately 81% of respondents had been teaching 11 or more years, approximately 5% of respondents had been teaching 6 to 10 years, approximately 5% had been

teaching 3 to 5 years, approximately 7% of respondents had been teaching 1 to 2 years, and approximately 2% of respondents had been teaching less than one year. (See Figure 2).

Figure 2

Years of Teaching



Type of Teacher Preparation Program

As part of this study, participants were asked about their teacher preparation program. In the demographic questions section, the survey asked what type of teacher-preparation program they had attended. The survey gave participants six response options: traditional 4-year program at a large public university/college, traditional 4-year program at a small public university/college, traditional 4-year program at a large private university/college, traditional 4-year program at a small private university/college, post-graduate teacher certification program, and other.

Of the 41 respondents, most attended a traditional 4-year program at a small public university or college (n = 16, 39.0%) or a traditional 4-year program at a large public university or college (n = 10, 24.4%). In total, the percentage of responding teachers who attended

preparation programs at public universities or colleges was approximately 64.0%. Table 7 illustrates the breakdown of this variable.

Table 7

Teacher-Preparation Program

Type of Teacher-preparation program	n	%
Traditional 4-year program at a large public university/college	10	24.4%
Traditional 4-year program at a small public university/college	16	39.0%
Traditional 4-year program at a large private university/college	1	2.4%
Traditional 4-year program at a small private university/college	8	19.5%
Post-graduate teacher certification program	6	14.6%

As illustrated in Table 7 above, the percentage of responding teachers who attended teacher-preparation programs at private universities or colleges was approximately 22.0%, and the percentage of responding teachers who attended a post-graduate certification program was approximately 15.0%.

Survey Questions

I asked participants to answer 31 question items using a 4-point Likert-style scale (4 – Agree, 3 – Tend to Agree, 2 – Tend to Disagree, 1 -Disagree). The 31 question items were further divided into four different constructs: level of cultural responsiveness, level of self-efficacy, level of growth mindset, and teacher preparation program (NExT, 2020; Tschannen-Moran & Woolfolk Hoy, 2001; Dweck, 2000). Participants were asked ten questions about how they would rate their levels of cultural responsiveness. They were also asked eight questions about how they would rate their levels of self-efficacy. Next, they were asked six questions about how they would rate their level of growth mindset. Lastly, participants were asked seven

questions about their perceived professional preparedness after completing their teacher preparation programs.

Respondents' answers to questions about the level of cultural responsiveness (Q11-Q20) are presented in Table 8.

Table 8

Level of Cultural Responsiveness

Question	4	3	2	1	$\bar{x}$
Q11. I can account for students' knowledge and experiences in instructional planning.	51.22%	36.59%	12.20%	0.00%	3.39
Q12. I can effectively teach students from culturally and diverse backgrounds and communities.	41.46%	31.71%	19.51%	7.32%	3.07
Q13. I can engage students in self-assessment strategies that account for cultural and linguistic differences.	24.39%	29.27%	39.02%	7.32%	2.71
Q14. I can recognize bias and how it influences and affects academic outcomes.	36.59%	34.15%	21.95%	7.32%	3
Q15. I consider students' cultures and backgrounds when establishing classroom expectations and appropriate behavior to ensure an environment conducive to learning.	39.02%	36.59%	17.07%	7.32%	3.07
Q16. I can respond appropriately to student behavior by considering cultural differences.	34.15%	51.22%	12.20%	2.44%	3.17
Q17. I can develop curricula and units that represent the cultures represented in the classroom.	34.15%	39.02%	21.95%	4.88%	3.02

Question	4	3	2	1	$\bar{x}$
Q18. I can differentiate assessments for all learners and support the language acquisition and comprehension of diverse students.	34.15%	34.15%	29.27%	2.44%	3
Q19. I can help students develop critical thinking skills taking into consideration their cultural experiences.	31.71%	43.90%	19.51%	4.88%	3.02
Q20. I can help students develop skills to solve complex problems while reinforcing their unique cultural practices and experiences.	31.71%	31.71%	29.27%	7.32%	2.88

Answers of the respondents to questions about their perceived level of cultural responsiveness were as follows:

Question 11 - Approximately 88% of respondents answered “Agree” (n = 21, 51.22%) or “Tend to Agree” (n = 15, 36.59%), while approximately 12% answered “Tend to Disagree” (n = 5, 12.20%) or “Disagree” (n = 0, 0.0%), which indicated that teachers felt more confident in their abilities to account for students’ knowledge and experiences when planning instruction ($\bar{x}$ = 3.39).

Question 12 – Approximately 73% of respondents answered “Agree” (n = 17, 41.46%) or “Tend to Agree” (n = 13, 31.71%), while approximately 27% answered “Tend to Disagree” (n = 8, 19.51%) or “Disagree” (n = 3, 7.32%) when rating their ability to effectively teach students from culturally diverse backgrounds and communities ($\bar{x}$ = *3.07).*

Question 13 – Approximately 54% of respondents answered “Agree” (n = 10, 24.39%) or “Tend to Agree” (n = 12, 29.27%), while approximately 46% answered “Tend to Disagree (n =

16, 39.02%) or “Disagree” (n = 3, 7.32%), which indicated that teachers did not feel confident in their abilities to engage students in self-assessment strategies that accounted for cultural and linguistic differences (

$\bar{x}$ = 2.71).

Question 14 – Approximately 71% of respondents answered “Agree” (n = 15, 39.59%) or “Tend to Agree” (n = 14, 34.15%), while approximately 29% answered “Tend to Disagree” (n = 9, 21.95%) or “Disagree” (n = 3, 7.32%), when rating their ability to recognize bias and its influence in academic outcomes ($\bar{x}$ = 3).

Question 15 – Approximately 76% of respondents answered “Agree” (n = 16, 30.02%) or “Tend to Agree” (n = 15, 36.59%), while approximately 25% answered “Tend to Disagree” (n = 7, 17.07%) or “Disagree” (n = 3, 7.32%), when rating their abilities to consider students’ culture and backgrounds when establishing classroom expectations and behavior ($\bar{x}$ = 3.07).

Question 16 – Approximately 85% of respondents answered “Agree” (n = 14, 34.15%) or “Tend to Agree” (n = 21, 51.22%), while approximately 15% answered “Tend to Disagree” (n = 5, 12.20%) or “Disagree” (n = 1, 2.44%), which indicated that teachers felt confident in their ability to take into consideration students’ cultural differences when responding to student behavior ($\bar{x}$ = 3.17).

Question 17 – Approximately 73% of respondents answered “Agree” (n = 14, 34.15%) or “Tend to Agree” (n = 16, 39.02%), while approximately 27% answered “Tend to Disagree” (n = 9, 21.95%) or “Disagree” (n = 2, 4.88%) when rating their abilities to develop curricula that represents the cultures of students in their classrooms ($\bar{x}$ = 3.02).

Question 18 – approximately 68% of respondents answered “Agree” (n = 14, 34.15%) or “Tend to Agree” (n = 14, 34.15%), while approximately 32% answered “Tend to Disagree” (n =

12, 29.27%) or “Disagree” (n = 2.44%), which indicates that fewer classroom teachers were confident in their abilities to differentiate assessments that support language acquisition and comprehension of diverse learners ($\bar{x}$ = 3)

Question 19 – approximately 76% of respondents answered “Agree” (n = 13, 31.71%) or “Tend to Agree” (n = 18, 43.90%), while approximately 24% answered “Tend to Disagree” (n = 8, 19.51%) or “Disagree” (n = 2, 4.88%) when rating their abilities to assist students in developing critical thinking skills that take into consideration their cultural experiences ($\bar{x}$ = 3.02).

Question 20 – Approximately 63% of respondents answered: “Agree” (n = 13, 31.17%) or “Tend to Agree” (n = 13, 31.17%), while approximately 37% answered “Tend to Disagree” (n = 12, 29.27%) or “Disagree” (n = 3, 7.32%), which indicates that fewer classroom teachers felt confident in their ability to reinforce students’ unique cultural practices and experiences when teaching them how to develop skills to solve complex problems ($\bar{x}$ = 2.88).

Respondents’ answers to questions about their level of self-efficacy (Q21-Q28) are presented in Table 9.

Table 9

Level of Self-efficacy

Question	4	3	2	1	$\bar{x}$
Q21. I can control the disruptive behavior of students in the classroom.	41.46%	34.15%	12.20%	12.20%	3.05
Q22. I can find ways to motivate students who show low interest in schoolwork.	26.83%	41.46%	17.07%	14.63%	2.8
Q23. I can analyze appropriate types of assessment data to identify student learning needs of all students.	48.78%	36.59%	9.76%	4.88%	3.29
Q24. I can regularly adjust instructional plans to meet students' needs.	51.22%	39.02%	7.32%	2.44%	3.39
Q25. I can provide students with meaningful feedback to guide their next steps in learning.	58.54%	34.15%	7.32%	0.00%	3.51
Q26. I can design activities where students engage with subject matter from a variety of perspectives.	48.78%	29.27%	17.07%	4.88%	3.22
Q27. I can develop and maintain a classroom environment that promotes student engagement and safety.	58.54%	39.02%	2.44%	0.00%	3.56
Q28. I can design, modify, and use a variety of assessments to match learning objectives and evaluate diverse students.	46.34%	41.46%	7.32%	4.88%	3.29

Answers of the respondents to questions about their perceived level of self-efficacy were as follows:

Question 21 – Approximately 76% of respondents answered: “Agree” (n = 17, 41.46%) or “Tend to Agree” (n = 14, 34.15%), compared to approximately 24% that answered “Tend to Disagree” (n = 5, 12.20%) or “Disagree” (n = 5, 12.20%) when rating their ability to control disruptive behavior in their classroom ($\bar{x}$ = 3.05).

Question 22 – Approximately 68% of respondents answered: “Agree” (n = 11, 26.83%) or “Tend to Agree” (n = 17, 41.46%), compared to approximately 32% that answered “Tend to Disagree” (n = 7, 17.07%) or “Disagree” (n = 6, 14.63%), which indicates that fewer classroom teachers are confident in their abilities to motivate students who show low interests in schoolwork ($\bar{x}$ = 2.8).

Question 23 – Approximately 85% of respondents answered “Agree” (n = 20, 48.78%) or “Tend to Agree” (n = 15, 36.59%), compared to approximately 15% that answered “Tend to Disagree” (n = 4, 9.76%) or “Disagree” (n = 2, 4.88%), which indicates that the majority of respondents feel confident in their abilities to analyze data to identify the learning needs of their students ($\bar{x}$ = 3.29).

Question 24 – Approximately 90% of respondents answered: “Agree” (n = 21, 51.22%) or “Tend to Agree” (n = 16, 39.02%), compared to approximately 10% that answered “Tend to Disagree” (n = 3, 7.32%) or “Disagree” (n = 1, 2.44%), which indicates that the majority of respondents feel confident in their abilities to adjust instructional plans to meet students’ needs ($\bar{x}$ = 3.39).

Question 25 – Approximately 93% of respondents answered: “Agree” (n = 24, 58.54%) or “Tend to Agree” (n = 14, 34.15%), compared to approximately 7.3% that answered “Tend to

Disagree" (n = 3, 7.32%) or "Disagree" (n = 0, 0.0%), which indicates that the majority of respondents feel confident with their abilities to provide meaningful feedback to students ($\bar{x}$ = 3.51).

