Special Educator Preparation: Are We Preparing Candidates who Possess the Dispositions to be Effective Educators for Diverse Learners?

by

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Abstract

Considerable debate continues in the field of educator preparation regarding how to ensure candidates possess critical teaching dispositions upon program completion. Despite considerable evidence that teachers who do not possess dispositions towards social justice do not provide equitable instruction to all students, there is still no consensus on how educator preparation programs should address dispositions assessment and development into their programs. Considering the recent attention of the impact of intersectionality of different types of diversity, there is a considerable lack of research on preparing special educators to work with learners who identify with other diverse groups. This paper presents details regarding an investigation into a course at one institution that is required of all special education majors who are seeking initial certification. This particular course was designed to address standards related to diversity. The purpose of the study was to determine if completing the course caused changes in participant attitudes and self-efficacy regarding teaching learners who are diverse. The Multicultural Efficacy Scale (Guyton & Wesche, 2005) along with the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960) were administered at the beginning of the course and at the end. Pre- and post-test data were analyzed using paired sample t-tests and the non-parametric Wilcoxon Signed Rank Test. Results indicated no significant difference in participant attitudes after completing the course. However, significant differences in participant self-efficacy were achieved.

Keywords: special education, educator preparation, educator candidates, social justice, dispositions, intersectionality, dual diversity

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Table of Contents

List of Tables

List of Abbreviations

AACTE	American Association of Colleges for Teacher Education
CAEP	Council for the Accreditation of Education Programs
CEC	Council for Exceptional Children
CLD	Culturally and Linguistically Diverse
ELs	English Learners
ESL	English as a Second Language
InTASC	Interstate New Teacher Assessment and Support Consortium
MCSD	Marlowe-Crowne Social Desirability Scale
MES	Multicultural Efficacy Scale
NCATE	National Council for Accreditation of Teacher Educators

CHAPTER I. INTRODUCTION

Kindergarten through twelfth grade learners in the United States are increasing in multiple characteristics related to diversity, whereas the pool of educators continues to be primarily comprised of White, monolingual, middle-class females (Edwards, 2011; Sauer & Sauer, 2010; Ukpokodu, 2011; Vázquez-Montilla, Just, & Triscari, 2014). Given the nationally recognized achievement gaps demonstrated by learners from diverse groups, considerable attention has been given to the dispositions of educators regarding diverse learners and the impact of those dispositions on student achievement. Learners with disabilities often represent another diverse group in addition to disability. Although not highly researched, there is some evidence that suggests learners who represent mutiple categories of diversity experience additional barriers to equitable educational experiences (Blanchett, Klingner, & Harry, 2009; Crenshaw, 1991; Garcia & Ortiz, 2013, Pugach, Blanton, & Florian, 2012).

Accrediting bodies for educator preparation programs have attempted to create standards that increase equitable instruction for all learners (Council for the Accreditation of Educator Preparation [CAEP], 2013; Interstate New Teacher Assessment and Support Consortium [InTASC], 1992). Educator preparation programs are tasked with designing and revising programs to meet these standards. Current standards for educator preparation programs include standards that relate to diverse learners for all educators. Special education preparation programs have an additional responsibility of preparing teaching candidates to address the ways multiple types of diversity interact and impact educational opportunities for learners with disabilities.

Statement of Problem

Educator preparation programs are responsible for ensuring their candidates meet all standards delineated by accrediting bodies, including standards related to being prepared to work

with learners who are diverse. Educator preparation programs must not only comply with standards from accrediting bodies, but also with regulations from state certification offices and institutional credit hour and length of program guidelines. In addition to these standards and regulations, programs often have standards from professional organizations to meet in order to be recognized or accredited by their professional organizations. As standards and regulations are updated, programs are tasked with ensuring all standards are met. This frequently requires redesigning programs and courses and attaching standards to specific courses for coverage.

Attaching standards to certain courses is only the first step. Next, programs must design and include assessments that are intended to measure whether candidates have met these standards by the completion of the course. This is frequently done through designing assignments and assessments that include the content from the selected standards. This process can be somewhat subjective and can leave programs wondering if candidates have actually acquired the content intended to meet the required standards. In the field of special education, there is a noticeable lack of research related to dispositions towards diversity other than disability. This leaves special education preparation programs to their own devices to determine if their programs effectively prepare their candidates to work with learners who represent other diverse groups (Keen & Bustamante, 2017; McHatton, Smith, Brown, & Curtis, 2013; Robertson, García, McFarland, & Rieth, 2012).

An additional challenge of measuring dispositions towards diverse learners is the lack of a universally accepted measure for dispositions related to diversity. While several measures exist, none have a substantial presence in the literature. This makes identifying a reliable and valid measure difficult and frequently leads professionals to design their own or revise existing measures (Jensen, Whiting, & Chapman, 2018).

Purpose of Study

The purpose of the current study was to examine how one educator preparation program was working to prepare future special educators to work with learners who represent diversity other than disability. Specifically, the study examined the effects of one course that included standards related to teaching learners who are diverse using the Multicultural Efficacy Scale (MES) developed by Guyton & Wesche (2005). Candidates' attitudes and self-efficacy towards learners who are diverse were measured prior to and at the conclusion of the course. Pre- and post-test data were compared to examine any changes that occurred after successfully completing the course. The Marlowe-Crowne Social Desirability Scale (MCSD) developed by Crowne & Marlowe (1960) was administered along with the MES during both the pre- and post-tests. The MCSD was included in order to provide additional information to consider regarding participant responses to the MES.

Research Questions

This study investigated two research questions related to special education candidates' dispositions towards learners who are diverse.

1. To what extent does participation in a required course designed to address diversity-related standards impact change in the *attitudes* of special education candidates towards teaching learners who are diverse (e.g., ethnicity, race, geographical origin, language, religion, socioeconomic status, gender, sexual identification)?
2. To what extent does participation in a required course designed to address diversity-related standards impact change in the *self-efficacy* of special education candidates towards teaching learners who are diverse (e.g., ethnicity, race, geographical origin, language, religion, socioeconomic status, gender, sexual identification)?

Overview of Research Design

The purpose of this study was to investigate changes in special education candidate attitudes and self-efficacy following completion of a course that included standards related to diverse learners. A non-experimental, pre/post evaluation using the MES survey was conducted. Descriptive and statistical analyses were performed. Paired sample t-tests were performed to determine if a statistically significant difference existed for pre- and post-test data using MES subsection total scores. Results from the MCSD were used to provide descriptive information about the results from the MES.

Significance of the Study

A review of the literature revealed that there is a significant shortage of research pertaining to the dispositions of special education candidates towards learners who represent diverse groups other than disability. This shortage is problematic as these dually diverse learners with disabilities likely experience additional barriers to equitable education. In order to prepare special education candidates who will provide effective instruction and services to these learners, educator preparation programs must examine course and program effectiveness. A common practice is for educator preparation programs to design their own studies to evaluate program and course effectiveness (Freking, 2000; Kidd, Sánchez, & Thorp, 2007; McHatton et al., 2013; Mills & Ballantyne, 2010; Prater, Wilder, & Dyches, 2008; Robertson et al., 2012; Robertson, McFarland, Sciuchetti, & Garcia, 2017; Thompson, 2013).

Limitations of the Study

There are several limitations to consider when interpreting the results of this proposed study. One limitation is the small sample size. This limitation is frequently present in studies involving special education candidates as the quantity of special education candidates enrolled in

educator programs is significantly lower than candidates in general education programs (Cowan, Goldhaber, Hayes, & Theobald, 2015; McLeskey, Tyler, & Flippin, 2004; Will, 2018). However, this was unavoidable as the purpose of the study was to examine the dispositions of special education candidates towards learners who identify with diverse groups other than disability. Similarly, the participants in this study were homogeneous in nature. All participants reported themselves as White, hetersosexual females aged 19-23. Although this is somewhat consistent with data on nationwide educator demographic information, a larger, more representative sample would be preferred.

Another limitation is that this study only included candidates from one university in one educator preparation program. Because the purpose was to examine effects of a particular course's impact on candidate dispositions towards diversity, there was no way to prevent this limitation. However, the course was offered two times during an academic year. In an effort to increase the usefulness of the findings, this study was administered during both course offerings.

Although direct administration of surveys is ideal for high rates of participation (Fraenkel, Wallen, & Hyun, 2012), a potential threat to internal validity could arise from the location of survey administration being the classroom where participants are taking the course in question. This potential location threat could introduce social desirability bias to participant responses. Social desirability threats may also be present due to the fact that participants in this study are educator candidates and may feel the need to respond in ways that they do not actually feel.

Summary

This study was an initial investigation into educator candidate attitudes and self-efficacy regarding learners who are diverse. Specifically, the study included candidates enrolled in a

special educator preparation program and examined their attitudes and self-efficacy towards learners who are diverse. The purpose of the study was to determine if candidate pre- and post-measures indicated that a course designed to include standards related to such learners did, in fact, impact candidate attitudes and self-efficacy in regard to learners who are diverse. Ideally, the results of this study would provide information that could inform course and program design for candidates in this special educator preparation program.

CHAPTER II. REVIEW OF THE LITERATURE

Introduction

In recent years, educator preparation programs have been including more content and experiences related to learner diversity largely due to the inclusion of professional standards related to diversity recommended by accrediting bodies. These standards are tied to diversity in terms of ethnicity, race, geographical origin, language, religion, socioeconomic status, gender, sexual identification, and disability (CAEP, 2013). There is a growing body of research on how educators' dispositions towards diversity impact outcomes for learners. The impact of the intersectionality between disability and other types of diversity has received increasing attention in the literature in recent years as well. Given that impact, one area where research seems to be lacking is on the dispositions of special education candidates towards learners with disabilities who also identify with other diverse groups (Hernández-Saca, Kahn, & Cannon, 2018).

This chapter begins with a summary of important legislation that has impacted learners who are diverse as well as concerns related to the achievement of diverse learners. Next, a history of the development of the term *dispositions* in the field of education and research related to the impact of educator dispositions on learner achievement is presented. Then, research related to how education preparation programs have addressed dispositions in their program is summarized. Finally, considerations regarding the intersectionality of disability and other types of diversity as well as methods to prepare special educators who are prepared to provide effective instruction to learners who are diverse are offered.

For the purpose of this paper, *learner*, refers to children who are eligible for early childhood and K-12 education. *Educator(s)* refers to teachers of early childhood and K-12 learners. *Diverse learners* refers to early childhood and K-12 learners who differ from the

cultural majority in the United States on the basis of ethnicity, race, geographical origin, language, religion, socioeconomic status, gender, sexual identification, and/or disability. *Educator candidate(s)* and *candidate(s)* refers to individuals enrolled in educator preparation programs. *Dispositions* refers to the attitudes and beliefs of educators and educator candidates that are observed through their teaching practices through instruction, discipline procedures, and interactions.

Laws Pertaining To Protecting The Rights Of Learners Who Are Diverse Including Those With Disabilities

Legislation that protects the rights of individuals considered to be minorites, including those with disabilities, is largely in place due to the efforts of advocacy groups who were responding to the exclusion of such individuals. Despite state compulsory eduation laws passed in the mid 1850s and early 1900s, children with disabilities were still permitted to be excluded from education. The White House Conference of 1910 addressed education programs for learners with disabilites and began a shift towards educating learners with disabilities in public schools instead of utilizing institutionalization as the primary method (Yell, 2016). A few states began adopting laws that required public schools to provide an education to learners with disabilities between 1911 and 1920, but the states had difficulty enforcing the laws. Additionally, learners with disabilities in regular classrooms were still largely unidentified and struggled to succeed. By the 1930s, there was a decrease in the number of special education programs, and the ones that remained were still highly restrictive and custodial in nature, similar to the institutional placements they were meant to replace (Yell, 2016). In the 1940s and 1950s, World War II veterans who had returned home with acquired disabilities were struggling to succeed in a society full of barriers and brought disability-related issues to the attention of the nation (Martin,

2001). Legislation from the 1920s through the 1950s for individuals with disabilities pertained more to vocational rehabilitation for veterans rather than rights for the general public with disabilities. During this time, parent and professional organizations and advocacy groups began forming and fighting for the rights of learners with disabilities and were instrumental in the sweeping changes that occurred from the 1950s through the 1970s (Martin, 2001; Yell, 2016).