Question 26 – Approximately 78% of respondents answered: "Agree" (n = 20, 48.78%) or "Tend to Agree" (n = 12, 29.27%), compared to approximately 22% of respondents that answered "Tend to Disagree" (n = 7, 17.07%) or "Disagree" (n = 2, 4.88%), which indicates that the majority of respondents feel confident in their abilities to design activities that will allow students to engage with content from a variety of perspectives ($\bar{x}$ = 3.22).

Question 27 – Approximately 98% of respondents answered: "Agree" (n = 24, 58.54%) or "Tend to Agree" (n = 16, 39.02%), compared to approximately 2% of respondents who answered "Tend to Disagree" (n = 1, 2.44%) or "Disagree" (n = 0, 0.0%), which indicates that the majority of respondents feel confident in their abilities to develop and maintain classroom environments that promote student engagement and safety ($\bar{x}$ = 3.56).

Question 28 – Approximately 88% of respondents answered "Agree" (n = 19, 46.34%) or "Tend to Agree" (n = 17, 41.46%), compared to approximately 12% that responded "Tend to Disagree" (n = 3, 7.32%) or "Disagree" (n = 2, 4.88%), which indicates that the majority of respondents feel confident in their abilities to design, modify, and use a variety of assessments that align to learning objects to evaluate diverse students ($\bar{x}$ = 3.29).

Respondents' answers to questions about their teacher preparation program (Q29-Q35) are presented in Table 10.

Table 10

Teacher Preparation Program

Question	4	3	2	1	$\bar{x}$
Q29. My preparation program prepared me to develop curricula and units that represent the cultures represented in the classroom.	17.07%	21.95%	46.34%	14.63%	2.41
Q30. My preparation program prepared me to evaluate instructional strategies and materials to align with learning goals and standards, determine their multicultural strengths and weakness, and revise them if necessary	19.51%	29.27%	36.59%	14.63%	2.54
Q31. My preparation program gave me relevant coursework to engage and teach diverse students.	19.51%	19.51%	48.78%	12.20%	2.46
Q32. My preparation program provided me with diverse field experiences that exposed me to different cultures and backgrounds.	29.27%	14.63%	31.71%	24.39%	2.49
Q33. My preparation program prepared me to understand the concept of a growth mindset and its importance in developing self-efficacy.	24.39%	41.46%	21.95%	12.20%	2.78
Q34. My preparation program prepared me to uphold laws related to student rights and teacher responsibility.	51.22%	34.15%	14.63%	0.00%	3.37
Q35. My preparation program prepared me to differentiate instruction for various learning needs and developmental levels.	46.34%	31.71%	17.07%	4.88%	3.2

Answers of respondents to questions about their teacher preparation programs were as follows:

Question 29 – Approximately 39% of respondents answered: "Agree" (n = 7, 17.07%) or "Tend to Agree" (n = 9, 21.95%), while approximately 61% of respondents answered "Tend to Disagree" (n = 19, 6.34%) or "Disagree" (n = 6, 14.63%), which indicates that the majority of respondents do not feel their teacher preparation programs prepared them to develop curricula and units representative of diverse cultures in their classrooms ($\bar{x}$ = 2.41).

Question 30 – Approximately 49% of respondents answered: "Agree" (n = 8, 19.51%) or "Tend to Agree" (n = 12, 29.27%), while approximately 51% answered "Tend to Disagree" (n = 15, 36.59%) or "Disagree" (n = 6, 14.63%), which indicates that the majority of respondents do not feel their teacher preparation programs prepared them to evaluate or revise instructional strategies or materials with learning goals and standards to address the multicultural strengths and weaknesses of diverse students ($\bar{x}$ = 2.54).

Question 31 – Approximately 39% of respondents answered: "Agree" (n = 8, 19.51%) or "Tend to Agree" (n = 8, 19.51%), while approximately 61% of respondents answered "Tend to Disagree" (n = 20, 48.78%) or "Disagree" (n = 5, 12.20%), which indicates that the majority of respondents do not feel their teacher preparation programs provided them with relevant coursework to engage and teach diverse students ($\bar{x}$ = 2.46).

Question 32 – Approximately 44% of respondents answered: "Agree" (n = 12, 29.27%) or "Tend to Agree" (n = 6, 14.63%), while approximately 56% of respondents answered "Tend to Disagree" (n = 13, 31.71%) or "Disagree" (n = 10, 24.39%), which indicates that the majority of respondents do not feel their teacher preparation programs provided them with diverse field experiences that exposed them to different cultures and backgrounds ($\bar{x}$ = 2.49).

Question 33 – Approximately 66% of respondents answered: "Agree" (n = 10, 24.39%) or "Tend to Agree" (n = 17, 41.46%), while approximately 34% of respondents answered "Tend

to Disagree" (n = 9, 21.95%) or "Disagree" (n = 5, 12.20%), which indicates that the majority of respondents feel their teacher preparation programs prepared them to understand the concept of a growth mindset and its importance in developing self-efficacy ($\bar{x}$ = 2.78).

Question 34 – Approximately 85% of respondents answered: "Agree" (n = 21, 51.22%) or "Tend to Agree" (n = 14, 34.15%), while approximately 15% of respondents answered "Tend to Disagree" (n = 6, 14.63%) or "Disagree" (n = 0, 0.0%), which indicates that the majority of respondents feel their teacher preparation programs prepared them to uphold laws related to student rights and teacher responsibility (*WM* = 3.37).

Question 35 – Approximately 78% of respondents answered: "Agreed" (n = 19, 46.34%) or "Tend to Agree" (n = 13, 31.71%), while approximately 22% answered "Tend to Disagree" (n = 7, 17.07%) or "Disagree" (n = 2, 4.88%), which indicates that the majority of respondents feel that their teacher preparation programs prepared them to differentiate instruction for various learning and developmental needs ($\bar{x}$ = 3.2).

Respondents' answers to questions about growth mindset (Q36-Q41) are presented in Table 11.

Table 11

Level of Growth Mindset

Question	4	3	2	1	$\bar{x}$
Q36. People have a certain amount of intelligence, and they cannot really do much to change it.	4.88%	14.63%	34.15%	46.34%	1.78
Q37. People's intelligence is something about them that they cannot change very much.	7.32%	12.20%	34.15%	46.34%	1.8
Q38. People can learn new things, but they cannot really change their basic intelligence.	9.76%	14.63%	39.02%	36.59%	1.98
Q39. No matter how much intelligence a person has, they can always change it quite a bit.	24.39%	51.22%	24.39%	0.00%	3
Q40. People can significantly change their intelligence level, regardless of who they are.	21.95%	46.34%	31.71%	0.00%	2.9
Q41. People cannot really change how intelligent they are.	2.44%	14.63%	51.22%	31.71%	1.88

Answers of respondents to questions about their perceived level of growth mindset were as follows:

Question 36 – Approximately 20% of respondents answered: "Agree" (n = 2, 4.88%) or "Tend to Agree" (n = 6, 14.63%), compared to approximately 80% who answered "Tend to Disagree" (n = 14, 34.15%) or "Disagree" (n = 19, 46.34%), which indicates that the majority of respondents do not believe that people's amount of intelligence is limited and cannot be changed ($\bar{x}$ = 1.78).

Question 37 – Approximately 20% of respondents answered: “Agree” (n = 3, 7.32%) or “Tend to Agree” (n = 5, 12.20%), compared to approximately 80% who answered “Tend to Disagree” (n = 14, 34.15%) or “Disagree” (n = 19, 46.34%), which indicates that the majority of respondents do not believe that peoples’ intelligence is inherent to them and cannot be changed ($\bar{x}$ = 1.8).

Question 38 – Approximately 24% of respondents answered: “Agree” (n = 4, 9.76%) or “Tend to Agree” (n = 6, 14.63%), compared to approximately 76% of respondents who answered “Tend to Disagree” (n = 16, 39.02%) or “Disagree” (n = 15, 36.59%), which indicates that the majority of respondents do not believe that while people can learn new things, they cannot change their basic intelligence ($\bar{x}$ = 1.98).

Question 39 – Approximately 78% or respondents answered: “Agree” (n = 10, 24.39%) or “Tend to Agree” (n = 21, 51.22%), compared to approximately 24% of respondents who answered “Tend to Disagree” (n = 10, 24.39%) or “Disagree” (n = 0, 0.0%), which indicates that the majority of respondents believe that regardless of how much intelligence a person has, they can always change it ($\bar{x}$ = 3).

Question 40 – Approximately 68% of respondents answered: “Agree” (n = 10, 24.39%) or “Tend to Agree” (n = 21, 51.22%), compared to approximately 24% of respondents who answered “Tend to Disagree” (n = 13, 31.71%) or “Disagree” (n = 0, 0.0%), which indicates that the majority of respondents believe that people can significantly change their level of intelligence regardless of who they are ($\bar{x}$ = 2.9).

Question 41 – Approximately 17% of respondents answered: “Agree” (n = 1, 2.44%) or “Tend to Agree” (n = 6, 14.63%), compared to approximately 83% of respondents who answered

"Tend to Disagree" (n = 21, 51.22%) or "Disagree" (n = 13, 31.71%), which indicates that the majority of respondents believe that people can change their level of intelligence ($\bar{x}$ = 1.88).

Each construct category (level of cultural responsiveness, level of self-efficacy, level of growth mindset, and teacher preparation program) was first analyzed by computing respondents' answers to each of the variables that formed the construct and then using descriptive statistics and histograms. Descriptive statistics of the variables are presented in Table 12.

Table 12

Descriptive Analysis of Variables

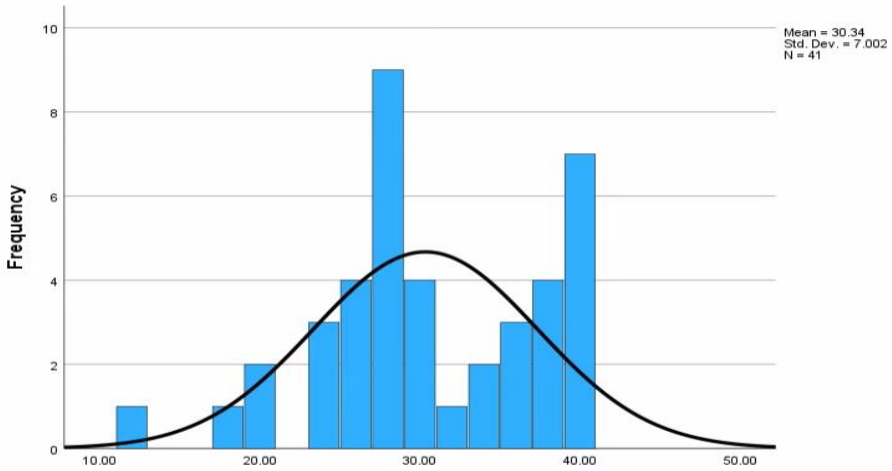
Variables	N	Mean	Sd	Skewness	Kurtosis
Level of Cultural Responsiveness	41	30.34	7.00	-0.29	-0.31
Level of Self-Efficacy	41	26.12	5.58	-0.92	0.15
Level of Growth Mindset	41	16.05	4.47	0.35	-0.74
Teacher Preparation Program	41	16.54	3.12	1.46	3.56

As indicated in Table 12, of the 58 respondents, only 41 participants answered all survey questions, and their responses were further analyzed. The average score for the level of cultural responsiveness was 30, the average score for the level of self-efficacy was 26, the average score for the level of growth mindset was 16, and the average score for the teacher preparation program was approximately 17. The standard deviation (Sd) describes the level of variability of each construct from its mean (Field, 2018; Trochim et al., 2016). Based on the results, the construct of the level of cultural responsiveness had the greatest variability from the mean as measured by the standard deviation of 7, while the construct of teacher preparation program had the lowest variability from the mean as measured by the standard deviation of 3.12.

The levels of cultural responsiveness, self-efficacy, and growth mindset results indicated normal skewness and kurtosis. This is further illustrated, respectively, in Figure 3 - Level of Cultural Responsiveness, Figure 4 - Level of Self-Efficacy, and Figure 5 - Level of Growth Mindset. The results for the teacher preparation program indicated normal levels of skewness but non-normal levels of kurtosis. This is illustrated in Figure 6 - Teacher Preparation Program. These results were based on distribution guidelines of |2.0| and |5.0| for skewness and kurtosis (Field, 2018).

Figure 3

Level of Cultural Responsiveness

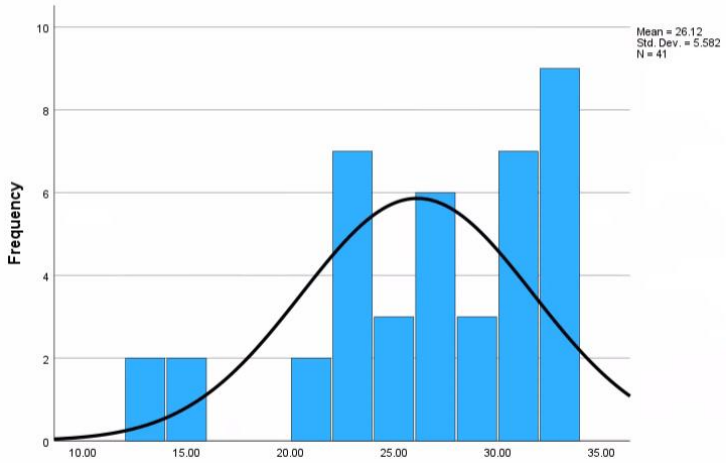


As indicated in Figure 3, the skewness of the level of cultural responsiveness was found to be -.29, indicating that the distribution was left-skewed. The kurtosis of the level of cultural responsiveness was found to be -.31, indicating a platykurtic distribution. Of the teacher sample (n = 41), the mean cultural responsive score is 30.3 (*M* = 30.3, range = 10.0 to 50.0), with a standard deviation of seven (*SD* = 7), which suggests that teachers that are greater by one standard deviation have a cultural response score of 37.3, in contrast, those with a lower standard deviation have a score of 23.3. The data indicates a positive perception of the respondents'

perceived level of cultural responsiveness. The distribution of the level of self-efficacy is illustrated in Figure 4.

Figure 4

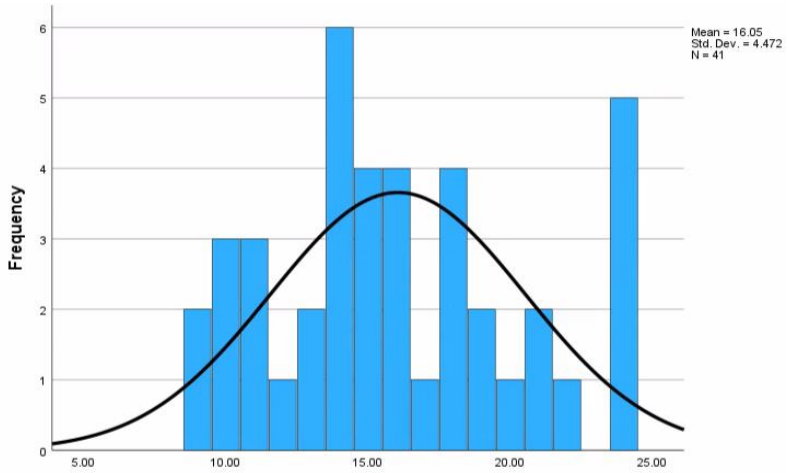
Level of Self-Efficacy



As indicated in Figure 4, the skewness of the level of self-efficacy was found to be -.92, indicating that the distribution was left-skewed. The kurtosis of the level of self-efficacy was found to be .15 in the distribution. Of the teacher sample (n = 41), the mean self-efficacy score is 26.1 (*M* = 26.1, range = 10.0 to 35.0), with a standard deviation of seven (*SD* = 5.6), which suggests that teachers that are greater by one standard deviation have a self-efficacy score of 31.7, in contrast, those with a lower standard deviation have a score of 20.5. The data indicates a positive perception of the respondents' perceived level of self-efficacy. The distribution of the level of growth mindset is illustrated in Figure 5.

Figure 5

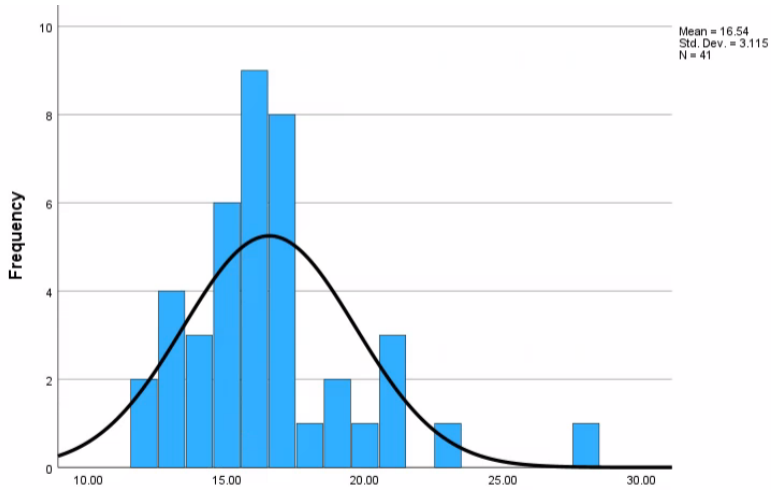
Level of Growth Mindset



As indicated in Figure 5, the skewness of the level of growth mindset was found to be .35 in the distribution. The kurtosis of the level of cultural responsiveness was found to be -.74, indicating a platykurtic distribution. Of the teacher sample (n = 41), the mean growth-mindset score is 16 (M = 16, range = 5.0 to 25.0), with a standard deviation of seven (SD = 4.5), which suggests that teachers that are greater by one standard deviation have a growth-mindset score of 20.5, in contrast, those with a lower standard deviation have a score of 11.5. The data indicates a positive perception of the respondents' perceived level of growth mindset. The distribution of the teacher preparation program is illustrated in Figure 6.

Figure 6

Teacher Preparation Program



As indicated in Figure 6, the skewness of the level of the teacher preparation program was found to be 1.46, indicating a positively skewed distribution. Of the teacher sample (n = 41), the mean teacher preparation score is 16.1 (*M* = 16.1, range = 10.0 to 30.0), with a standard deviation of seven (*SD* = 3.1), which suggests that teachers that are greater by one standard deviation have a cultural response score of 19.2, in contrast, those with a lower standard deviation have a score of 13. The data indicates a negative perception of the respondents' teacher preparation program in preparing them to work with culturally diverse student populations. The kurtosis of the level of the teacher preparation program was found to be 3.56, indicating a leptokurtic distribution.

Data Analysis

The analysis was done with three fundamental assumptions regarding the sample: the first was that teachers provided with diverse field experiences and curricula related to diversity and equity are better prepared to teach diverse student populations, recognize bias, and enact culturally responsive practices. The second is that teachers experience greater self-efficacy when

exposed to diverse field experiences and curricula and have the opportunity to interact with individuals of other races and backgrounds. The third is that teachers with a growth mindset who are exposed to diverse field experiences, curricula, and interaction with multicultural groups experience greater degrees of self-efficacy in the classroom.

Pearson's Zero-Order Correlation Analysis

A Pearson's zero-order correlation analysis was conducted to examine multicollinearity and the relationship of each assumption to the criterion variables – the ability to adopt culturally responsive practices, self-efficacy, growth mindset, and program preparation. The predictor variables were diverse field experiences and years of service of respondents.

Due to the small sample size and the low response of novice year one and year two teachers, responses for years of service were coded as 1 = More than six years or 0 = Five years or less. The results of Pearson's zero-order correlation analysis are presented below in Table 13 below.

Table 13

Pearson's Zero-Order Correlation

	CR	SE	GW	TP	DFE	YOS
Cultural Responsiveness (CR)	1	.778**	.653**	.310*	-0.043	-0.209
Self-efficacy (SE)		1	.629**	.410**	0.075	0.022
Growth Mindset (GM)			1	.413**	0.099	-0.058
Teacher Preparation (TP)				1	.772**	0.072
Diverse Field Experiences (DFE)					1	0.135
Years of Service (YOS)						1

Note. ** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

As indicated above, there was a significant correlation between the variables of cultural responsiveness and self-efficacy (p = 0.778), suggesting that teachers with high levels of cultural responsiveness also had high levels of self-efficacy. There was also a significant correlation between the variables growth mindset and cultural responsiveness (p = 0.653), which also suggests that teachers who believe in people's ability to learn also had higher levels of cultural responsiveness. However, there was a low negative correlation between the variable cultural responsiveness and diverse field experiences (p = -0.043) and the variables cultural responsiveness and years of service (p = -0.209), which suggests that teachers with more than six years of services may have not had been exposed to diverse curriculum or field experiences in their teacher preparation programs and this may have influenced their cultural responsiveness. In addition, there was a strong correlation between the variables of self-efficacy and growth mindset (p = 0.629) and between the variables of self-efficacy and teacher preparation (p = 0.410), which suggests that teachers' beliefs in the ability to learn and increase intelligence influences their belief of being able to do their jobs. The analysis also showed a strong correlation between the variables of growth mindset and teacher preparation (p = 0.413) and between the variables of teacher preparation and diverse field experiences (p = 0.772).

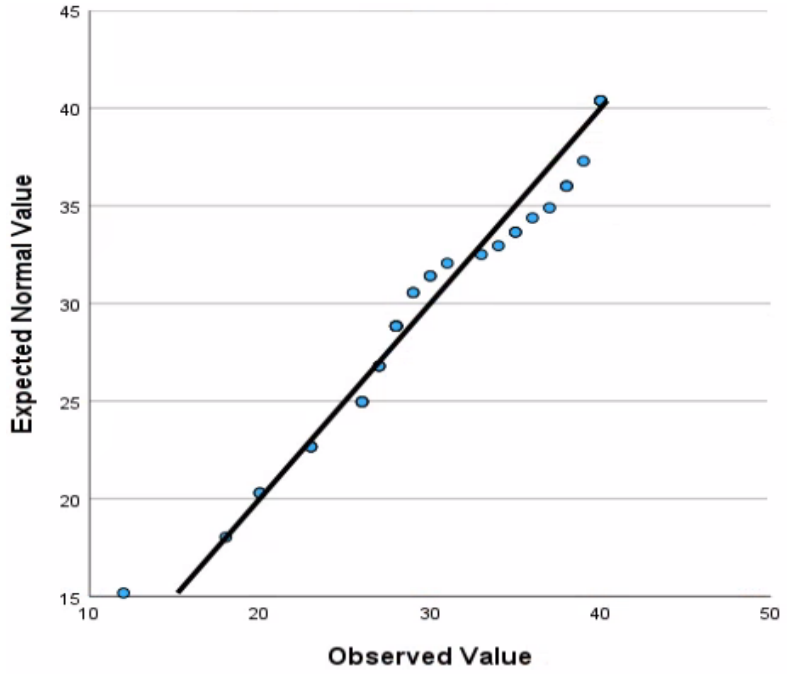
There was no multicollinearity between the predictor variables; therefore, the assumption of no multicollinearity is tenable.