The movement to protect the rights of individuals with disabilities was heavily influenced by the civil rights movement. In the 1950s, the civil rights movement began as an effort to end racial segregation and discrimination. The 1954 Supreme Court determined in *Brown v. Board of Education* that segregation of racial minorities in schools denied learners equal opportunities in education and was unconstitutional. Ten years later, Title VI of the Civil Rights Act of 1964 was enacted and prohibited discrimination on the basis of race, color, and national origin in programs and activities that received federal funding (U.S. Department of Justice [DOJ], 2016). *Brown v. Board,* The Civil Rights Act of 1964, and The Voting Rights Act of 1965 which prohibited racial discrimination in voting set the stage for disability advocacy groups who began a movement to prohibit discrimination on the basis of disability.

The 1960s and 1970s contained many efforts to improve the circumstances of learners, including those who were diverse. The 1965 Congress passed the Elementary and Secondary Education Act (ESEA), which was initially enacted to provide federal funding to states in an effort to support learners from economically disadvantaged backgrounds. Learners with disabilities who attended state schools were included in this act. The ESEA was critical to the disability rights movement because it set a precedent for federal funding to support the education of a specific group of learners, which eventually led to federal funding to support learners with disabilities in education. The 1966 amendments to ESEA, Title VI, added grant funding to

encourage the development of programs for learners with disabilities (Yell, 2016). Two years later, the 1968 amendments included, among other things, the Bilingual Education Act (BEA), which originally included financial incentives to states to create effective educational programs for learners who had limited English proficiency as well as additional grant programs to serve learners with disabilities. That same year, the 1968 Architectural Barriers Act (ABA) was passed. ABA was the first federal legislation regarding accessibility for individuals with disabilities and required all federally funded buildings and transportation facilities to be accessible to individuals with disabilities. The ABA set the stage for future civil rights legislation for individuals with disabilities. Two years later, in 1970, Title VI of the ESEA was replaced with the Education of the Handicapped Act (EHA). The EHA provided additional funding to states for creating, expanding, or improving programs for learners with disabilities; grants to higher education institutions to train educators for learners with disabilities; and funding to create and maintain regional resource centers. In 1972, Title IX of the Education Amendments added that discrimination on the basis of sex or blindness was prohibited in any program or activity receiving federal funding (DOJ, 2015).

Early stages of the disability rights movement included a series of equal opportunity lawsuits for learners with disabilities (Wright, 2010; Yell, 2016). The *Pennsylvania Association for Retarded Citizens (PARC) v. Commonwealth of Pennsylvania* resulted in a federal court decision in 1972 that learners with mental retardation between the ages of 6 and 21 must receive a free public education in a program as similar to those of their peers without disabilities as possible. Following the *PARC* decision, another class action suit was filed in the Federal District Court for the District of Columbia. *Mills v. Board of Education of District of Columbia* resulted in a court decision in 1972 that learners who had been expelled and excluded from public schools

based on the severity of their disabilities must receive public education, and the district must include procedural safeguards including: (1) the right to a hearing with representation and an impartial hearing officer, (2) the right to appeal, (3) access to records, and (4) required written notice for all components of the process. The *Mills v. Board of Education of District of Columbia* decision also provided due process procedures for identification, placement, and exclusion of learners with disabilities. These safeguards and procedures later became the basis for the due process piece of The Education for All Handicapped Children Act (EAHCA) in 1975 (Yell). The 1974 amendments to the EHA responded to the *PARC* and *Mills* cases. These Education Amendments of 1974 authorized a National Advisory Council and required each state receiving federal funding to provide equal educational opportunities for learners with disabilities. While impactful for learners with disabilities and learners who were gifted and talented, the amendments of 1974 still had room for improvement (Yell, 2016).

As educational law was being developed, laws to protect civil rights were also being formulated. In 1973, Congress passed the Rehabilitation Act. Section 504 of The Rehabilitation Act of 1973 was the first federal civil rights law protecting individuals with disabilities from discrimination in any activity receiving federal financial assistance and was similar to previously enacted civil rights laws (e.g., Title VI of the Civil Rights Act of 1964 and Title IX of the Education Amendments of 1972). Both of these acts prohibited discrimination on the basis of race or sex. One area where Section 504 applies is public schools. Although there are no funds available, schools are required to make reasonable accommodations to ensure that discrimination on the basis of disability does not occur (Yell, 2016). Section 504 was enacted as a civil rights law and contained broad definitions and requirements that are still in place today. Although Section 504 of the Rehabilitation Act of 1973 was landmark legislation for people with

disabilities, a need remained for increased legislation for learners with disabilities in public schools.

Despite previous legislation, alarming amounts of learners with disabilities were still being excluded from public education, segregated from their peers, or not receiving an education that met their unique needs in the public schools. In 1975, President Ford enacted legislation that significantly increased the role of the federal government in education for learners with disabilities. This legislation, P.L. 94-142 or The Education for All Handicapped Children Act (EAHCA) of 1975, created stricter guidelines for federal funding for services for learners with disabilities. In order to receive federal assistance states and local education agencies (LEAs) were required to develop and implement policies that ensured learners with disabilities received a free and appropriate public education (FAPE). States were required to provide FAPE to learners with disabilities ages 3-18 by September 1, 1978, and to learners with disabilities ages 3-21 by September 1, 1980. The EAHCA declared that learners with disabilities had the right to receive FAPE, which included non-discriminatory testing, evaluation, and placement procedures; education in the least restrictive environment; procedural due process that ensured parental involvement opportunities; and an individualized education program (IEP) that was reviewed and revised annually by a group of people including the parents. In 1986, The Handicapped Children's Protection Act (HCPA) was created as an amendment to the EAHCA that allowed parents to recover attorney's fees if they won a suit against school districts for violating the EAHCA. That same year the Education of the Handicapped Amendments of 1986 (P.L. 99-457) were passed. These amendments were focused on early intervention for infants and toddlers with disabilities. They provided federal incentives to states for providing early intervention services to infants and toddlers with disabilities and their families and required that each eligible child and

his or her family have an individualized family service plan developed by a multidisciplinary and interagency team that included the family, a case manager, and service providers. The Amendments of 1986 also established procedural safeguards similar to those established in EAHCA and increased financial incentives for states to provide services to children ages 3 to 5 (Yell, 2016).

The 1990s contained several instances of landmark legislation. In 1990, EAHCA was amended again and renamed the Individuals with Disabilities Education Act (IDEA), P.L. 101-476. IDEA replaced the term "handicap" with "disability" and used person first language. It also added traumatic brain injury and autism as two new disability eligibility categories and redefined related services, assistive technology, and rehabilitation services. In addition, IDEA included requirements for the inclusion of individualized transition services in learners' IEPs beginning no later than age 16. The Americans with Disabilities Act (ADA) was also passed in 1990. ADA is comprehensive civil rights legislation that prohibits discrimination against individuals with disabilities in all areas of life including employment, transportation, communication, all state and local government services and programs, and access to public accommodations. In 1994, Goals 2000 Educate America Act, P.L. 103-227, and the reauthorization and amendments to ESEA P.L. 103-382, titled Improving America's Schools Act, were passed. Both were efforts to create national education standards and provide additional resources to help all students meet the standards by the year 2000 (Paul, 2016). Improving America's Schools Act required consistent standards and assessment for all students, assessment results that were broken down demographically in order to identify achievement gaps present for certain groups, as well as an improvement plan for all schools not achieving adequate yearly progress. In 1997, IDEA was reauthorized and amended as P.L. 105-17. The 1997 reauthorization of IDEA added additional

IEP requirements with the goal of improving instruction and outcomes for learners. It also added discipline procedures, additional opportunities for parent participation, and limits on private school services and reimbursements. Additionally, the reauthorization modified procedures for evaluation and eligibility determination, required states to offer mediation prior to due process proceedings, and reorganized the structure of IDEA (Yell, 2016).

To date, the 2000s have reflected continued concern for the achievement of all learners. The 2001 reauthorization of ESEA, titled The No Child Left Behind Act (NCLB) further increased accountability in public education by requiring more frequent assessment in reading and math achievement for all students and required schools to ensure that all learners, regardless of demographics, were meeting the same standards in an effort to close the achievement gap demonstrated by diverse learners (Yell, 2016). NCLB required schools to provide intervention to learners who were not making sufficient progress and to ensure that their educators were highly qualified in their subject areas. In 2002, The President's Commission on Excellence in Special Education made recommendations to reform special education in order to align special education services with NCLB. These recommendations included utilizing research-based teaching methods, focusing on achievement, and moving to a model of prevention by focusing on early identification of learners with special needs (Yell, 2016). Two years later, The Individuals with Disabilities Education Improvement Act of 2004 (IDEIA 2004), P.L. 108-446, was enacted. IDEIA further emphasized increased accountability for learner performance and achievement. Significant changes were made to eligibility requirements for learners with learning disabilities, IEP components and process, guidelines for addressing discipline for learners with disabilities, and certification requirements for special educators. Most recently, the 2015 Every Student Succeeds Act (ESSA) reauthorized ESEA and replaced and updated NCLB. ESSA allowed

greater flexibility for schools to implement plans to increase equity of instruction for all learners and close the achievement gap. Clearly, there have been many developments in efforts to protect the rights of individuals in the United States who are considered diverse. The following table serves to summarize major civil rights and disability court decisions that impacted these legislative developments and the societal and educational experiences of diverse learners.

Table 1.

Significant Court Decisions Impacting Legislation Pertaining to Diverse Learners

Year	Title	Significant Findings/Most Recent Components
1954	*Brown vs. Board of Education*	Segregation of racial minorities in schools is unconstitutional
1967	*Hobsen v. Hansen*	Tracking systems being used were culturally biased and resulted in placements made by race and class rather than ability and therefore unconstitutional.
1970	*Diana v. CA State Board of Education*	Eligibility testing for special education must be in the learner's native language and not be culturally biased
1972	*Mills v. Board of Education of District of Columbia*	Segregation on the basis of disability is unconstitutional.
1972	*Pennsylvania Association for Retarded Citizens (PARC) v. Commonwealth of Pennsylvania*	Free and appropriate public education must be provided to learners with intellectual disabilities.
1979	*Larry P. v. Riles*	Culturally biased IQ tests were unconstitutional and contributed to overrepresentation of African American students in what were then called educably mentally retarded (EMR) classes.
1982	*Board of Education of Hendrick Hudson Central School District v. Rowley*	FAPE is met when personalized instruction and support services provides "some educational benefit". FAPE does not mean instruction and support to maximize potential to a greater degree than provided to other learners.

1989	*Honig v. Doe*	School systems cannot suspend students for more than 10 days without an IEP meeting and parental consent.
1997	*Cypress-Fairbanks ISD v. Michael F.*	Educational benefit means that the educational programming for learners with disabilities must produce meaningful progress.
2017	*Endrew F. v. Douglas County School District*	Educational benefit standard increased. IEPs must be designed to provide measurable benefit given learner capabilities instead of "some" benefit.