Quantile-Quantile Plot Analysis

A Q-Q Plot analysis was conducted to test the normality of the distribution of the dependent variables of cultural responsiveness, growth mindset, self-efficacy, and teacher preparation. Four separate plots were generated. The first plot showing the distribution of the variable cultural responsiveness is illustrated in Figure 7.

Figure 7

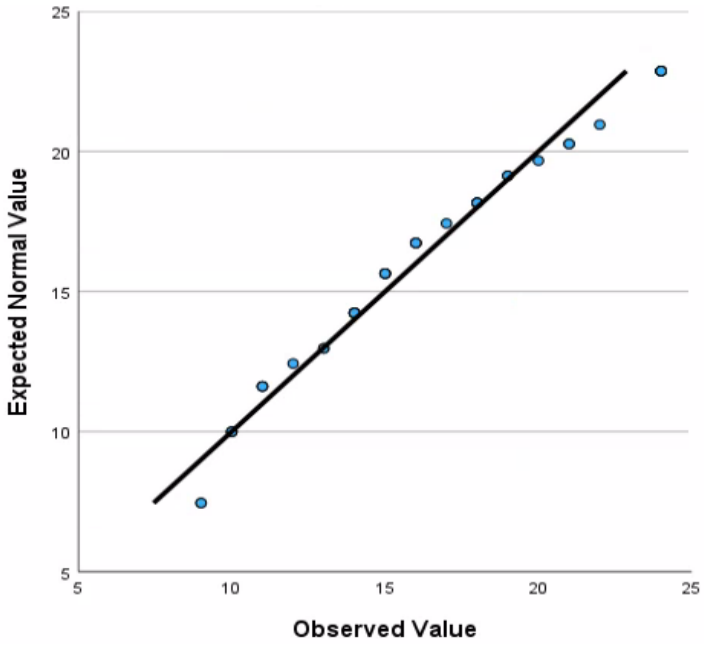
Q-Q Plot of the Cultural Responsiveness Variable



The data points lie close to the straight line with few outliers. Thus, we can say that the data point was normally distributed. The second plot showing the distribution of the variable growth mindset is illustrated in Figure 8.

Figure 8

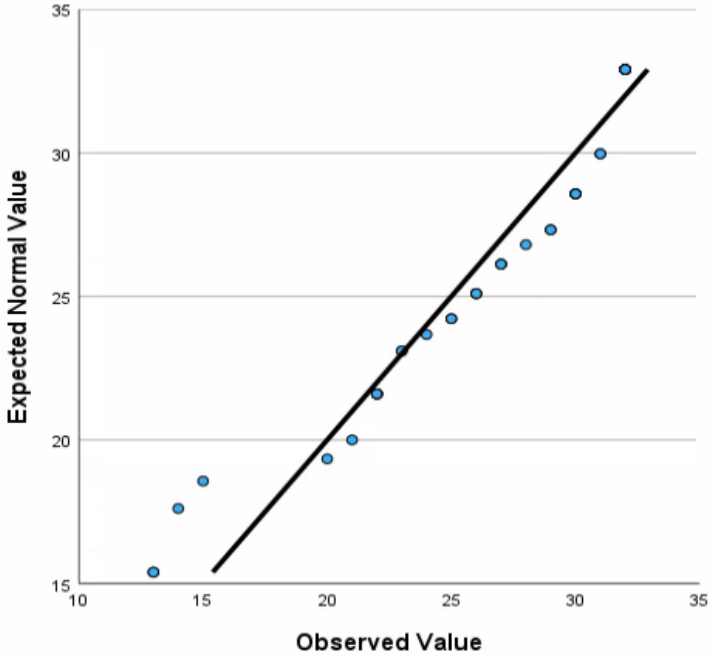
Q-Q Plot of the Growth Mindset Variable



As it can be observed, the data points lie approximately in a straight line with few outliers. Thus, we can say that the data point was normally distributed. The third plot showing the distribution of the variable self-efficacy is illustrated in Figure 9.

Figure 9

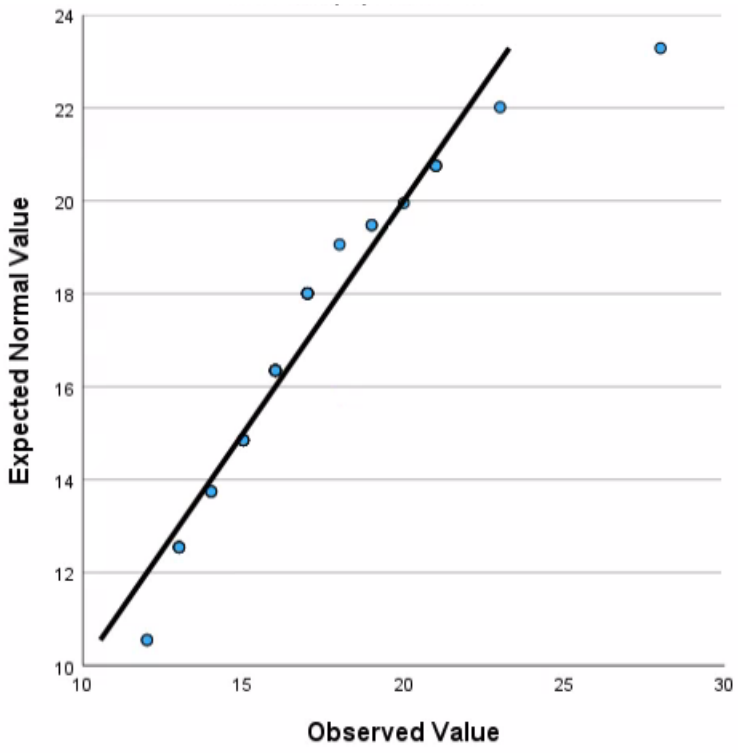
Q-Q Plot of the Self-Efficacy Variable



As it can be observed, most of the data points lie close to a straight line with few outliers. Thus, we can say that the data point was normally distributed. The fourth plot showing the distribution of the variable teacher preparation is illustrated in Figure 10.

Figure 10

Q-Q Plot of the Teacher Preparation Variable



As it can be observed, most of the data points lie close to a straight line with few outliers. Thus, we can say that the data point was normally distributed. Based on the above figures, it can be suggested that the measures approach normality according to the sample size.

Regression Analysis

Linear Regression

Linear regression analysis was used to test if the independent variables (years of service and diverse field experiences) explained participants' levels of cultural responsiveness, self-efficacy, growth mindset, and teacher preparation; and moreover, their ability to enact culturally responsive practices.

The dependent variable, cultural responsiveness, was regressed on predicting variables self-efficacy, growth mindset, teacher preparation, years of service, and diverse field experiences. The independent variables significantly predicted cultural responsiveness, F (5, 35) = 16.627, p<.001, which indicated that the five factors had a significant impact on cultural responsiveness. Moreover, the $R^2 = 0.704$ depicted that the model explained 70.4% of the variance in teacher cultural responsiveness.

Additionally, coefficients were further assessed to ascertain the influence of the factors on the dependent variables, cultural responsiveness. Table 14 illustrates the results of the linear regression analysis.

Table 14

Linear Regression Analysis

			95% CI					
Variable	Beta	SE	LL	UL	β	T	*p*	VIF
Years of Service	-3.783	1.828	-7.495	-0.072	-0.193	-2.07	0.046	1.031
Diverse Field Experiences	-1.285	1.192	-3.704	1.134	-0.176	-1.078	0.288	3.163
Self-Efficacy	0.754	0.158	0.433	1.075	0.601	4.763	<.001	1.88
Growth Mindset	0.364	0.194	-0.031	0.758	0.232	1.873	0.069	1.82
Teacher Preparation	0.265	0.409	-0.565	1.095	0.118	0.648	0.521	3.908

Note. Dependent Variable: Cultural Responsiveness (CR)

As illustrated above, the data suggested that the independent variables years of service (p = 0.046) and self-efficacy (p = <.001) had a significant impact on teacher cultural responsiveness, which can support the argument that current teacher preparation programs are working to increase diverse curricula and field experiences for teachers; however, teachers that

have been in the profession longer than six years may not have been exposed to diversity curricula or field experiences where they had the opportunity to interact with multicultural and multilingual communities.

Conclusion

Overall, the results of this study revealed a statistically significant relationship between the dependent variable, cultural responsiveness, and the independent variables, teacher preparation, self-efficacy, growth mindset, and years of service. The results will be further addressed in Chapter V.

CHAPTER V: CONCLUSIONS, DISCUSSION, AND SUGGESTIONS FOR FUTURE RESEARCH

Introduction

The purpose of this quantitative study was to explore novice teachers' perceived effectiveness of their teacher preparation programs and field experiences in fostering their abilities to interact with and teach multicultural student populations. The target population of this study consisted of public school teachers in 30 school districts in three counties in Western Pennsylvania – Mercer, Lawrence, and Butler counties. The schools in all of these three counties receive professional development and advisory services from the Midwestern Intermediate Unit IV (MIU IV) in Pennsylvania, as well as guidance in implementing programs mandated by the Pennsylvania Department of Education, the State Board of Education, the General Assembly, and the United States Department of Education. MIU IV representatives were instrumental in distributing my survey link.

As part of this quantitative study, participants were asked to complete demographic questions. The survey was strictly voluntary and was sent to all teachers in the participating school districts. In addition, the study also asked questions to measure participants' levels of cultural responsiveness, growth mindset, self-efficacy, and perceived preparedness by their teacher preparation program. In the United States, public school teachers in elementary and high school settings are less racially and ethnically diverse than their students (Good, 2022). According to Kea and Trent (2013), public schools in the United States are increasingly racially and linguistically diverse; therefore, educators must be able "to meet the needs of an increasing population of culturally and linguistically diverse students" (p. 82).

This chapter discusses the findings, limitations, significance of the study, future research, and recommendations regarding the challenges of teaching multicultural classrooms, how mindset influences teacher self-efficacy and cultural responsiveness, and whether teacher preparation programs and diverse field experiences have readied novice teachers for these challenges. According to Bazemore-Bertrand and Porcher (2020), teacher preparation programs must provide teachers with the necessary tools and meaningful field experiences to teach from a position of cultural responsiveness and not a deficit mindset. In contrast, teachers' attitudes, beliefs, and perceptions are constructed by their personal experiences and communities, which often differ from the communities they serve (Bazemore-Bertrand & Porcher, 2020; Espinoza, 2022).

Summary of Findings

The results of this study are outlined and discussed in this section. As part of this study, a web link to the voluntary five-part survey was distributed to school districts with the assistance of the Midwestern Intermediate Unit IV (MIU IV). The survey link was distributed to districts in two waves due to state testing and end-of-the-year activities on May 16, 2023, and May 26, 2023. The response window was extended to June 16, 2023, to accommodate year-end activities.

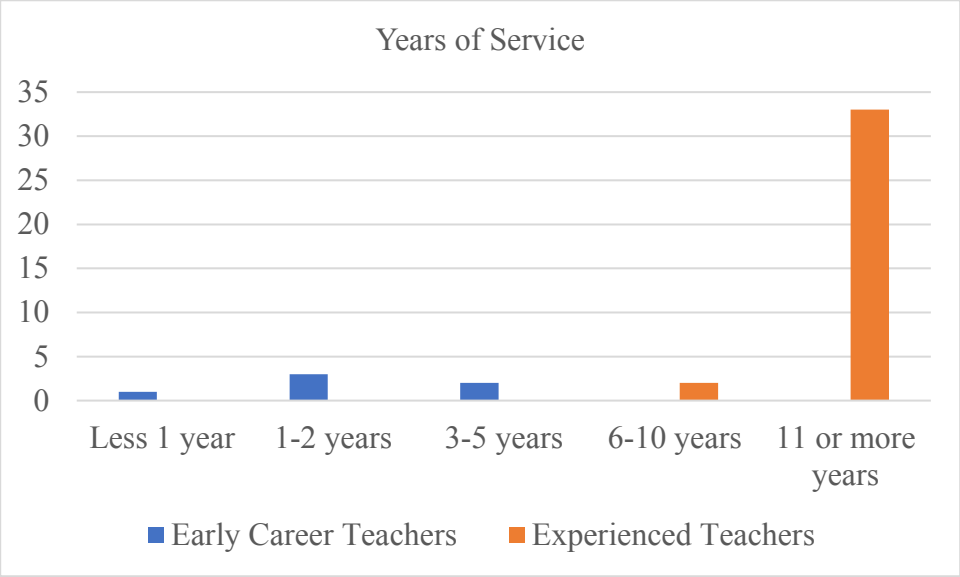
A total of 58 responses were received, and only data from respondents who answered all questions was further examined. Based on this, 41 responses were deemed valid for analysis. Each respondent was a classroom teacher. Of the 41 respondents, five (12.2%) identified as male, and 36 (87.8%) identified as female. When identifying their race, 35 (85.4%) respondents identified as White, five (12.2%) identified as Black, and one (2.4%) identified as Hispanic or Latino. Most participants responded to living in suburban (58.5%) or rural (31.7%) communities, compared to those who reported living in urban communities (9.8%).

When asked how often they interacted with individuals of other races, ethnicities, and cultures, the majority responded very often (73.2%) and often (19.5%). Only a small number of participants reported rarely (7.3%) interacting with individuals of other races, ethnicities, and cultures. In contrast, most participants responded to teaching in urban or urban-like (51.2%) and suburban (41.5%) schools, with only a small number of participants responding to teaching in a rural (7.3%) district. How often participants interacted with individuals of other races and the type of school where they taught did not influence the outcome of the study.

When asked how long they had been teaching, of the 41 respondents, one (2.4%) had less than one year of experience, three (7.3%) had 1-2 years of experience, two (4.9%) had 3-5 years of experience, two (4.9%) had 6-10 years of experience, and 33 (80.5%) respondents had 11 or more years of experience. Because of the low response rate of novice teachers, I combined the answers of participants' responses with five years or less of experience and the responses of participants with six or more years of service. Respondents with five or less years of experience were combined under the *early career* teachers variable. Participants with six years were combined under the *experienced* teachers variable. In their research about teacher experience and quality of teaching, Graham et al. (2020) proposed that teachers with 0-3 years of service are beginning their career, teachers with 4-5 years of service are transitioning in their careers, and those with more than five years of service are experienced teachers. The distribution of *early career* and *experienced* teachers is illustrated in Figure 11.

Figure 11

Years of Service



Analysis of Research Questions

Participants were asked 31 question items using a 4-point Likert-style scale (4-Agree, 3-Tend to Agree, 2-Tend to Disagree, 1-Disagree). The 31 questions were further divided into four different constructs: level of cultural responsiveness, level of self-efficacy, level of growth mindset, and teacher preparation program (Dweck, 2000; NExT, 2020; Tschannen-Moran & Woolfolk Hoy, 2001).

Descriptive statistics and Pearson's Zero-Order Correlation analysis were conducted on the sample to determine if there was a correlation between the respondents' years of service, their levels of cultural responsiveness, self-efficacy, growth mindset, and teacher preparation, and to describe the sample.

The first research question for the present study asked, "What are the perceived levels of teachers' culturally responsive practices?" Findings from the modified *Common Metrics Transition to Teaching Survey - TTS* (NExT, 2016), addressing respondents' cultural

responsiveness, showed an overall positive perceived level of cultural responsiveness, *M* =30.3 (range = 10.0-50.0), *SD=7*, *N*=41, which suggest that most respondent teachers felt confidence in their abilities to enact culturally responsive practices.

The second research question for the present study asked, "What are the perceived levels of teachers' self-efficacy?" Findings from the *modified Teachers' Sense of Efficacy Scales (TSES) short-form survey* (Tschannen-Moran & Woolfolk Hoy, 2001), addressing respondents' self-efficacy, showed an overall positive perceived level of self-efficacy, *M*=26.1 (range = 10.0-35.0), *SD*=5.6, *N*=41, which suggests that most respondent teachers felt confidence in their perceived self-efficacy.

The third research question for the present study asked, "What are the teachers' perceived levels of growth mindset?" Findings from the *Theories of Intelligence (Others Form)* scale created by Carol Dweck and her colleagues (Dweck, 2000), addressing respondents' growth mindset, showed an overall positive perceived level of growth mindset, *M*=16 (range = 5.0-25.0), *SD*=4.5, *N*=41, which suggests that most respondent teachers believed in having a growth mindset.

The fourth research question for the present study asked, "Is there a relationship between the teacher's perceived level of cultural responsiveness and self-efficacy?" Correlation analysis between these constructs showed a significant correlation between cultural responsiveness and self-efficacy (*p*=0.778).

The fifth research question for the present study asked, "Is there a relationship between teachers' perceived levels of cultural responsiveness and growth mindset?" Correlation analysis between these constructs showed a significant correlation between cultural responsiveness and growth mindset (*p*=0.653).

The sixth research question for the present study asked, “Is there a relationship between a growth mindset and self-efficacy?” Correlation analysis between these constructs showed a significant correlation between growth mindset and self-efficacy (p=0.629).

The seventh research question for the present study asked, “Is there a relationship between teachers' perception of culturally responsive pedagogy and their previous field experiences and classwork?” Correlation analysis between these constructs showed a low negative correlation between the variable cultural responsiveness and diverse field experiences (p=-0.043).

Linear Regression Progression

Linear regression progression analysis was also conducted to examine if there was a relationship between the teacher’s perceived level of cultural responsiveness and self-efficacy, the teachers’ perceived levels of cultural responsiveness and growth mindset, and years of service. Linear regression progression analysis was also used to determine whether there was a relationship between a growth mindset and self-efficacy and if there was a relationship between teachers' perception of culturally responsive pedagogy, their previous field experiences and classwork, and years of service.

The analysis showed that the model explained that 70.4%, R^2=.704 of the variance in teachers’ level of cultural responsiveness was largely predicted by self-efficacy, growth mindset, teacher preparation, years of service, and diverse field experiences, F (5,35) =16.627, p<.001. Table 15 illustrates the results of the regression analysis.

Table 15

Regression Analysis

Variable	Beta	SE	β	T	*p*
Years of Service	-3.783	1.828	-0.193	-2.07	0.046
Diverse Field Experiences	-1.285	1.192	-0.176	-1.078	0.288
Self-Efficacy	0.754	0.158	0.601	4.763	<.001
Growth Mindset	0.364	0.194	0.232	1.873	0.069
Teacher Preparation	0.265	0.409	0.118	0.648	0.521

Note. Dependent Variable: Cultural Responsiveness (CR)

As illustrated above, the data suggested that although teachers' cultural responsiveness was largely predicted by their levels of self-efficacy, growth mindset, teacher preparation, years of service, and diverse field experiences, it also showed that it decreased with longevity in the profession. The data showed that teachers with six or more years of teaching experience had lower coefficients of cultural responsiveness (B =-3.78) and, although not significant, experienced fewer diverse field experiences than those teachers with five or less years of service (B =-1.29). In addition, the data also suggested that for each unit of increase in self-efficacy, cultural responsiveness increased by .754 (B =.754), suggesting that teachers with higher levels of self-efficacy had higher levels of cultural responsiveness.

Conclusions

For teachers to effectively teach multicultural student populations, they need to be aware of their own biases and have an understanding of the specific needs of the student populations and communities in which they teach (Alismail, 2016). This study sought to better understand

teachers' perceived levels of cultural responsiveness, self-efficacy, and growth mindset, as well as their perceived preparedness to teach in multicultural classrooms after completing their teacher preparation programs. Of the seven research questions, three entailed teachers' self-reporting of their cultural responsiveness, self-efficacy, growth mindset, and college preparation. The four other research questions sought to understand whether these factors had an influence on teachers' cultural responsiveness in conjunction with years of service.

The data showed a significant relationship between teachers' perceived cultural responsiveness and self-efficacy ($p=0.778$). As teachers gained self-efficacy, their cultural responsiveness increased. The data also showed that teachers with more than six years of service reported lower levels of cultural responsiveness and self-efficacy than teachers with five years or less. It should be clarified that having one diverse field experience does not fully prepare teachers to work with diverse populations. Some teachers can spend multiple years in a school without exposure to diverse populations from one year to the next. This suggests potential solidification in pedagogical practices without exposure to diverse student populations. Thus, this suggests the importance of a continuum of teacher skill development that ensures teachers are supported in their growth and effectiveness, reaching an increasingly diverse student population. Providing teachers with meaningful and intentional professional development opportunities relating to cultural proficiency is relevant as teachers only have a monocultural experience and view themselves as noncultural, nonethnic, and colorblind - just American, which can affect their ability to acknowledge their students' lived experiences (Banks, 2007; Hachfield et al., 2015).

The data also showed a strong relationship between teachers' perceived level of cultural responsiveness, self-efficacy, and growth mindset. Thus, it supported the idea that to be

culturally responsive, one must believe in one's abilities to perform the job (Bandura, 1997) and have the belief that traits such as personality and intelligence can be acquired and are not fixed (Dweck, 2000). Although experts suggest that universities and teacher preparation must ensure that teacher candidates understand and are prepared to enact culturally responsive pedagogical practices in diverse classrooms, the current educational model is deficit-driven, and rewards are determined by standardized tests and curriculum (Bazemore-Bertrand & Porcher, 2020; Zhao, 2016). Therefore, it is important that teachers understand that having a growth mindset can provide them with an enhanced understanding of multicultural individuals. It can also provide an understanding of opposing views or previously taught stereotypes about other ethnic or racial groups that perpetuate the idea that certain societal groups lack certain qualities that prevent them from academic success (Carales and López, 2020).