Achievement Gap

Despite over 60 years of legislation intended to protect the rights of learners from diverse backgrounds, there is still significant evidence that all learners are not receiving equitable access to education. Statistics show that learners from diverse backgrounds with respect to ethnicity, race, gender, primary spoken language, disability, and income status demonstrate considerable differences in education outcomes (National Education Association [NEA], 2017). This discrepancy in outcomes is commonly referred to as the achievement gap (Howard, 2010). Literature in education is replete with statistics illustrating achievement gaps for learners from culturally and economically diverse backgrounds as indicated in test scores, graduation rates, placement in gifted programs, discipline referrals and other outcomes that can be easily measured (Girvin, Gion, McIntosh, & Smolkowski, 2017; Milner, 2012; Sage, Davis, & Young, 2013). Statistics from the National Assessment of Education Progress (2014) and the National Center for Education Statistics (2014, 2015) show that learners from low-income families; learners who are learning English; learners who have disabilities; learners who are racial and ethnic minorities (specifically learners who are Black, Latino, and American Indian/Alaska native); and learners who are youth in foster care, homeless, or exposed to trauma and violence continue to experience achievement gaps. These gaps call for reform in all aspects of education,

as well as in public policies impacting social and economic factors that impact learners at home and in their communities (NEA, 2017).

In addition to these easily measured gaps in *outcomes*, it is also suggested that gaps in *opportunities* for learners from diverse backgrounds exist and directly contribute to the achievement gaps experienced by these learners (Milner, 2012; NEA, 2017). Examples of opportunity gaps suggested by the NEA include non-equitable access to early learning programs, qualified educators, modern materials and facilities, and courses and opportunities leading to higher education. Milner recommends a change in perspective when viewing achievement gap statistics. Milner's recommendation is that professionals begin examining and addressing opportunity gaps with a focus on prevention instead of achievement gaps. Milner claims that achievement gaps promote a deficit perspective and focus on the standardization of individuals and their shortcomings as compared to non-minority students instead of attending to the systems and practices in place that contribute to the discprepancy in outcomes experienced by diverse learners. Milner's proposed Opportunity Gap Framework can be used to explain and understand practices that contribute to achievement/opportunity gaps and hopefully aid in changing practices (2012). Although many of the factors that contribute to these opportunity and achievement gaps are outside of the scope of this paper, access to effective educators is relevant to this paper, specifically, as the desired dispositions of educator candidates in educator preparation programs is considered.

In addition to the achievement gap demonstrated in academic performance by learners from diverse backgrounds, overrepresentation of minorities in special education and in discipline referrals is also a highly recognized problem. Although there is likely a relationship among academic difficulties, referrals to special education, and discipline problems, there is still

considerable concern with overrepresentation of learners from diverse backgrounds present in educational research today (Annamma, Morrison, & Jackson, 2014; Blanchett, 2013; Girvin et al., 2017; Howard, 2010; Irvine, 2012, Sauer & Sauer, 2010; U.S. Department of Education [DE], 2017; Villegas, 2007). Concerns regarding overrepresentation of racial minorities in special education and the inappropriate overuse of segregated settings were first presented to the special education community by Lloyd Dunn, a pioneer in the field of special education (1968). Since then, disproportionality of culturally diverse learners determined eligible for special education services and referred for discipline problems has remained an area of concern. While the number of culturally diverse learners found eligible for intellectual disabilities has decreased, disproportionate numbers of diverse learners are now found in the eligibility category of learning disabilities (Blanchett, 2010). Research suggests that one contributing factor to the achievement gap and overrepresentation of minorities in special education and discipline referrals could be due to the dispositions of educators (Elik, Weiner, & Corkum, 2010; McHatton & McCray, 2013, Palardy and Rumberger, 2008; Stronge, Ward, & Grant, 2011; Vázquez-Montilla et al., 2014; Villegas, 2007).

Dispositions

Considerable attention has been given to the dispositions of educators and educator candidates in recent years. This attention is largely due to the examination of the nationally recognized achievement gap experienced by certain groups of diverse learners. In an attempt to address the achievement gap, educator preparation program accrediting bodies and educators in higher education are working to better prepare candidates to provide equitable educational experiences to all learners. However, the debate surrounding educator dispositions began long before accrediting bodies included standards related to them. Educator preparation programs

have long recognized that there are certain characteristics present in effective educators, while at the same time acknowledging the difficulty in defining these characteristics and the dangers of using such characterstics as a way of selecting educator candidates for program entry (Hines, 2007). The more recent attention to educator dispositions related to diverse learners and their impact on learner outcomes has added to a long standing line of inquiry in the field of education. This section will: (a) provide a history of the dispositions debate and attempts to define the term in education, (b) sumarize research regarding the link between educator dispositions and the achievement gap demonstrated by diverse learners, (c) present literature pertaining to whether dispositions are innate or have the potential to be developed in educator candidates, and (d) examine strategies to assess and develop dispositions that have been employed by educator preparation programs.

Dispositions in Educator Preparation

The term *dispositions* is not new to the field of education, but despite years of debate, no universally approved definition exists. In 1985, Katz and Raths made early references to dispositions when they discussed the difference between educator candidates possessing the skills to teach and the dispositions to utilize the skills (Ruitenberg, 2011). In 1990, Diez provided one of the earliest reports on how the faculty at Alverno College were attempting to redesign their educator preparation program to incorporate dispositions, including attitudes and self-perception (Diez, 2007). Following that, Diez served on the Interstate New Teacher Assessment and Support Consortium (InTASC). Alverno College's newly designed framework was a primary resource used by InTASC in their development of the 1992 *Model Standards for Beginning Teacher Licensing and Development: A Resource for State Dialogue* (Diez, 2007). This InTASC publication was the first to specifically address dispositions of educators. In

response to these standards, some educator preparation programs began voluntarily incorporating dispositions into their programs and some states adopted the InTASC standards into their state code (Diez, 2007; Villegas, 2007). Later, language from the InTASC standards was used in the 2008 National Council for Accreditation of Teacher Educators (NCATE) standards bringing dispositions into the vast majority of educator preparation programs.

NCATE, the predecessor to Council for the Accreditation of Education Programs (CAEP) and the previous agency responsible for accreditation in educator preparation programs, accredited over 600 colleges of education and reviewed accreditation attempts of more than 50 additional colleges in 2008 (NCATE, 2008). Once initial accreditation was granted, NCATE program reviewers conducted visits at least every seven years to verify continued accreditation. NCATE standards were revised every seven years to ensure maintenance of relevant, research-based standards (NCATE). Educator preparation programs were required to meet criteria in all six standards in order to receive and maintain NCATE accreditation. Table 2 lists these standards and provides a brief description of each.

Table 2

NCATE Unit Standards (2008)

Standard	Description
1. Candidate knowledge, skills, and professional dispositions	Teacher candidates know and demonstrate content knowledge, pedagogical content knowledge and skills, pedagogical and professional knowledge and skills, and professional dispositions needed to help all students learn. Program assessments indicate candidates meet professional, state, and institutional standards.
2. Assessment system and unit evaluation	Educational unit has an assessment system that collects and analyzes data on applicant qualifications, candidate and graduate performance, and unit operations to evaluate and improve performance of the candidates, the unit, and programs.
3. Field experiences and	The unit and school partners design, implement, and evaluate field experiences and clinical practice so that candidates and other school

clinical practice	professionals develop and demonstrate knowledge, skills, and professional dispositions necessary to help all students learn.
4. Diversity	The unit designs, implements, and evaluates curriculum and provides experiences for candidates to gain and demonstrate the knowledge, skills, and professional dispositions necessary to help all students learn. Candidates demonstrate and apply proficiencies related to diversity. Experiences provided for candidates include working with diverse populations.
5. Faculty qualifications, performance, and development	Faculty members are qualified and model best practices in scholarship, service, and teaching including the assessment of their own effectiveness related to candidate performance. They collaborate with colleagues and school partners. The unit systematically evaluates faculty performance and facilitates professional development.
6. Unit governance and resources	The unit has leadership, authority, budget, personnel, facilities, and resources for the preparation of candidates to meet professional, state, and institutional standards.

Note. Adapted from "Professional Standards for the Accreditation of Schools, Colleges and Departments of Education" by NCATE, 2008.

In addition to several other components, NCATE standards one, three, and four involved evaluating educator candidate dispositions. Standard one required that educator candidates be familiar with professional dispositions in professional, state, and institutional standards and demonstrate classroom behaviors that are consistent with the ideal of fairness and the belief that all students can learn. Professional dispositions were to be evident in educator candidates' work with students, families, colleagues, and communities. Standard three required field experiences to provide candidates opportunities to develop and demonstrate professional dispositions. Standard four required students to gain and demonstrate knowledge, skills, and dispositions necessary to help all students learn with specific regard to diversity. Despite earlier appearances of dispositions in the literature, it was the addition of dispositions into the NCATE standards that led to professional discourse as educator preparation programs began attempts to operationally define the term with little guidance. Complaints from the field included the vagueness in the

NCATE definition and concerns that there was no consensus in the field on a definition of dispositions (Welch, Pitts, Tenini, Kuenlen, & Wood, 2010). The 2002 NCATE definition of professional dispositions described them as:

> The values, commitments, and professional ethics that influences behaviors towards students, families, colleagues, and communities, and affect student learning, motivation, and development as well as the educator's own professional development. Dispositions are guided by beliefs and attitudes related to values such as caring, fairness, honesty, responsibility and social justice. (as cited in Welch et al., 2010, p.180)

When NCATE included the term social justice in the 2002 definition of dispositions, much debate ensued. Those opposed to the inclusion of the term social justice as it related to dispositions cited concerns with educator candidates being marginalized and subjected to political screenings of program faculty (Heybach, 2009; Sockett, 2009). Alternately, supporters of the term's inclusion stressed the importance of preparing educator candidates who are responsive to learner populations who have been historically marginalized and who will treat all learners equitably to prevent future marginalization (Heybach, 2009; Sockett, 2009; Villegas, 2007). In 2008, NCATE removed social justice from the definition of dispositions with little explanation. Arthur Wise, then president of NCATE, issued a statement saying that NCATE did not require social justice, but that the term was used to help define dispositions. Wise (2006) reiterated that NCATE expected educator preparation programs to produce educator candidates who "demonstrate dispositions that value fairness and learning by all students" (p. 1). Supporters of the inclusion of social justice questioned NCATE's removal of the term from the definition of dispositions with no attempt to offer an alternative definition or explain the removal thereof (Heybach, 2009; Villegas, 2007). The 2008 NCATE definition of dispositions did add that

dispositions should be measured through behaviors, but did not offer guidance in determining the behaviors required of educator candidates:

> Professional attitudes, values, and beliefs demonstrated through both verbal and non-verbal behaviors as educators interact with students, families, colleagues, and communities. These positive behaviors support student learning and development. NCATE expects institutions to assess professional dispositions based on observable behaviors in educational settings. The two professional dispositions that NCATE expects institutions to assess are fairness and the belief that all students can learn. Based on their mission and conceptual framework, professional education units can identify, define, and operationalize additional professional dispositions. (NCATE, 2008, pp. 89-90)

Despite NCATE's attempt to clarify the definition of professional dispositions, programs continued to struggle to find ways to evaluate students' beliefs and application of fairness as these broad concepts are not operationally defined thus making reliable and valid dispositions assessment impossible.

There is still debate in the field of educator preparation regarding the inclusion of dispositions assessment in educator preparation programs. The current accrediting body, CAEP, requires educator preparation programs to ensure that their candidates meet certain criteria in essential knowledge and critical dispositions (CAEP, 2013). InTASC developed the current criteria required by CAEP. InTASC claims that the standards are tied to learner achievement and the critical dispositions are "habits of professional action and moral commitments that underlie the performances [and] play a key role in how educators do, in fact, practice" (Council of Chief State School Officers [CCSSO], 2013, p. 6). See Table 3 for a list of all of the dispositions included in the standards for educator candidates.

Table 3.

InTASC Standards and Critical Dispositions

Standard	Related Dispositions
1. *Learner Development* The teacher understands how learners grow and develop, recognizing that patterns of learning and development vary individually within and across the cognitive, linguistic, social, emotional, and physical areas, and designs and implements developmentally appropriate and challenging learning experiences.	• The teacher respects learners' differing strengths and needs and is committed to using this information to further each learner's development. • The teacher is committed to using learners' strengths as a basis for growth, and their misconceptions as opportunities for learning. • The teacher takes responsibility for promoting learners' growth and development. • The teacher values the input and contributions of families, colleagues, and other professionals in understanding and supporting each learner's development.
2. *Learning Differences* The teacher uses understanding of individual differences and diverse cultures and communities to ensure inclusive learning environments that enable each learner to meet high standards.	• The teacher believes that all learners can achieve at high levels and persists in helping each learner reach his/her full potential. • The teacher respects learners as individuals with differing personal and family backgrounds and various skills, abilities, perspectives, talents, and interests. • The teacher makes learners feel valued and helps them learn to value each other. • The teacher values diverse languages and dialects and seeks to integrate them into his/her instructional practice to engage students in learning.
3. *Learning Environments* The teacher works with others to create environments that support individual and collaborative learning, and that encourage positive social interaction, active engagement in learning, and self-	• The teacher is committed to working with learners, colleagues, families, and communities to establish positive and supportive learning environments. • The teacher values the role of learners in

motivation.	promoting each other's learning and recognizes the importance of peer relationships in establishing a climate of learning. • The teacher is committed to supporting learners as they participate in decision making, engage in exploration and invention, work collaboratively and independently, and engage in purposeful learning. • The teacher seeks to foster respectful communication among all members of the learning community. • The teacher is a thoughtful and responsive listener and observer.
4. *Content Knowledge* The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and creates learning experiences that make these aspects of the discipline accessible and meaningful for learners to assure mastery of the content.	• The teacher realizes that content knowledge is not a fixed body of facts but is complex, culturally situated, and ever evolving. S/he keeps abreast of new ideas and understandings in the field. • The teacher appreciates multiple perspectives within the discipline and facilitates learners' critical analysis of these perspectives. • The teacher recognizes the potential of bias in his/her representation of the discipline and seeks to appropriately address problems of bias. • The teacher is committed to work toward each learner's mastery of disciplinary content and skills.
5. *Application of Content* The teacher understands how to connect concepts and use differing perspectives to engage learners in critical thinking, creativity, and collaborative problem solving related to authentic local and global issues.	• The teacher is constantly exploring how to use disciplinary knowledge as a lens to address local and global issues. • The teacher values knowledge outside his/her own content area and how such knowledge enhances student learning. • The teacher values flexible learning environments that encourage learner exploration, discovery, and expression across content areas.

6. *Assessment* The teacher understands and uses multiple methods of assessment to engage learners in their own growth, to monitor learner progress, and to guide the teacher's and learner's decision making.	• The teacher is committed to engaging learners actively in assessment processes and to developing each learner's capacity to review and communicate about their own progress and learning. • The teacher takes responsibility for aligning instruction and assessment with learning goals. • The teacher is committed to providing timely and effective descriptive feedback to learners on their progress. • The teacher is committed to using multiple types of assessment processes to support, verify, and document learning. • The teacher is committed to making accommodations in assessments and testing conditions, especially for learners with disabilities and language learning needs. • The teacher is committed to the ethical use of various assessments and assessment data to identify learner strengths and needs to promote learner growth.
7. *Planning for Instruction* The teacher plans instruction that supports every student in meeting rigorous learning goals by drawing upon knowledge of content areas, curriculum, cross-disciplinary skills, and pedagogy, as well as knowledge of learners and the community context.	• The teacher respects learners' diverse strengths and needs and is committed to using this information to plan effective instruction. • The teacher values planning as a collegial activity that takes into consideration the input of learners, colleagues, families, and the larger community. • The teacher takes professional responsibility to use short- and long-term planning as a means of assuring student learning. • The teacher believes that plans must always be open to adjustment and revision based on learner needs and changing circumstances.
8. *Instructional Strategies* The teacher understands and uses a	• The teacher is committed to deepening awareness and understanding the strengths and needs of

variety of instructional strategies to encourage learners to develop deep understanding of content areas and their connections, and to build skills to apply knowledge in meaningful ways.	diverse learners when planning and adjusting instruction. • The teacher values the variety of ways people communicate and encourages learners to develop and use multiple forms of communication. • The teacher is committed to exploring how the use of new and emerging technologies can support and promote student learning. • The teacher values flexibility and reciprocity in the teaching process as necessary for adapting instruction to learner responses, ideas, and needs.
9. *Professional Learning and Ethical Practice* The teacher engages in ongoing professional learning and uses evidence to continually evaluate his/her practice, particularly the effects of his/her choices and actions on others (learners, families, other professionals, and the community), and adapts practice to meet the needs of each learner.	• The teacher takes responsibility for student learning and uses ongoing analysis and reflection to improve planning and practice. • The teacher is committed to deepening understanding of his/her own frames of reference (e.g., culture, gender, language, abilities, ways of knowing), the potential biases in these frames, and their impact on expectations for and relationships with learners and their families. • The teacher sees him/herself as a learner, continuously seeking opportunities to draw upon current education policy and research as sources of analysis and reflection to improve practice. • The teacher understands the expectations of the profession including codes of ethics, professional standards of practice, and relevant law and policy.
10. *Leadership and Collaboration* The teacher seeks appropriate leadership roles and opportunities to take responsibility for student learning, to collaborate with learners, families, colleagues, other school professionals, and community members to ensure learner growth, and to advance the profession.	• The teacher actively shares responsibility for shaping and supporting the mission of his/her school as one of advocacy for learners and accountability for their success. • The teacher respects families' beliefs, norms, and expectations and seeks to work collaboratively with learners and families in setting and meeting challenging goals.

	• The teacher takes initiative to grow and develop with colleagues through interactions that enhance practice and support student learning. • The teacher takes responsibility for contributing to and advancing the profession. • The teacher embraces the challenge of continuous improvement and change.

CCSSO. (2013, April). Interstate Teacher Assessment and Support Consortium (InTASC) Model Core Teaching Standards and Learning Progressions for Teachers 1.0. Washington, D.C.: Author.

Defining Dispositions

Still today, more than 30 years after early references to the term, there is no universally agreed upon definition of dispositions in the literature. Numerous articles in the literature on educator attitudes, beliefs, values, and dispositions provide evidence of how this construct relates to educator effectiveness and learner outcomes (Elik et al., 2010; Guarino, Hamilton, Lockwood, & Rathbun, 2006; Lessen & Frankiewicz, 1992; Nye, Konstantopoulos, & Hedges, 2004; Palardy & Rumberger, 2008; Stronge et al., 2011; Wayne & Youngs, 2003). In the literature, the term *dispositions* has been synonymous with other terms such as *tendency*, *motivation*, *temperament*, *nature*, *potential*, *passion*, *commitment*, *characteristic*, *attitude*, *drive*, and *virtue* (Splitter, 2010). Most professionals in educator preparation would agree that dispositions do impact educator performance; however, deciding how to measure them is problematic. For example, Karges-Bone and Griffin (2009) explain dispositions by "we know it when we don't see it" (p. 29). Educator candidates may possess the knowledge and skills to teach but lack the *dispositions* to put their skills and knowledge into practice in a manner that promotes fairness and equality across learners.

Thornton (2006) conducted a qualitative study over three years and found that educators with similar training and experience possessed dispositional differences in action (categorized in

her study as technical dispositions versus responsive dispositions) that impacted student learning. Elik et al. (2010) administered an open-mindedness dispositions scale, a readiness to learn scale, and an attitudes toward learning and behavioral difficulties scale to educator candidates and found that candidates with more open-minded thinking dispositions and a higher readiness to learn reported a greater likelihood of adapting instruction for students with learning and behavioral difficulties and a lesser likelihood of implementing punitive responses for inappropriate behavior and difficulty with learning.

Stronge et al. (2011) found that, in addition to teaching characteristics, educators who scored higher on personal qualities measures of fairness and respect and positive relationships with learners had higher learner achievement. Since *fairness, respect, positive relationships, potential*, *temperament*, *attitude*, *drive,* and other terms associated with *dispositions* are not observable and measurable, the challenge in measuring dispositions lies in identifying behaviors that provide evidence of desired dispositions in educator candidates in order to protect the interests of both the educator candidates and the learners the candidates will teach.

Katz (1993) offered a definition of dispositions that provided early insight into the possibility of defining dispositions in regard to observable and measurable behaviors by asserting that "a disposition is a tendency to exhibit frequently, consciously, and voluntarily a pattern of behavior that is directed to a broad goal" (p. 1). Since then, researchers have attempted, first, to define categories of *dispositions* and, then, to identify observable and measurable behaviors that provide evidence of desired dispositions. Sockett (2009) discussed dispositions as virtues and identified three main categories: character, intellect, and care. According to Sockett, *character* included virtues such as "self-knowledge, courage, sincerity, integrity, trustworthiness, persistence, and perseverance" (2009, p. 296). *Intellect* included virtues such as "truthfulness,

accuracy, consistency in the application of rules, fairness, thoughtfulness, and open-mindedness" (Sockett, p. 296). *Care* included virtues such as "tolerance, tact, discretion, civility, receptivity, relatedness, and responsiveness" (Sockett, p. 296).

Ruitenberg (2011) distinguished *predispositions* (values, habits, interests, and opinions that may not be acted upon) from *professional dispositions* (characteristics ascribed to a person based on their actions) and asserted that educator preparation programs should focus on *professional dispositions* in their dispositions assessments. Serdyukov and Ferguson (2011) developed an instrument to investigate the dispositions of educator candidates in a pilot study and found the following attributes were most commonly identified under the corresponding categories: (1) professional dispositions (attributed by being knowledgeable, collaborative, responsible, reflective, effective, prepared), (2) attitudinal dispositions (attributed by being unbiased, compassionate, encouraging, understanding, tolerant, fair, cooperative, flexible), (3) moral dispositions (attributed by being ethical, trustworthy, has integrity, honest, principled), and (4) character dispositions (attributed by being respectful, hardworking, considerate, reliable) (p. 113). Additional efforts have been made by educator preparation programs to define behaviors that indicate educator candidates possess desired dispositions.

One definition that seems to encompass many of the ideas agreed upon in the field is that dispositions are the tendencies for individuals to act in a particular manner under particular circumstances based on their beliefs (Villegas, 2007). While this definition does describe how dispositions influence actions and behaviors, it does not define dispositions in a way that is easily measured. Despite the variation in definitions, it is clear, however, that educators need to possess the disposition to teach with equity in order to minimize achievement gaps. Students from economically and culturally diverse backgrounds suffer when educators do not demonstrate

critical teaching dispositions (Talbert-Johnson, 2006). Although educator preparation programs are required by CAEP to produce candidates who understand learning differences and provide inclusive learning environments, there is considerable variation with how these dispositions are addressed in educator preparation programs.

Measuring Dispositions in Educator Preparation Programs

The debate over how to ensure educator candidates possess dispositions towards diverse learners includes several issues: Are dispositions fixed or malleable? Should educator candidates be screened at program entry and denied access if they are judged not to possess the desired teaching dispositions? Do educators in preparation programs have the right or even enough knowledge of the candidates to make a decision prior to program admission? Can programs include instruction that will ensure their candidates demonstrate positive dispositions towards diverse learners by the time they complete the program? While some suggest that educator dispositions are resistant to change (Chi, 2005; Torff, 2014), there is research that suggests the opposite. Educator candidates do enter programs with dispositions shaped by their backgrounds and previous experiences; however, educator preparation programs can incorporate dispositions assessment used to inform dispositions instruction into their programs and impact future educators' dispositions towards diverse learners (Johnson & Reiman, 2007; Kidd et al., 2007; Lynn & Smith-Maddox, 2007; Mills, 2012, 2013; Mills & Ballantyne, 2010; Morrison, 2014; Villegas, 2007).