As part of their continued growth within the profession, teachers and administrators need to be able to first recognize their own biases and acknowledge they exist in the educational system. Second, teachers and administrators need to acknowledge that these biases are systemic and affect a large portion of the student population nationwide. Third, teachers and administrators need to believe, acknowledge, and respect the lived experience of diverse students and their family members. Establishing continued education for teaching professionals is essential to the well-being of diverse student populations and the sustainability of the teaching profession. While this type of training might be uncomfortable for some, it is important that we learn to be uncomfortable and address how we can be better educators and support all students.

Teachers and administrators must be able to reflect on how they meet the needs of each student. Being able to recognize and disrupt practices that perpetuate inequalities is essential to our practice and profession. Equally essential is the ability to acknowledge the diversity of

learners and to foster inclusive practices that will facilitate the creation of equitable learning spaces for all students. To this end, it is imperative that teachers and administrators employ diverse channels to engage diverse families as members of the school community.

Discussion

This quantitative research study sought to provide a snapshot of novice teachers' perceptions regarding the effectiveness of their teacher education program and field experiences in preparing them to work with multicultural student populations and their perceived self-efficacy in teaching and interacting with diverse student populations. The current political landscape and the debate over diversity and culturally inclusive practices in education support the current and future study of educators' ability to enact culturally responsive pedagogical practices within their classrooms. Current events reflect increasingly concerning rhetoric; between the rise of white nationalism, the banning of books in schools, and the national educator shortage, the United States appears increasingly polarized (McCall, 2018). However, in order to be able to enact culturally responsive practices, educators need to develop the necessary knowledge, self-awareness, respect, and skills that will allow them to effectively work with diverse student populations (Bertera & Littlefield, 2003; Kranz & Sale, 2022).

Teacher Preparedness

Much has been said in the literature about the importance of preparing preservice teachers to be culturally responsive in their classrooms. This ability is particularly important due to many early career, experienced, and preservice teachers having a monocultural life experience – mainly white and female (Banks, 2007; Bazemore-Bertrand & Handsfield, 2019; Hattie, 2009). It is important to note that the ability to enact culturally responsive pedagogical practices in the

classrooms can be a tool to facilitate equitable education for students from diverse racial and ethnic backgrounds (Ladson-Billings, 2021).

This study examined the relationship between teachers' perceived cultural responsiveness and their previous field experiences and classwork and how their years of service impacted their responses. Of the 41 respondents, approximately 86% reported teaching 6 years or more ($n = 35$) and 6 respondents, approximately 14% reported teaching 5 years or less ($n = 6$). As indicated by the linear regression, early career teachers with less than five years of experience appear to have benefited from increasingly more diverse field experiences and coursework (B =-1.29), compared to teachers already in the profession and with more than six years of classroom experience, who presented lower coefficients of cultural responsiveness (B =-3.78) and may have experienced fewer diverse field experiences throughout their teacher preparation programs. In their research about teacher cultural proficiency and self-efficacy, Debnam et al. (2015), surveyed and observed 142 teachers and found that "teachers with fewer years of experience" tended to report higher scores on the Culturally Responsive Teaching Self-Efficacy Scale ($F = 1.76$, $p < .05$), which further supports the importance of providing relevant coursework and field experiences where preservice teachers have the opportunity to interact with multilingual and multicultural student populations and communities. In addition, it is imperative that educational leaders recognize the need for purposeful, continuous professional development opportunities for teachers that address culturally sustaining pedagogical practices. According to Sleeter (2017), veteran teachers may not have had the opportunity to take coursework that addressed cultural responsiveness. In addition, while many teacher programs in the United States have added coursework addressing cultural responsiveness and social justice, many of the teachers graduating from these programs transition into teaching in an environment focused on raising

test scores, which does not necessarily change preconceived mindsets on student achievement and perpetuates the notion of color blindness (Banks, 2007; Hachfield et al., 2015; Sleeter, 2017).

Many scholars agree that students need to feel safe in their environments, and connected to those providing instruction and materials being used to learn. To ensure that teachers are effective in their classrooms, they must become aware of cultural practices, histories, values, beliefs, and behaviors other than their own (Szucs et al., 2019). To this end, preservice, early career, and veteran teachers must be prepared to meet the pedagogical requirements of diverse populations to ensure their success in their classrooms while also understanding their different needs – abilities, language, and culture (House-Niamke & Sato, 2019).

Professional Development

In the United States, Black and Latino students graduate from high school at lower rates than White and Asian students (National Center for Education Statistics, 2020; Parkhouse et al., 2019). The data from this study suggested that current teacher preparation programs have been ensuring that, as part of their training, preservice teachers have a higher exposure to diverse field experiences, communities, and coursework. However, the data also showed that teachers with six or more years of service presented a lower incidence of cultural responsiveness and self-efficacy ($p=-0.209$). This suggested that more experienced teachers may not have had the opportunity to be exposed to field experiences where they could interact with multicultural and multilinguistic student populations, which would have enriched their formative experiences. However, it could be argued that this decrease in self-efficacy and cultural responsiveness is due to veteran teachers' increased awareness of their knowledge gaps regarding diversity, cultural proficiency, and being able to meet the needs of multilingual and multicultural students in their classrooms.

While many efforts are being made to ensure the cultural proficiency of emerging educators, this supports the need to ensure that equal opportunities must be established for those teachers already in the profession, in particular, due to the increased cultural diversity adding new layers of complexity to educators' work where being culturally competent is of essence (Franco, 2021; Santoro & Kennedy, 2016).

Professional development can be defined as "any activity that is intended…to prepare…staff…for improved performance in present and future roles in the school districts (Little, 1987, p. 491). The goal of professional development is to facilitate the learning of new ideas and, hopefully, improve professional practices that directly affect student achievement. The interactions of students and educators in the classroom shape the climate of the school, and a district. However, to ensure the success of professional development related to cultural proficiency, equity, and social justice, it must have the buy-in of the entire school district – administration, school board, teachers, and the community. This is particularly important due to what researchers describe as resistance and fatigue from discussing and working with race (Flynn, 2015; Sleeter, 2017; Smith et al., 2021). Furthermore, administration and teachers' attitudes and beliefs are influenced by their experiences and surroundings and, in turn, drive the climate of the larger school community (Hazelbaker & Mistry, 2021).

According to Parkhouse et al. (2019), professional development in cultural diversity, equity, and inclusion can assist in reducing inequitable academic outcomes and help advocate for the achievement of marginalized communities. Professional development that addresses cultural diversity, equity, and inclusion can facilitate addressing complex and, sometimes, uncomfortable topics. It would also allow educators to analyze their mindsets, increase their knowledge about topics affecting members of the global majority, and how they can support and advocate for

students from diverse backgrounds in their classrooms to feel safe, connected, and successful (Milner, 2007; Sleeter, 2017; Stansberry Brusnahan et al., 2023).

To ensure the continuous growth and sustainment of their school community, educational leaders must assess how their school climate promotes and supports safe and equitable learning environments (El-Mekki, 2020). By assessing the climate of their school community, leadership can make informed decisions on creating meaningful professional development opportunities and thoughtful interventions to ensure all teachers feel they have the tools to enact culturally responsive practices. Additionally, analyzing the climate of a school community can provide leaders with tools to best support teaching practices, provide opportunities for greater input in the decision-making process, and teacher recruitment and retention (Stanley, 2022).

Cultural Competency and Growth Mindset

Learning and growth do not stop once preservice teachers graduate and enter the profession. New curricula, advances in technology, and pedagogical methods consume much of the professional development received by teachers and are made available by districts nationwide. We can all agree that fostering adequate environments for learning is essential to the profession and the growth and success of all students. However, this cannot happen if educators are unaware of their assumptions, beliefs, and biases that may have influenced their belief system and can affect their lenses regarding the educational abilities of culturally diverse student populations (Acquah & Commins, 2017).

Teachers can be affected by their environments and influenced by negative and positive rhetoric around them; therefore, it is important that they develop the necessary knowledge to shape their interactions with individuals from diverse backgrounds – ability, ethnicity, language, race, and religion (Stewart et al., 2021). Challenging mindsets is an important step toward

effective cultural competency. It can help teachers analyze whether their perceived challenges stem from their perceptions of a particular culture or actual academic factors in their control (Sleeter, 2017). Meaningful and purposeful professional development is essential to the success of not only students but also teachers. It helps address gaps in knowledge and can facilitate changes in mindset, increasing cultural awareness and self-efficacy. Teachers must have the ability to analyze their classrooms to identify gaps that can prevent equitable access to resources for all students. Equally important is that teachers feel supported and not judged. Understanding diverse points of view requires interactions with individuals from the global majority, which not all individuals have experienced. Analyzing and understanding their own biases can be an emotional and uncomfortable process. The facilitation of this process must come from a lens of growth and improvement rather than a critical one and should happen in an empathetic and supportive environment (Kranz & Sale, 2022).

When teachers have a better understanding of themselves and how their experiences shaped their worldview, it allows them to make conscious assessments of their environment and how it affects those around them (Beatty et al., 2022). Examining how their environment looks from a member of a marginalized or diverse community point of view is essential to facilitate a change in mindset and increase self-efficacy. Teachers need the skills, knowledge, and resources that will allow them to evaluate their instructional practices, whether a deficit mindset drives some of these practices, and how they can address their biases to improve outcomes by challenging systems of inequity. This process will not only help teachers gain cultural proficiency but will also allow them to facilitate and model awareness, inclusivity, self-efficacy, tolerance, and social justice in their classrooms.

Limitations

The data collected only involved teachers from three rural counties – Butler, Lawrence, and Mercer – in Western Pennsylvania. Data collection occurred at the end of the 2022-2023 school year. The surveys were distributed with the assistance of representatives from the Midwestern Intermediate Unit IV (MIU IV) in Pennsylvania and could have potentially reached 1,568 teachers across 104 school districts.

The survey was distributed via an electronic link to building administrators across the school districts, and administrators were asked to distribute the survey link to teachers in their respective buildings. However, only 58 responses were received, and only 41 respondents completed the entire survey, and their responses moved on to further analysis. The lack of respondents may be attributed to the lateness of the school year and the large number of similar survey requests that teachers may have received. In addition, the narrow collection window and inability to directly contact potential participants might have also been instrumental in the low response rate.

With the narrow sample area of three rural counties in Western Pennsylvania and its small sample size, the generalizability of the study to other states is limited. The study originally sought to provide a snapshot of novice teachers' perceptions of how their teacher preparation programs and field experiences prepared them to interact with and teach diverse student populations. However, only four novice year one and two teachers responded to the survey. Because of the low response rate of novice teachers, I combined the answers of participants' responses with five years or less of experience and the responses of participants with six or more years of service. I analyzed all responses to understand how years of service and teacher

preparation programs influence respondents' levels of cultural proficiency, self-efficacy, and growth mindset.

Although the study only focused on a particular geographical area and had a limited sample size, the study may be relevant for future research. All participants were qualified public school teachers. The respondents attended different teacher preparation programs at private and public universities across the United States. This can provide a window into the potential need for common skills teachers entering the profession must have to enact culturally responsive and equitable practices in the classroom and meet the needs of diverse student populations.