There is considerable variation regarding how educator preparation programs are integrating disposition development and assessment into their programs. While concerns that some programs might focus on dispositions assessment as a gate-keeping and mandatory documentation process have been reported (Karges-Bone & Griffin, 2009; Wasicsko, Wirtz, &

Resor, 2009), it appears that other programs view dispositions assessment as necessary for effective educator preparation and seek to integrate dispositions instruction, modeling, and opportunities for remediation into programs (Duplass & Cruz, 2010; Wasicsko et al., 2009). Still others have documented the inclusion of a dispositions assessment as a reactive process to address concerns with dispositions without integrating instruction prior to assessment (Beverly, Santos, & Kyger, 2006; Brewer, Lindquist, & Altemueller, 2011). Educator preparation programs are responsible for ensuring their candidates meet CAEP standards and must provide instructional and growth opportunities for their educator candidates regarding dispositions. Relying on disposition screening tools and assessments to identify "undesirable" candidates with the purpose of screening or counseling these candidates out of the field is in direct conflict with InTASC Standard 1 (see Table 3), which is expected to be demonstrated by candidates as they enter the teaching field. Disposition education and assessment are critical components of educator preparation programs and must be infused throughout.

Significance of Educator Dispositions Towards Diverse Learners

Considerable attention has been paid to the dispositions of educators towards students who are culturally diverse as researchers have recognized the potential impact of educator effectiveness on learner outcomes for years. Earlier studies examined educator "characteristics" in the form of years of experience, quality of institution where teaching degree was conferred, educator test scores, certification area, type of degree, and the like. Findings from these studies indicated that there are differences in outcomes for learners based on these types of educator characteristics but also suggested that there are other educator characteristics that might account for the difference in outcomes for learners (Nye et al., 2004; Rice, 2003; Wayne & Youngs, 2003). Identifying other educator characteristics that contribute to postiive learner outcomes is

essential to the field of education as educators attempt to address the achievement gaps that are well documented within our education system.

In contrast to the studies described previously that focused on educator characteristics that could be easily measured and compared (e.g., years of experience, type of degree, quality of educator preparation program), more recent studies have delved into different types of educator characteristics that contribute to learner achievement. Stronge et al. (2011) examined the impact of instructional delivery, student assessment, learning environment, and personal qualities of the educator such as positive relationships with learners, fairness and respect, and enthusiasm on math and reading achievement. They found that personal qualities and classroom mangament had a greater impact on learner outcomes than instruction or assessment practices and suggested that educators who possess certain "attitudes, approaches, strategies, or connections with students" contribute to higher achievement for learners (p. 348). Palardy and Rumberger (2008) included educator attitudes in their study of educator effects on learner outcomes. They found that educator attitudes about their own ability to teach and about their students' ability to learn as well as teaching practices had a greater impact on reading and math achievement for learners in first grade than the background qualifications of educators. Although their study only examined outcomes for one year and produced relatively small effect sizes, an interresting finding was that educator quality had a larger effect size than did socioeconomic status or class size. The researchers suggested that if learners have ineffective educators over multiple years, it is likely that the gaps in achievement would grow considerably. This is consistent with other findings that educators' attitudes and beliefs heavily influence educator behaviors and instructional decisions, which ultimately impacts learner opportunities and/or outcomes (Elik et al., 2010).

It is necessary to examine the impact of educator dispositions in relation to current demographics in society. It is well documented that the demographics of today's learners do not match those of their educators or those of educator candidates who will soon enter the field. Today's learners are increasing in racial, ethnic, cultural and linguistic, socioeconomic, sexual orientation, gender orientation, and family structure diversity, while educators and educator candidates remain primarily White, monolingual, middle class females (Edwards, 2011; Sauer & Sauer, 2010; Ukpokodu, 2011; Vázquez-Montilla et al., 2014). While there is evidence that educator effects account for less than 10% of variation in learner outcomes when compared to larger school and societal issues (e.g., class size, curriculum, prior schooling, home factors, and individual learner needs), educator preparation programs must commit to preparing educators who: (1) are competent in a wide range of knowledge and skills pertaining to content, (2) demonstrate a good understanding of how culture impacts learning, (3) understand the barriers that diverse learners experience, and (4) exhibit evidence that they demonstrate the disposition that all learners should be taught equitably (Darling-Hammond, 2015; Villegas, 2007).

Research shows that educators' beliefs about learners from diverse backgrounds affect their teaching practices and the opportunities they provide to their learners. When educators make assumptions about learners based on their race, ethnicity, primary language, socioeconomic status, etc., it can lead to lower expectations (Vázquez-Montilla et al., 2014; Villegas, 2007). Research shows that educator expectations impact not only their teaching practices (e.g., fewer or different academic opportunities, different instructional and behavioral treatment) but also learner outcomes, frequently referred to as the self-fulfilling prophecy (Brophy, 1983; Ferguson, 2003; Robinson, 2017; Villegas, 2007). In a study designed to investigate the link between educator beliefs and academic rigor, educators were asked to

determine if high or low critical thinking activities would be appropriate for economically disadvantaged learners. Results showed that educators were less likely to assign higher critical thinking assignments to economically disadvantaged students based on educator assumptions regarding the students, such as the learners' lack of prior knowledge, instructional time, parent and colleague influence, and learner motivation and ability (Torff, 2014). This lack of opportunity based on educator beliefs and practices is an example of an opportunity gap that results in achievement gaps for these and other diverse learners. Additionally, recent federal efforts to ensure all learners are meeting the same standards has led to the increased use of value-added measures to evaluate educator effectiveness. Value-added measures are intended to reveal the amount of educational growth learners make during a school year through end of year testing. There is concern about the use of value-added measures in terms of holding teachers accountable through tenure or pay raise requirements, how learner growth is measured, and the trustworthiness of the results of the value-added measures. These value-added measures could further impact educator views of learners who do not meet standards and lead to negative dispositions towards learners who demonstrate difficulties or delays in classrooms due to disability or society imposed opportunity gaps (Darling-Hammond, 2014, 2015; Robinson & West, 2012).

Developing Dispositions towards Social Justice in Educator Preparation Programs

The literature on developing dispositions towards diversity in educator preparation programs is still growing, but it includes varied examples of how programs are including instruction and assessment that will hopefully lead to their candidates developing positive dispositions towards students who are diverse. There are multiple terms throughout the literature, used somewhat interchangeably, to refer to teaching methods addressing dispositions towards

diverse learners, including culturally responsive teaching, culturally-relevant teaching, teaching for diversity, and multicultural education (Villegas, 2007). For the remainder of this chapter, the phrases *teaching for social justice* and *social justice dispositions* will be used, as these phrases suggest promoting equality for all rather than responding to learners who are diverse as being deficient in some way. One thing that is clear is that a number of educators in education preparation programs believe that dispositions develop over time with well-planned activities (Johnson & Reiman, 2007; Kidd et al., 2007; Lynn & Smith-Maddox, 2007; Mills, 2012, 2013; Mills & Ballantyne, 2010; Morrison, 2014; Robertson et al., 2017; Villegas, 2007).

Because this issue is relatively new to the field, there is minimal research regarding the effectiveness of any of these procedures. However, there is some evidence that there is a need to incorporate social justice education into educator preparation programs. Silverman (2009) conducted a study investigating educator and educator candidates' beliefs and behaviors related to personal responsibility for social justice in their classrooms. She utilized a mixed methods research design including self-report surveys, cognitive appraisal interviews, and classroom observations and interviews. She found that educators' sense of responsibility for social justice in the classroom impacted their instructional strategies. She also found that educators' beliefs about personal and professional identity impacted the extent to which they felt personal responsibility in their teaching. Additionally, she found that the ways educators understood and responded to cultural influences on their teaching was related to their sense of responsibility for social justice in the classroom. A significant implication of her findings was that educators do not independently come equipped with the knowledge and means to promote social justice in classrooms; therefore, making it essential that educator preparation programs embed teaching for social justice throughout their programs.

Programs have responded to requirements to ensure their candidates possess critical social justice dispositions by implementing their own techniques and reporting on them in the literature. Clearly there is a need for research to determine effectiveness of the techniques. For now, consumers of the literature must cautiously interpret findings from these reports.

Developing Dispositions through Course Content

Educator preparation programs have reported various ways they have integrated and attempted to address social justice dispositions within their programs. One method found in the literature is including dispositions instruction into courses and course assignments. A good starting point for integrating social justice dispositions is to examine the perceptions of educator candidates. A recent study surveyed students in a mandatory education and counseling course to determine if candidates considered social justice dispositions a useful part of the curriculum (Thompson, 2013). Results indicated that, not only did candidates embrace coverage of social justice dispositions, but they also experienced some degree of change in their dispositional views over the course of a semester after a researcher designed curriculum titled the *Critical Multicultural Imperative* (CMI) was integrated into a single course (Thompson). While these results are promising, it can be argued that integrating dispositions education towards social justice into one course is not sufficient. Mills and Ballantyne (2010) examined autoethnographies of educator candidates enrolled in a mandatory diversity course and found that while some candidates demonstrated evidence of evolving dispositions towards social justice over the course of the semester, others showed no change. In later studies, Mills (2012, 2013) claimed that educator candidates enter programs highly influenced by their past experiences, referencing Lortie's commonly known work regarding the *apprenticeship of observation* (1975). Mills urged educator preparation programs to incorporate diverse field experiences into preparation programs

in order to offset previous experiences and to further study the impact of field experiences on dispositions.

Developing Dispositions through Field Experiences

In her 2012 study, Mills found that dispositions can change in positive and negative ways as a result of experience and argued for ensuring carefully chosen practicum placements and opportunities to raise awareness in educator candidates towards issues related to social justice. The subsequent study by Mills (2013) called for ensuring there is a close relationship between field experiences and courses, thus providing candidates with opportunities to reflect on and discuss theory and diversity in their classroom settings. Mills also recommended selecting cooperating clinical educators who demonstrated dispositions towards social justice, working with these cooperating educators to assist candidates in considering questions related to diversity, and incorporating longer field experiences with an emphasis on teaching learners who are diverse.

Morrison (2014) also identified well-planned internship experiences as crucial to social justice disposition development. She claimed that existing power structures within internship experiences can result in educator candidates feeling like they are not able to challenge the existing structures and practices, which leads them to move away from beliefs and strategies learned in their program and rely on the model provided by the internship cooperating educator or past experiences as models for their future practice. Choosing placements carefully, as recommended by Mills, is one way to avoid this impact of power structure within internships. Another way could be to provide opportunities for reflection on equitable education in meaningful ways with cooperating educators and supervisors.

Using Reflection and Infusing Dispositions Development Throughout Programs

Providing opportunities to raise awareness and discuss issues related to social justice has been recommended by other professionals. Villegas (2007) asserted that educator candidates must first examine their own beliefs about students from diverse backgrounds. Lynn and Smith-Maddox (2007) studied the use of inquiry in promoting reflection and dialogue about social justice in educator candidates. Their goal was to create a safe, alternative learning space where they could meet with their candidates once a month for one-hour sessions to aid their candidates in understanding how to teach in urban schools. Their results indicated that the candidates appreciated the use of inquiry and safe space in which to discuss issues related to social justice. Candidates viewed these sessions as opportunities to examine themselves in relation to promoting social justice in ways that they would not have otherwise. Lynn and Smith-Maddox asserted that opportunities such as these are critical to educator candidate integration of personal and professional knowledge. Based on these studies, it is clear that integration of dispositions towards social justice into educator preparation programs is not only possible but also beneficial. Integration must not be limited to one course or experience. Instead, opportunities for integration must be provided throughout a program (Diez, 2007; Florian, 2012; Robertson et al., 2017; Robinson, 2017; Robinson & West, 2012; Ukpokodu, 2011; Villegas, 2007).

The need to integrate opportunities throughout programs is also identified in the literature on knowledge, expertise, and professional development. Dall'Alba & Sandberg (2006) proposed an alternative model for skill development based on their belief that knowledge and skill acquisition does not occur in a "step-wise" fashion, but, instead, occurs in a circular pattern that differs across individuals. Their theory of skill development supports their claim that curriculum should be designed so that it questions and extends the learner's current understanding of

practice *as* they practice and that program components should be integrated to aid understanding and development of skills and knowledge. Specific support for integration of developing dispositions towards social justice throughout educator preparation programs can also be found. Kidd et al. (2007) examined educator candidates' perceptions of components and interactions among components in their educator preparation program that impacted candidate development in social justice dispositions and teaching practices. The authors analyzed educator candidates' written assignments and found that the types of experiences participants regarded as influential included readings related to race, culture, poverty, and social justice; internship experiences in diverse communities; interactions with diverse families; critical reflection opportunities; and discussion and dialogue. The authors also found that interactions among the components strengthened their impact. Repeated exposure to topics of social justice and the interactions among exposures likely increase the chances that educator candidates will experience cognitive dissonance allowing them to critically examine their preexisting and developing perceptions in multiple contexts as they progress through a program.

Additional Concerns for Special Educator Preparation Programs

Intersectionality

Given that learners with disabilities who receive special education services under IDEIA are highly comprised of learners who also identify with another category of diversity (e.g., race, socioeconomic status, cultural background), there is a noticeable lack of research regarding how the different types of diversity interact and impact opportunities, experiences, and outcomes for learners who are dually diverse. This interaction of the different types of diversity is also known as intersectionality (Blanchett et al., 2009; Crenshaw, 1991; Garcia & Ortiz, 2013, Pugach et al., 2012). Although not heavily represented in the literature, the intersection of race, class, and

disability is most frequently addressed (Blanchett et al., 2009; McCall & Skrtic, 2009). In 2010, a review of a variety of national education statistics indicated that African American learners with disabilities were more likely than their peers from other racial groups to be educated in segregated settings for longer periods of the day and that more highly segregated settings were linked to increased drop-out rates, decreased graduation rates, and fewer post-school opportunities (Blanchett). Given that special educators will work with learners who represent multiple types of diversity, one might presume that professional literature would contain a plethora of information on how to best prepare special education educator candidates to consider intersectionality as they provide services to learners with disabilities. However, it is well documented that there is, in fact, a shortage in the literature on this topic (Artiles, 2013; Blanchett et al., 2009; Garcia & Ortiz, 2013; Hernández-Saca et al., 2018; Robertson et al., 2017).

There has been recent attention to the lack of collaboration between the fields of multicultural education, general education, and special education to produce special education educators prepared for other types of diverse learners. In 2012, a special issue of the *Journal of Teacher Education* was published. This special issue highlighted the complicated relationship between different fields of educator preparation programs and presented ideas for how the programs could collaboratively address the needs of today's candidates who will be working with an increasingly diverse learner population (Villegas, 2012). Within this issue, the common thread across the articles was that the authors recommended a departure from discrete program approaches and, instead, the utilization of a collaborative approach among faculty from special, general, and multicultural education programs.

In this special issue, Cochran-Smith and Dudley-Marling (2012) described their thoughts on the reasons there is a divide between the special education community and the general education community who work from a social justice perspective. They suggested that the field of special education revolves around the deficit perspective and medical model and that these are in direct conflict with teaching for social justice. According to the authors, educators who focus on teaching for social justice work from a sociocultural theory of learning as opposed to the behaviorist perspectives of special educators. Instead of using solely quantitative measures, educators in preparation programs who work from the sociocultural theory of learning would be more likely to employ qualitative or mixed methods studies to examine the "why" in addition to the "what". In addition, Cochran-Smith and Dudley-Marling suggested that while special education has fought to ensure students with disabilities had access to the curriculum, general educators working from a social justice perspective would argue that it is more important to seek to repair the curriculum that does not serve all students equitably.

In the same issue, Irvine (2012) suggested that multicultural education and special education actually share ideals of "fairness, equity, social justice, activism, and critical consciousness" (pp. 268). Irvine also claimed that multicultural educators and special education educators have high expectations for all students and avoid deficit model thinking. These statements seem to be in direct conflict with the views presented by Cochran-Smith and Dudley-Marling who repeatedly shared ways in which special education is the antithesis of teaching for social justice. Irvine presented four ways in which multicultural education and special education conflict: (1) disproportionate representation, (2) cultural misunderstandings, (3) tensions between home and school, and (4) competition for limited resources. She suggested that special education programs include Culturally Responsive Pedagogy (CRP) in their preparation programs. Despite

two decades worth of research, Irvine claimed that CRP has not been accepted by special education programs as having an empirically-based impact on student learning. The major components of CRP include: (1) creating caring relationships and having high expectations for all students, (2) employing motivating and engaging teaching strategies, (3) effective selection and use of culturally diverse resources, and (4) engaging with the family and community (Irvine). Irvine believed that if special education educators used CRP in their practice, there could be positive effects on lowering disproportionate representation, cultural misunderstandings that lead to special education and office referrals, tensions between home and school, and the competition for limited resources.

Another entry in the special issue regarding the divide between the different fields of education presented the organization of educator preparation programs as a large contributor to general and special educators' difficulty serving students who are English learners (ELs). Rueda and Stillman (2012) discussed the compartmentalized delivery of instruction and how it prevents special education and general education educators from presenting effective instruction for ELs. They suggested that instruction related to ELs is not infused into the program and is, instead, presented as an add-on to the curriculum. They claimed the same happens for general education programs in terms of providing effective instruction for students with disabilities. They proposed that increased communication and collaboration across programs, teaching culturally and not just about culture, and even completely reorganized departments of education in educator preparation programs could prevent overrepresentation of ELs in special education, enhance the quality of instruction provided to ELs in the public schools, and help all educators consider the impact of cultural and linguistic diversity on learning.

This issue also included the results of an exploratory study that examined three separate dual certification programs (elementary general education and special education for learners with mild to moderate disabilities) that had been created in an attempt to increase the communication and collaboration across programs and enhance the preparation of educator candidates to provide effective instruction to all students. The researchers specifically examined how the merged programs addressed diversity, inclusivity, and the boundaries of general and special education as evidenced in their program and course materials such as advising documents, syllabi, and text books (Pugach & Blanton, 2012). Results of the study indicated that disability as diversity was covered by all programs to a similar degree, but that other types of diversity (e.g., race, class, culture, language) were not addressed to the same extent. Findings also showed that inclusivity was mentioned in mission statements and other materials, but not addressed in ways that might be impactful for candidates. Finally, the results revealed that none of the programs addressed collaboration in a meaningful way. The authors suggested that the existence of these dual certification programs is a sign that progress is being made in the field, but also that programs must make even more improvements to adequately prepare candidates to work with increasingly diverse learners.

Developing Dispositions towards Social Justice in Special Education Educator Candidates

Special education preparation programs have an option under CAEP to receive accreditation by meeting their professional organization standards. In special education, that professional organization is the Council for Exceptional Children (CEC). The CEC standards (see table 4) address intersectionality in Standards 1 and 6. The standards address the need for culturally sensitive learning environments, assessments, and instructional practices in Standards

2, 4, and 5. However, individual preparation programs decide how they will ensure their candidates meet the CEC standards.

Table 4

CEC Initial Preparation Standards

Standard 1: Learner Development and Individual Learning Differences	
1.0	Beginning special education professionals understand how exceptionalities may interact with development and learning and use this knowledge to provide meaningful and challenging learning experiences for individuals with exceptionalities.
1.1	Beginning special education professionals understand how language, culture, and family background influence the learning of individuals with exceptionalities.
1.2	Beginning special education professionals use understanding of development and individual differences to respond to the needs of individuals.
Standard 2: Learning Environments	
2.0	Beginning special education professionals create safe, inclusive, culturally responsive learning environments so that individuals with exceptionalities become active and effective learners and develop emotional well being, positive social interactions, and self-determination.
2.1	Beginning special education professionals, through collaboration with general educators and other colleagues, create safe, inclusive, culturally responsive learning environments to engage individuals with exceptionalities in meaningful learning activities and social interactions.
2.2	Beginning special education professionals use motivational and instructional interventions to teach individuals with exceptionalities how to adapt to different environments.
2.3	Beginning special education professionals know how to intervene safely and appropriately with individuals with exceptionalities in crisis.
Standard 3: Curricular Content Knowledge	
3.0	Beginning special education professionals use knowledge of general and specialized curricula to individualize learning for individuals with exceptionalities.
3.1	Beginning special education professionals understand the central concepts, structures of the discipline, and tolls of inquiry of the content areas they teach, and can organize this knowledge, integrate cross-disciplinary skills, and develop

	meaningful learning progressions for individuals with exceptionalities.
3.2	Beginning special education professionals understand and use general and specialized content knowledge for teaching across curricular content areas to individualize learning for individuals with exceptionalities.
3.3	Beginning special education professionals modify general and specialized curricula to make them accessible to individuals with exceptionalities.
Standard 4: Assessment	
4.0	Beginning special education professionals use multiple methods of assessment and data sources in making educational decisions.
4.1	Beginning special education professionals select and use technically sound formal and informal assessments that minimize bias.
4.2	Beginning special education professionals use knowledge of measurement principles and practices to interpret assessment results and guide educational decisions for individuals with exceptionalities.
4.3	Beginning special education professionals, in collaboration with colleagues and families, use multiple types of assessment information in making decisions about individuals with exceptionalities.
4.4	Beginning special education professionals engage individuals with exceptionalities to work toward quality learning and performance and provide feedback to guide them.
Standard 5: Instructional Planning and Strategies	
5.0	Beginning special education professionals select, adapt, and use a repertoire of evidence-based instructional strategies to advance learning of individuals with exceptionalities.
5.1	Beginning special education professionals consider individual abilities, interests, learning environments, and cultural and linguistic factors in the selection, development, and adaptation of learning experiences for individuals with exceptionalities.
5.2	Beginning special education professionals use technologies to support instructional assessment, planning, and delivery for individuals with exceptionalities.
5.3	Beginning special education professionals are familiar with augmentative and alternative communication systems and a variety of assistive technologies to support the communication and learning of individuals with exceptionalities.

5.4	Beginning special education professionals use strategies to enhance language development and communication skills of individuals with exceptionalities.
5.5	Beginning special education professionals develop and implement a variety of education and transition plans for individuals with exceptionalities across a wide range of settings and different learning experiences in collaboration with individuals, families, and teams.
5.6	Beginning special education professionals teach to mastery and promote generalization of learning.
5.7	Beginning special education professionals teach cross-disciplinary knowledge and skills such as critical thinking and problem solving to individuals with exceptionalities.
Standard 6: Professional Learning and Ethical Practice	
6.0	Beginning special education professionals use foundational knowledge of the field and their professional ethical principles and practice standards to inform special education practice to engage in lifelong learning and to advance the profession.
6.1	Beginning special education professionals use professional ethical principles and professional practice standards to guide their practice.
6.2	Beginning special education professionals understand how foundational knowledge and current issues influence professional practice.
6.3	Beginning special education professionals understand that diversity is a part of families, cultures, and schools, and that complex human issues can interact with the delivery of special education services.
6.4	Beginning special education professionals understand the significance of lifelong learning and participate in professional activities and learning communities.
6.5	Beginning special education professionals advance the profession by engaging in activities such as advocacy and mentoring.
6.6	Beginning special education professionals provide guidance and direction to paraeducators, tutors, and volunteers.
Standard 7: Collaboration	
7.0	Beginning special education professionals collaborate with families, other educators, related service providers, individuals with exceptionalities, and personnel from community agencies in culturally responsive ways to address the needs of individuals with exceptionalities across a range of learning experiences.