In addition, the self-reported racial composition of respondents (White, *n*=35, 85.4%; Black or African American, *n*=5, 12.2%; Hispanic or Latino, *n*=1, 2.4%) and self-reported community of residence (Rural, *n*=13, 31.7%; Suburban, *n* = 24, 58.5%; Urban, *n* = 4, 9.8%) was representative of what the literature reported was the majority of students enrolled in teacher preparation programs. According to researchers, approximately 80% are White, monolingual, and raised in suburban environments (Banks, 2007; Hattie, 2009; Schaeffer, 2021; Sleeter, 2017; Tatum, 2017).

Conclusion

Although the original purpose of this study was to research novice teachers' perceptions of cultural proficiency, self-efficacy, and mindset, the reality is that to understand the needs of the profession better, we need to broaden the scope to encompass all teachers. Currently, teachers are leaving the profession at an alarming rate, with many teachers stating that they do not feel supported by administrators or their communities and that increasing legislation on topics such as curriculum, diversity, and inclusion prevents them from doing their jobs with fidelity (Miller et al., 2023). However, it is critical for the sustainability of the profession that

work continues in developing the cultural proficiency and self-efficacy of preservice and veteran teachers and showing them how they can be instrumental in developing a more equitable society. To this end, teacher preparation programs and professional development opportunities need to engage in critical discussions that address ideologies, inequalities, and privilege.

Schools are environments where society is made, and teachers are essential to this process (Sánchez Loza, 2021). It is the job of teachers and administrators to ensure that all students feel safe and welcome in this environment; however, for many diverse student populations navigating educational spaces that are not inclusive and equitable affects their perceptions of self-efficacy, safety, and achievement. To this end, teachers need the tools to provide students with a quality education but also an environment in which all students feel safe, accepted, and seen.

Suggestions for Future Research

Teacher preparation programs have been making efforts to ensure that they have developed curriculum models that provide prospective teachers with the knowledge, skills, and mindset necessary to teach and interact with culturally diverse student populations effectively. However, this does not address the cultural competence needs of veteran teachers who may not have been exposed to culturally relevant coursework and field experiences in their preparation programs and work with culturally diverse students. While the literature does address the need for teachers to be culturally competent in education, much of the focus is on White educators in diverse spaces. However, there needs to be more extensive research that addresses the challenges experienced by educators of color in non-diverse spaces. Teachers of color in the United States represent approximately 20% of the teaching population and are leaving the profession at an alarming rate (NCES, 2021). Furthermore, teachers of color are oftentimes stereotyped and

experience additional scrutiny from their peers and educational leaders, which may influence their sense of self-efficacy (Williams, 2018; Duncan, 2019).

In addition, the literature generalizes the cultural responsiveness of all educators (elementary, middle, and high school). This area could benefit from future studies to understand whether the grade level of the student population might influence teachers' cultural responsiveness and self-efficacy. It would also be of interest to examine how the cultural, linguistic, or ethnic background of the teacher influences the outcome. Furthermore, how are cultural differences and diversity addressed in child development coursework? Are teacher preparation programs addressing unique cultural perspectives in their curricula?

As mentioned, an important area that could benefit from further research is how teachers, members of the global majority, navigate teaching in rural and suburban areas where they might be the only ethnic minority within the district. Throughout their lives, many teachers of color have experienced systemic racism and social oppression and have been urged to assimilate into the cultural and linguistic practices of a White American society (El-Mekki, 2020). According to the National Center for Education Statistics (2021), approximately 20% of teachers in the United States are ethnic minorities, and approximately 80% of teachers in the United States are White. In contrast, in most schools with large minority student populations, most teachers were White (National Center for Education Statistics, 2021). According to researchers, exposure to a diverse teacher population can benefit all students as it enriches their worldviews and can lead to better test scores, reduced absenteeism, and fewer disciplinary problems for minority students (Egalite et al., 2015; Villegas et al., 2012). Furthermore, minority teachers are more likely to enact culturally responsive and equitable classroom practices (Burciaga & Kohli, 2018; Irizarry & Donaldson, 2012). Unfortunately, compared to their White counterparts, they often do not feel

valued for their contributions (Burciaga & Kohli, 2018; Pour-Khorshid, 2016). Educators of color have also reported facing social isolation, mistrust, and a lack of support from administrators and peers (El-Mekki, 2020).

Much of the focus in the literature addresses ensuring the cultural responsiveness of White teachers toward their students and supporting these teachers in their journeys to establish equitable classrooms. However, an essential area of study is the support of minority educators in non-diverse environments. In the current polarizing environment in the United States, it is not only culturally and ethnically diverse students who may experience uncertainty. Understanding the experiences of culturally and ethnically diverse teachers in communities where they might experience scrutiny due to their race or ethnicity, microaggressions, and concerns for their safety is important for the recruitment, development, and retention of minorities in the profession.

Summary

This quantitative study sought insight into teachers' perceptions of how their teacher preparation programs and field experiences prepared them to enact culturally responsive pedagogical practices in multicultural classrooms and their perceived self-efficacy when interacting with and teaching diverse student populations. Forty-one respondents from three rural counties – Mercer, Lawrence, and Butler – in Western Pennsylvania participated in the survey during the 2022-2023 school year.

All respondents were public school teachers and answered a five-part survey. They answered demographic questions and questions regarding their perceived levels of cultural responsiveness, self-efficacy, growth mindset, and teacher preparation program. Data was analyzed with three fundamental assumptions regarding the sample – teachers provided with diverse field experiences and curricula are better prepared to teach diverse student populations;

teachers experience greater self-efficacy when exposed to diverse field experiences and curricula; teachers with a growth mindset experience greater degrees of self-efficacy in the classroom.

Of the 41 respondents, five identified as male (n=5, 12.2%), and thirty-six as female (n=36, 87.8%). Thirty-five respondents identified as White (n=35, 85.37%), five identified as Black or African American (n=5, 12.2%), and one identified as Hispanic or Latino (n=1, 2.4%). According to the National Center for Educational Statistics (2021), 77% of public school teachers in the United States are female, and 23% of teachers are male. In addition, approximately 80% of public school teachers identify as White, and approximately 20% of teachers identify as other ethnic minorities (National Center for Education Statistics, 2021).

Data was further analyzed by conducting a Pearson's zero-order analysis to examine each assumption of the criterion variables. The data showed that there was a significant correlation between the variables of cultural responsiveness and self-efficacy (p=0.778), between growth mindset and cultural responsiveness (p=0.653), between self-efficacy and growth mindset (p=0.629), and between self-efficacy and teacher preparation (p=0.410). These results aligned with the importance of understanding how misperceptions, overreactions, and discriminations can adversely affect student achievement and how teachers' awareness will be essential to the dismantling of negative assumptions regarding cultural diversity (Howard, 2016; Legette et al., 2021). In addition, these results supported the need for teachers to be directly taught how to be socially just and teach from a position of cultural responsiveness (Bazemore-Bertrand & Porcher, 2020).

In addition, linear regression analysis was conducted to test how years of service and diverse field experiences explained participants' ability to enact culturally responsive practices.

The dependent variable, cultural responsiveness, was regressed on predicting variables self-efficacy, growth mindset, teacher preparation, years of service, and diverse field experiences. The independent variables significantly predicted cultural responsiveness, $F(5, 35) = 16.627$, $p<.001$, which indicated that the five factors have a significant impact on cultural responsiveness. Furthermore, the $R2 = .704$ depicted that the model explained 70.4% of the variance in teacher cultural responsiveness.

The purpose of education is to serve society's needs (Carpenter & Hughes, 2011). Cultural competency and self-efficacy are more critical now than ever. In an increasingly polarizing global society, teachers are essential in forming and transforming society. They are tasked with facilitating spaces where students learn how to apply cultural, racial, ethnic, and linguistic abilities to develop critical thinking and problem-solving skills for the betterment of society. For future and current teachers to form and transform a society built on equity, social justice, and equality, they need the necessary tools to dismantle biases and embrace culturally sustaining change.

As previously mentioned, education serves the needs of society, and it is important to note that society has changed. Issues and attitudes towards education have increasingly become deeply polarized. While the American public education system is still a social institution, its purpose has evolved from the dissemination of norms, customs, and ideologies of future citizens to ensure that current and future American citizens can function as members of a global society (Brown et al., 2017; Popa, 2016). To this end, conversations must be taking place beyond the education of teachers or regarding the diversification of the teaching profession, but rather about what happens after teachers enter the classroom and how they can be supported to ensure the success of these global citizens.

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APPENDIX A: IRB APPROVAL

Date: 5-10-2023

IRB #: 2023-287
Title: Teacher Cultural Awareness and Responsiveness Survey
Creation Date: 4-17-2023
End Date:
Status: Approved
Principal Investigator: Jane Beese
Review Board: YSU IRB Board
Sponsor:

Study History

Submission Type	Review Type	Decision
Initial	Exempt	Exempt

Key Study Contacts

Member	Role	Contact
Veronica Torres Oquendo	Co-Principal Investigator	vstorresoquendo@student.ysu.edu
Jane Beese	Principal Investigator	jbeese@ysu.edu
Veronica Torres Oquendo	Primary Contact	vstorresoquendo@student.ysu.edu

APPENDIX B: PERMISSION TO USE INSTRUMENT

Duffield, Stacy <stacy.duffield@ndsu.edu>
Wed 1/25/2023 9:56 AM
To: Veronica S Torres Oquendo <vstorresoquendo@ysu.edu>

1 attachments (32 KB)
Guidelines for Use of Common Metrics Data.docx;

Hello Veronica,

Yes, you can sure use these surveys. We just ask that we are given credit. I am attaching a document that we worked out for helping with citations.

We have quite a bit of information about the surveys on the NExT website, including the latest validity and reliability studies. NExT | Network for Excellence in Teaching-Common Metrics Instruments | NExT | Network for Excellence in Teaching (nexteachers.org)

Best wishes with your research. Let me know if you have any questions about the instruments. I would love to hear about your findings!

Stacy

From: Veronica S Torres Oquendo <vstorresoquendo@ysu.edu>
Sent: Tuesday, January 24, 2023 5:47 PM
To: Duffield, Stacy <stacy.duffield@ndsu.edu>
Subject: TTS and Exit Interview Request

Dear Dr. Duffield,

I hope this email finds you well. My name is Verónica S. Torres Oquendo, and I am a doctoral candidate in the Educational Leadership Program at Youngstown State University. I am writing to request your permission to use the Transition to Teaching Survey (TTS) and portions of the Exit Interview Survey in my doctoral study. With your permission, I would like to use the instruments in an online format to survey novice teachers in Northeast Ohio and Western Pennsylvania.

The focus of my study is to provide a snapshot of how novice teachers navigate the challenges of multicultural classrooms and their perceptions of how their teacher preparation programs and field experiences prepared them for these challenges.

Thank you for your consideration.

Verónica S. Torres Oquendo

APPENDIX C: LETTER OF COOPERATION

Midwestern Intermediate Unit IV
453 Maple Street, Grove City, PA 16127 • 724-458-6700 • fax: 724-458-5083 • www.miu4.org

Letter of Collaboration

Date: April 19, 2023

Re: Letter of Cooperation for Midwestern Intermediate Unit IV (MIU IV)

Dear Dr. Jane Beese,

This letter confirms that I, Dr. David Zupsic, as an authorized representative of Midwestern Intermediate Unit IV (MIU IV), will assist Verónica S. Torres Oquendo in the distribution of study instruments at the schools supported by the Midwestern Intermediate Unit IV (MIU IV), as discussed with the Principal Investigator and briefly outlined below, and which may commence when the documentation of IRB approval for the proposed project is received.

- **Study Title:** Teacher Cultural Awareness and Responsiveness Survey
- **Study Activities Occurring at this Site:** Survey to be distributed electronically to teachers in participating schools.
- **Site(s) Support:** Assistance in distributing survey instruments.
- **Anticipated End Date:** June 9, 2023

I understand that any activities involving compliance with Health Insurance Portability and Accountability Act (HIPAA), Family Educational Rights and Privacy Act (FERPA), or other applicable regulations at this site must be addressed prior to granting permission to the Youngstown State University researcher to collect or receive data from the site. I am authorized to make this determination on my organization's behalf.

We understand that Midwestern Intermediate Unit IV (MIU IV)'s participation will only take place during the study's active IRB approval period. All study-related activities must cease if IRB approval expires or is suspended. If we have any concerns related to this project, we will contact the Principal Investigator, who can provide the information about the IRB approval. For concerns regarding IRB policy or human subject welfare, we may also contact the Youngstown State University IRB at YSUIRB@ysu.edu.

Sincerely,

[redacted]

Dr. David Zupsic
Director of Educational Services
Midwestern Intermediate Unit IV (MIU IV)

Midwestern Intermediate Unit IV is an education and community service agency comprised of highly qualified staff who customize solutions to evolving challenges.

APPENDIX D: RECRUITMENT EMAIL

Dear Educator:

My name is Verónica S. Torres Oquendo, a doctoral student in the Educational Leadership program at Youngstown State University and fellow educator.

I would like to invite you to participate in my dissertation study about teachers' perceived preparedness to interact with and teach multicultural student populations. The survey will explore how exposure, field experiences, and relevant curricula provided opportunities to interact with diverse student populations and the challenges they might face.

Youngstown State University IRB has approved this study. Your privacy is important, and I will handle all information collected with confidentiality. Results will not identify participants, and the study results will only be presented as part of my dissertation defense.

If you would like to participate in my study, please click on the link below to participate.

Thank you for your time. If you have any questions or need further information, please do not hesitate to contact me.

Sincerely,

Verónica S. Torres Oquendo
vstorresoquendo@student.ysu.edu

APPENDIX E: INFORMED CONSENT FORM

Dear Teacher:

My name is Verónica S. Torres Oquendo, a doctoral student in the Educational Leadership program at Youngstown State University and fellow teacher. As part of my dissertation, I will be conducting a survey to research how teachers perceive their preparedness to interact with and teach multicultural student populations.

KEY INFORMATION

This document defines the terms and conditions for consent to participate in this research study.

- ***How do I know if I can be in this study?***
  - I am currently employed as a school teacher in Mercer, Lawrence, or Butler counties in Western Pennsylvania,
  - and I am willing to answer personal, identifiable demographic questions related to my gender identity, race/ethnicity, years of service, cultural exposure, and typology.

- ***What am I being asked to do?*** If you agree to be in this study, you will be asked to:
  - Complete one (1) anonymous online survey, which will take approximately 30 minutes to complete.
  - The 41-item survey is related to teachers' perception of their level of cultural responsiveness, level of self-efficacy, level of growth mindset, and their perceived effectiveness of their teacher preparation program.
  - Your participation in the survey is anonymous.
  - The survey will contain no personally identifiable information.

- **Who will have access to my information?** The investigators of the study will have access to survey responses. Participation is voluntary, and you can stop participating at any time.

- **Any possible risks or discomforts?** Participating in the interview or taking the survey may experience emotional responses from answering questions regarding their perception of cultural responsiveness, growth mindset, self-efficacy, and the perceived effectiveness of their teacher preparation programs. Although unlikely, it is possible that a person reading the study may infer the identities of participants. The researchers will not use any personally identifiable information in the reporting of results. The researchers may report results in educational or leadership journals or at conferences. You may end participation at any time during the surveys. If you stop participating, the researchers will delete all of your responses.

- **Any direct benefits for me?** The benefit that connects to this study is that the information collected will help districts, administrators, and, potentially, universities to create opportunities to help teachers to implement culturally responsive practices in their classrooms to ensure the success of all students.

- **Any paid compensation for my time?** Participants will not get paid for their participation in this study.

- **How will my information and/or identity be protected?** The records of this study will be kept private. Information that will make it possible to identify you will be removed. Research records will be kept in a locked file, and only the researcher will have access to the records for a maximum of three years.

PRESENTATION OF INFORMATION COLLECTED

The information collected is specific to this study. Although the data collected will be grouped, individual data will be presented.

PRIVACY AND DATA SECURITY

- **Will researchers ever be able to link my data/responses back to me?**
  No. The data will not identify you as the respondent.

- **Will my data include information that can identify me (names, addresses, etc.)?**
  No. The data that the respondent completes will be assigned a pseudonym or identifier in place of the participant's name to protect the identity and maintain confidentiality.

- **Will researchers assign my data/responses a research ID code to use instead of my name?** Yes.

- **How will my data be protected (electronic and hardcopy)? Where? How long? Who will have access? Approximate destruction or de-identification date?**
  All data in this study will be protected by the researcher for three years. All recordings will be kept confidential, which means that we will be the only ones who will view your interview responses and ensure that any information included in the study does not identify you as the respondent.

- **Where and how will the signed consent forms be secured?**
  All data obtained, including informed consent, survey responses, and notes, will be stored in two locations identified as the researchers' computer hard drives and an external hard drive for a maximum of three years based on YSU's guidelines.

FUTURE RESEARCH

The data gathered for this study could be used for future research. After the names and email addresses are removed, no additional informed consent forms from the participants are needed.

STUDY CONTACTS

Should you have any questions before, during, or after the study begins or wish to withdraw from the study, you can contact me at vstorresoquendo@student.ysu.edu. If you have any questions about this research, please contact Dr. Jane Beese, Dissertation Chair, at jbeese@ysu.edu.

If you have any questions about your rights as a participant in a research project, you may contact the Office of Research Services at Youngstown State University at (330) 941-2377 or via email at YSUIRB@ysu.edu.

VOLUNTARY CONSENT

Participant's Rights

- I have been given an opportunity to read the informed consent.
- I have been given an opportunity to ask questions about this study.
- I have been given enough time to consider whether or not I want to participate.
- I have read and understand the terms and conditions and agree to take part in this research study.
- I understand my participation is voluntary and that I may stop participation at any time without penalty.
- **BY COMPLETING AND SUBMITTING THIS SURVEY, I *CONSENT* TO PARTICIPATE IN THIS STUDY.**

APPENDIX F: ANALYSIS OF DATA

Correlations

[DataSet1] C:\Users\vstorresoquendo\OneDrive - Youngstown State University\Desktop\Teacher Cultural Awareness and Responsiveness Survey081723.sav

Correlations

		CR	SE	GW	TP	TP 4	Years of Service
CR	Pearson Correlation	1	.778**	.653**	.310*	-.043	-.209
	Sig. (2-tailed)		<.001	<.001	.049	.788	.190
	N	41	41	41	41	41	41
SE	Pearson Correlation	.778**	1	.629**	.410**	.075	.022
	Sig. (2-tailed)	<.001		<.001	.008	.641	.893
	N	41	41	41	41	41	41
GW	Pearson Correlation	.653**	.629**	1	.413**	.099	-.058
	Sig. (2-tailed)	<.001	<.001		.007	.537	.719
	N	41	41	41	41	41	41
TP	Pearson Correlation	.310*	.410**	.413**	1	.772**	.072
	Sig. (2-tailed)	.049	.008	.007		<.001	.654
	N	41	41	41	41	41	41
TP 4	Pearson Correlation	-.043	.075	.099	.772**	1	.135
	Sig. (2-tailed)	.788	.641	.537	<.001		.401
	N	41	41	41	41	41	41
Years of Service	Pearson Correlation	-.209	.022	-.058	.072	.135	1
	Sig. (2-tailed)	.190	.893	.719	.654	.401	
	N	41	41	41	41	41	41

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

PPlot

Model Description

Model Name		MOD_1
Series or Sequence	1	CR
	2	SE
	3	GW
	4	TP
Transformation		None
Non-Seasonal Differencing		0
Seasonal Differencing		0
Length of Seasonal Period		No periodicity
Standardization		Not applied
Distribution	Type	Normal
	Location	estimated
	Scale	estimated
Fractional Rank Estimation Method		Blom's
Rank Assigned to Ties		Mean rank of tied values

Applying the model specifications from MOD_1

Case Processing Summary

		CR	SE	GW	TP
Series or Sequence Length		41	41	41	41
Number of Missing Values in the Plot	User-Missing	0	0	0	0
	System-Missing	0	0	0	0

The cases are unweighted.

Estimated Distribution Parameters

		CR	SE	GW	TP
Normal Distribution	Location	30.3415	26.1220	16.0488	16.5366
	Scale	7.00218	5.58209	4.47186	3.11527

The cases are unweighted.

Regression

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	TP, Years of Service, SE, GW, TP 4[b]	.	Enter

a. Dependent Variable: CR

b. All requested variables entered.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.839[a]	.704	.661	4.07446	2.049

a. Predictors: (Constant), TP, Years of Service, SE, GW, TP 4

b. Dependent Variable: CR

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1380.176	5	276.035	16.627	<.001[b]
	Residual	581.044	35	16.601		
	Total	1961.220	40			

a. Dependent Variable: CR

b. Predictors: (Constant), TP, Years of Service, SE, GW, TP 4

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	6.198	4.440		1.396	.172	-2.816	15.212		
	Years of Service	-3.783	1.828	-.193	-2.070	.046	-7.495	-.072	.970	1.031
	TP 4	-1.285	1.192	-.176	-1.078	.288	-3.704	1.134	.316	3.163
	SE	.754	.158	.601	4.763	<.001	.433	1.075	.532	1.880
	GW	.364	.194	.232	1.873	.069	-.031	.758	.550	1.820
	TP	.265	.409	.118	.648	.521	-.565	1.095	.256	3.908

a. Dependent Variable: CR

Collinearity Diagnostics[a]

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions					
				(Constant)	Years of Service	TP 4	SE	GW	TP
1	1	5.653	1.000	.00	.00	.00	.00	.00	.00
	2	.156	6.021	.00	.12	.28	.01	.01	.00
	3	.137	6.422	.00	.70	.01	.01	.05	.00
	4	.031	13.536	.30	.16	.03	.01	.57	.01
	5	.017	18.242	.24	.00	.01	.88	.31	.00
	6	.006	29.516	.46	.02	.67	.10	.05	.98

a. Dependent Variable: CR

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	16.7270	41.2914	30.3415	5.87404	41
Residual	-8.06992	8.56753	.00000	3.81131	41
Std. Predicted Value	-2.318	1.864	.000	1.000	41
Std. Residual	-1.981	2.103	.000	.935	41

a. Dependent Variable: CR