7.1	Beginning special education professionals use the theory and elements of effective collaboration.
7.2	Beginning special education professionals serve as a collaborative resource to colleagues.
7.3	Beginning special education professionals use collaboration to promote the well-being of individuals with exceptionalities across a wide range of settings and collaborators.

Council for Exceptional Children [CEC]. (2015). What Every Special Educator Must Know: Professional Ethics and Standards. Arlington, VA: CEC.

Given that the CEC standards reference the interaction of disability with other identities of diversity, one might expect research in this area to be prevalent in the special education literature. The literature, however, is noticeably bare on the topic. A review of the literature on multicultural education in educator preparation programs from 1997 to 2006 revealed that neither general education nor special education programs were addressing the topic to a significant degree (Trent, Kea, & Oh, 2008). The only criteria for inclusion in the study were articles that were peer reviewed and data based that contained quantitative, qualitative, or mixed method designs pertaining to preparing educator candidates to work with students who were culturally and linguistically diverse (CLD). Even with such flexible criteria, only 39 articles in the general education literature and 7 articles in the special education literature were identified (Trent et al., 2008). A current search of the literature in special education programs reveals that although there is an increased presence of preparing special educators to work with learners who identify with other diverse groups, there is still much work to do.

In 2008, faculty at Brigham Young University identified three areas of deficiency in educator preparation programs and described their efforts to improve their special education preparation program. The three areas of need they identified were: (1) recruiting diverse educator candidates to better match the population of diverse learners, (2) certifying that program faculty

were culturally competent educators, and (3) integrating cultural competence throughout teacher education programs (Prater et al., 2008). With the assistance of financial support provided by an Office of Special Education Programs grant, Prater and colleagues created a post-baccalaureate and undergraduate special education/English as a Second Language (ESL) dual preparation program that included 50 hours of special education courses and 16 hours of ESL credits as well as field experiences each semester. Extensive recruitment efforts resulted in a more diverse pool of candidates that contained more candidates who were non-White or bilingual than candidates who were not diverse. Significant efforts to support and retain students resulted in an 83% completion rate over two years. Activities to promote cultural competence in faculty were conducted for the four years of the program and were designed in response to faculty needs. These activities included: (1) training on the Center for Research on Education, Diversity, and Excellence (CREDE) standards that had been newly introduced to the program, (2) creating professional development plans aligned with the standards, (3) adding CEC and CREDE standards to courses and field work, (4) training in ESL observation procedures, (5) training in conducting culturally sensitive interviews, and (6) developing assessment measures and handbooks to be used in educator preparation programs at their college. The authors identified challenges including: (1) lack of available staff and faculty, (2) resistance to change by some faculty/staff, and (3) bad fit of some of their candidates and the university environment (Prater et al., 2008).

A few years later, special education candidate educators at the University of Texas at Austin (UT) described their efforts to redesign their program to prepare their candidates to work with dually diverse learners. The faculty at UT secured a 5-year federal grant to implement their project. Candidates in their program proceeded through two specially designed courses and

several field experiences that specifically addressed standards regarding learners with disabilities who were also culturally or linguistically diverse. Feedback sessions and follow up measures with candidates, cooperating educators, and first year employers revealed that candidates who completed their program showed measurable gains in multicultural competencies from program entry to completion. Feedback and follow up measures also revealed that candidates desired and would benefit from earlier introduction to culturally responsive teaching and infusing culturally responsive teaching into more than the two specially designed courses (Robertson et al., 2012).

A group of researchers interested in preparing special educators who were culturally competent conducted a study that examined the use of a theoretical framework and assessment instrument in their educator preparation program (McHatton et al., 2013). These researchers utilized The Developmental Model of Intercultural Sensitivity (DMIS) as their theoretical framework and the Intercultural Development Instrument (IDI) as their assessment instrument. The DMIS, developed by M. Bennett in 1993, consists of two categories (ethnocentric world view and ethnorelative world view) that each have three phases through which individuals are believed to travel as they develop cultural competence. The ethnocentric world view phases are denial, defense, and minimization. The ethnorelative world view phases are acceptance, adaptation, and integration. The Intercultural Development Instrument (IDI) was initially developed by M.R. Hammer in 1998 and revised in the early 2000s. The IDI version 2, used in this study, measures intercultural sensitivity in both perceived scores and developmental scores.

Participants in the study were enrolled in an educator preparation program that contained activities meant to increase cultural competence (e.g., seminars, lecture series, community experiences). The IDI version 2 was administered at the beginning and end of a one-year period in their preparation program. Results indicated that although no statistically significant changes

in perceived or actual (developmental) intercultural sensitivity were present, all participants did experience some change. An interesting finding was that some participants experienced a decrease in their intercultural sensitivity. This finding suggests that candidates' development in the phases of cultural competence described in the DMIS is important to consider when planning educational activities. Well-intentioned experiences and activities could actually cause more harm than good if an individual candidate's development of cultural competence has not reached a particular level. Overall, the findings of this study indicated that the use of DMIS and IDI could be useful in planning individualized educational programs for candidates in educator preparation programs (McHatton et al., 2013).

Another group of researchers investigated the impact of one semester's worth of integrated field experiences and coordinated classes on a cohort of special education candidates in the first semester of their educator preparation program. The integrated block of field experiences and courses were newly developed using intersectionality as a guide. The researchers conducted a qualitative study and examined end-of-the-semester reflections on the significance of candidate experiences and candidate understanding of their development over the semester. Although there were several limitations to this study including the lack of pre-measures, small sample size, and no examination into candidates' previous experiences, the results suggested that the integration of course and fieldwork was beneficial to candidates in many ways. Suggested benefits included increasing candidates' understanding of: (1) their own cultural biases and assumptions, (2) the intersectionality between disability and other types of diversity, and (3) the nature of special education delivery (Robertson et al., 2017).

Summary and Recommendations

Although much debate exists about how to ensure future educators possess the necessary knowledge and dispositions to teach students equitably and promote social justice, it is certain that failing to do so in meaningful ways will have negative outcomes for students from diverse backgrounds and will continue contributing to the cycle of social injustice that plagues our schools and society as evidenced by achievement/opportunity gaps. Educator preparation programs must carefully consider and plan to incorporate opportunities for social justice dispositions assessment and development throughout their programs. It is critical that colleagues within and across programs collaborate to ensure that opportuntities are meaningful and integrated throughout coursework and field experiences. As supported, although minimally, from existing literature, programs should carefully select readings and class activities that encourage critical thinking and self-examination in the context of both learner and educator. Special attention should be paid to issues of achievement and opportunity gaps for learners from diverse backgrounds. Readings and activities should be designed so that they can be discussed and examined in multiple courses with multiple professors. Opportunities for personal reflection and group discussion should be utilized throughout, although careful consideration should be made so that these reflections and discussions are not seen as threatening to educator candidates. In addition, field experiences should be structured in ways that promote examination, reflection, and discussion of issues related to social justice that are found in field experiences. They should also be designed so that educator candidates gain field experience in settings that have learners and educators from diverse backgrounds and educators who demonstrate dispositions towards social justice. Special consideration should be given to power dynamics within field experiences, and these dynamics should be incorporated into discussions amongst faculty and preservice

educators. Programs should also conduct research to evaluate the effectiveness of their social justice content and opportunities for disposition development and share their results with other programs. Although integration of all of these tasks initially will require a great deal of coordination, planning, and collaboration amongst program faculty, with time, the inclusion of this content will likely become a natural part of instruction and conversations. The hope is that it would have similar effects on future educators as they enter the teaching field and throughout their careers.

CHAPTER III. METHODS

There is evidence that dispositions of educators can change over time with well-planned activities (Johnson & Reiman, 2007; Kidd et al., 2007; Lynn & Smith-Maddox, 2007; Mills, 2012, 2013; Mills & Ballantyne, 2010; Morrison, 2014; Robertson et al., 2017; Villegas, 2007). However, there are a limited number of studies related to the dispositions of special education candidates towards learners who represent diverse groups other than learners with disabilities (Artiles, 2013; Blanchett et al., 2009; Garcia & Ortiz, 2013; Hernández-Saca et al., 2018, Robertson et al., 2017). The purpose of this study was to examine the effectiveness of a specially designed course in an initial certification special educator preparation program that was intended to cover CAEP and CEC standards related to diversity.

This chapter first describes the following components of the proposed study: participants and setting, information regarding the course under investigation, and research design. Then, this chapter includes information related to measurement methods and data analysis.

Research Questions

This study investigated two research questions related to the dispositions of special education candidates seeking initial teaching certification towards learners who are diverse.

1. To what extent does participation in a required course designed to address diversity-related standards impact change in the *attitudes* of special education candidates towards teaching learners who are diverse (e.g., ethnicity, race, geographical origin, language, religion, socioeconomic status, gender, sexual identification)?
2. To what extent does participation in a required course designed to address diversity-related standards impact change in the *self-efficacy* of special education candidates

towards teaching learners who are diverse (e.g., ethnicity, race, geographical origin, language, religion, socioeconomic status, gender, sexual identification)?

Setting and Participants

Setting

This study was conducted with participants in an initial certification special educator preparation program at a 4-year, land grant, higher education institution located in the southeastern United States. Institution demographics from August 2019 indicated 81% of the institution's students were enrolled in undergraduate programs, 15% were enrolled in graduate programs, and 4% were enrolled in professional programs. These reports also showed that 49% of the entire student population were female and 51% were male. The National Center for Education Statistics reported that in 2016, 56% of students enrolled in post-secondary programs were female and 44% were male (DE, 2019). In-state students at the institution included in the study represented 56% of the entire institution population, and out-of-state students represented 44%. In terms of race/ethnicity, 76% of current students were reported as White, 10% were reported as non-resident alien, 6% were Black, 3% were Hispanic or Latino, 2% were Asian, 2% reported two or more races, and American Indian/Alaska native, native Hawaiian/pacific islander, and unknown each represented less than 1% of the entire student population. National averages of students in post-secondary programs in 2016 showed a significant difference from those reported by the institution in this study with national averages by race/ethnicity being 57% White, 18% Hispanic or Latino, 14% Black, 7% Asian/Pacific Islander, 5% non-resident alien, 4% two or more races, and 0.8% American Indian/Alaska native (DE, 2019).

The participants in this study were enrolled in a College of Education that represented 9% of the entire university population. Of the students in the College of Education, 65% were

enrolled in undergraduate programs and 35% were enrolled in graduate programs. National averages from 2015-2016 indicated that of all Colleges of Education, 31% of degrees were awarded to undergraduates, 49% to master's students, and the remaining 20% to students seeking undergraduate and graduate certificates, associate degrees, and doctorates (American Association of Colleges for Teacher Education [AACTE], 2018). This comparison reveals that the institution in this study served more undergraduates in educator preparation programs than the national average.

The institution under investigation reported that females represented 73% of the College population and males represented 27%. This ratio is consistent with national averages at the time of the study that reported 80% of undergraduates seeking bachelor's degrees in Colleges of Education are female and 20% are male. National averages also showed that of those seeking master's degrees, 76% were female and 24% were male (AACTE, 2018). Of the students at the institution under investigation, 67% were in-state students and 33% were from out-of-state. In terms of race/ethnicity, 79% of students in the College of Education at this institution were White, 14% were Black, 4% were Hispanic or Latino, 3% were reported as non-resident alien, 2% reported two or more races, 1% were Asian, and American Indian/Alaska native, Native Hawaiian/Pacific Islander, and unknown each represented less than 1% of the College population. National averages indicated similar numbers (See table 5).

Table 5

National Educator Preparation Program Enrollment by Race/Ethnicity

	Bachelor's Degree	Master's Degree
White	76%	66%
Black	7%	11%
Hispanic or Latino	10%	15.5%

Native American	1%	1%
Asian/Pacific Islander	3%	3.5%
More than one race	2%	3%
Total	100%	100%

Note. Master's degree data includes institution-based data only.
Source: American Association of Colleges for teacher education, (2018).

As stated previously, participants in this study were all students in the College of Education. These participants were also majoring in special education. At this institution, students majoring in special education at the undergraduate and master's level made up only 2.7% of the College of Education's population. National averages showed that 10% of education degrees that were conferred during the time of investigation were in the area of special education (AACTE, 2018). When compared to the national average, the number of special education majors at the institution under investigation was low.

Participants

Selection. Participants for this study were enrolled in initial teaching certification programs in the area of special education. At the time of the study, special education majors made up 5% of the entire College of Education population. Of this 5%, 72% were undergraduates seeking initial certification and 28% were enrolled in graduate programs. Of these graduate students, only a portion of students were seeking initial certification. Exact numbers of graduate students seeking initial certification were not available in demographic data. Females represented 91% of all special education majors and males represented 9%. Of these students, 75% were in-state and 25% were from out-of-state. In terms of race/ethnicity, 90% were White, 4% were Black, 3% were Hispanic or Latino, 1% reported two or more races, and

American Indian/Alaska Native, Native Hawaiian/Pacific Islander, Non-resident Alien, and unknown represented less than 1% of the population each.

The participants in this study were chosen because they were taking a course as a part of their educator preparation program that includes standards related to learner diversity. This course was offered two times a year (summer and fall) to all students seeking initial certification in special education.

Recruitment. Upon obtaining IRB approval, participants were invited to participate in the study at the beginning of the semester in which the course under investigation was offered. The researcher worked with the instructor of the course to identify a time for a representative to come to the class to explain the purpose of the study, invite students to participate, and administer the survey. In an effort to increase participation, the survey was administered during or immediately after class time so that participants did not have to arrange an alternate time to participate. If any students in the distance education section of the class were willing to participate, they would have been emailed an information letter and online format of the survey. In an additional effort to increase participation, participants were entered into a drawing to win a gift card that could be used in their community. Six gift cards (e.g., three per semester) were available to win with values of $10 each. There were two separate drawings, one each semester, for participants who completed both pre- and post- surveys.

Informed Consent and Confidentiality. During recruitment, participants were provided with an explanation and information letter explaining the study, age requirements, estimated time commitment, potential risks or discomforts, benefits, compensation, cost, plan for data collection and storage, procedures to maintain participant anonymity, and how the data would be used. The letter also informed the recruitment sample that their participation was voluntary and provided

them with contact information for the primary researcher and faculty advisor in case they had any questions.

Sample Size. The study was conducted over two semesters that the course under investigation was offered. In the summer of 2019, there were 10 students enrolled in the course. Of these students, six were on-campus undergraduate students, two students were on-campus masters students, and two students were master's students enrolled in the distance education program. Of the eight students who participated in the study, only five completed post-test surveys, leaving five usable surveys from this survey administration. The five complete measures were submitted by on-campus students. In the fall of 2019, there were 16 students enrolled in the course. All of these students were on-campus undergraduate students. Of the 15 students who participated in the study, only 13 submitted both the pre- and post-test surveys needed to be included in the sample. Total sample size from both survey administrations was 18 which was 69% of all students enrolled in the course over the two semesters. The demographics of these participants is described in Chapter IV.

Program Description

The participants were all enrolled in an initial teaching certification program in the area of special education. There were two types of certification programs available. One prepared and certified candidates to teach learners with disabilities from birth through sixth grade. The other prepared and certified candidates to teach learners with disabilities from kindergarten through twelfth grade. The undergraduate initial certification programs were four-year programs that contained two years of core academic classes and two years of program specific classes. The graduate initial certification program required 54 -57 hours of coursework with many of the required courses overlapping with undergraduate requirements. Each initial certification program

required four semesters of field experiences with one being the final, full-time semester-long student teaching experience. At the time of the study, all undergraduate students in the College of Education took two core classes on diversity at the beginning of their programs. One was geared towards disability as diversity, and the other covered other types of diversity. These two courses were designed for all education majors regardless of discipline.

At the time of the study, the program under investigation met the CAEP accreditation requirements by maintaining the status of a recognized program under the national special education professional organization CEC. During the time of the study, educator preparation programs were required to incorporate and collect data on all CEC standards in their programs in order to be recognized by CEC. This particular program incorporated several standards related to diverse learners into one course while utilizing field experiences to address and assess other standards related to diversity. Table 6 presents ways in which this program incorporated these standards. For a full listing of CEC initial preparation standards see Table 4.

Table 6

CEC Initial Preparation Standards Related to Diversity

CEC Standards Addressed in Course Under Investigation	
1.1	Beginning special education professionals understand how language, culture, and family background influence the learning of individuals with exceptionalities.
2.1	Beginning special education professionals, through collaboration with general educators and other colleagues, create safe, inclusive, culturally responsive learning environments to engage individuals with exceptionalities in meaningful learning activities and social interactions.
5.1	Beginning special education professionals consider individual abilities, interests, learning environments, and cultural and linguistic factors in the selection, development, and adaptation of learning experiences for individuals with exceptionalities.
6.3	Beginning special education professionals understand that diversity is a part of families, cultures, and schools, and that complex human issues can interact with the delivery of special education services.

6.5	Beginning special education professionals advance the profession by engaging in activities such as advocacy and mentoring.
CEC Standards Addressed in Field Experiences	
1.0	Beginning special education professionals understand how exceptionalities may interact with development and learning and use this knowledge to provide meaningful and challenging learning experiences for individuals with exceptionalities.
1.2	Beginning special education professionals use understanding of development and individual differences to respond to the needs of individuals.
2.0	Beginning special education professionals create safe, inclusive, culturally responsive learning environments so that individuals with exceptionalities become active and effective learners and develop emotional well being, positive social interactions, and self-determination.
7.0	Beginning special education professionals collaborate with families, other educators, related service providers, individuals with exceptionalities, and personnel from community agencies in culturally responsive ways to address the needs of individuals with exceptionalities across a range of learning experiences.

Course Description

The focus of this study was a course that was required for all candidates seeking initial certification in special education. The course was presented differently for each semester, but the content and objectives remained the same. One occurrence was a 5-week mini-semester, and the other was a 15-week semester. The course was provided on-campus for undergraduate students. Graduate students had the option of enrolling in an on-campus or online section of the course. The most recent syllabus for the course, which was the syllabus used for both courses, indicated that candidates covered a range of topics including learners who are culturally and linguistically diverse, instructional methods, present level of performance, collaboration, curriculum standards, interpersonal communication, listening and responding to feedback, problem-solving in difficult situations, and teams and co-teaching. Candidates took three tests and completed four projects, three of which were tied to course learning outcomes. The course assessment map indicated that

standards and objectives related to diversity were assessed with Tests 1 and 2 and two of the four projects (See Table 7). Table 8 contains a description of course projects.

Table 7

Course Assessment Map for Course Under Investigation

Learning Outcomes	Test 1	Test 2	Test 3	Content Standards Analysis Project	Responsive Instruction Project	Collaborative Lesson Planning Project
1. Collaboration with stakeholders to facilitate student learning and well-being.			X			
2. Learning experiences that engage all learning styles and multiple intelligences.		X				
3. Inclusive learning environments that support and address the needs of learners.*		X				X
4. Differentiation between learner difficulties related to cognitive or skill development and those that relate to language learning.*		X			X	
5. Understanding of how personal and cultural biases can affect teaching and learning.*	X				X	
6. Communication strategies that demonstrate sensitivity to diversity.*	X				X	
7. Subject-matter content and ability to organize related facts, concepts, and skills.				X		

8. Diverse cultures, including cultural and socioeconomic factors and their impact on eligibility, programming, instruction, interventions, and implementation of services.*	X				X	X
9. How to design and implement programs that reflect knowledge, awareness, and responsiveness to diverse cultures, including cultural and socioeconomic factors.*		X				
10. Student learning styles/Characteristics and instructional strategies, including collaborative, co-teaching and direct instruction.	X	X	X			
11. Roles of professionals, students and families as members of a collaborative team.			X			
12. Strategies for promoting coordination and collaboration between special education services and general education.			X			
13. Approaches for communicating with families.			X			
14. Content for Grades K-6/6-12 in the State Courses of Study for English language arts, mathematics, science, and social studies.				X		

15. Knowledge of collaborative skills, procedures, and techniques designed to facilitate coordination of instruction and service delivery (i.e., families, general education, school-to-work programs, related service providers, and agencies).			X			
16. Knowledge of content for Grades K-6 in the *State Courses of Study* for English language arts, mathematics, science, and social studies.				X		
17. Knowledge of content for Grades 6-12 in the *State Courses of Study* for English language arts, mathematics, science, social studies, and career and technical education.				X		

Note. Standards related to diversity are marked with *.
Source: Course Syllabus, Fall 2019

Table 8

Projects Completed in Course Under Investigation

Title	Description
Content Standards Analysis Project	Students are assigned groups of content standards across subject areas. Students are to define each portion of each standard and identify the product that would be produced if a child mastered the standard.
Present Level of Performance Project	Students are given written case studies that involve eligibility and assessment information for learners with disabilities. Students are to write present levels of academic and functional performance for each area of need for each learner.
Responsive Instruction Project	In groups, students are assigned a geographic area within 50 miles of the university. Students are to visit the area, conduct informal

	research, and report on resources and community infrastructure available to residents in the area. Students write a reflection that includes a description of the area, ease of access to various resources and community infrastructure, and three ways in which their instruction will be designed to be responsive to students from the areas' experiences. Each group leads a class discussion in which they describe their reflections and findings.
Collaborative Lesson Planning Project	Groups of students work with a general education major enrolled in a specified general education course offered at the same institution to assist in planning an elementary learning activity for a diverse group of students. Students from both classes meet and discuss the lesson draft. Students work together and conference with the instructor to generate ideas for lesson accommodations. Students enrolled in distance education will work with a peer in general education to assist with planning, accommodations, behavior management etc. Students enrolled in distance education will participate in conferencing with the instructor by using Skype Zoom or Face Time to discuss the educational activity. At the end of the semester, students meet again to discuss and develop a plan for collaborative implementation of the lesson. Students also complete a written reflection of the collaborative experience and complete a collaborative planning sheet which states specific activities and roles for each teacher.

Source: Course Syllabus, Fall 2019

Design

A non-experimental, pre-test/post-test design was utilized to examine the effectiveness of a course designed to incorporate standards related to learners who are diverse on participants who are seeking initial certification in a special educator preparation program. This particular course was offered twice an academic year to all special education majors enrolled in initial certification programs. This study was implemented for two semester course offerings. The Multicultural Efficacy Scale (MES) developed by Guyton and Wesche (2005) was administered at the beginning of the two semesters the course under investigation was offered and again at the end of each semester. The independent variable was the course under investigation. The dependent variables were the difference in pre-test and post-test scores on the MES in the areas

of attitudes/beliefs and self-efficacy regarding diverse learners. The data obtained from the MES pre-test and post-test were analyzed using paired sample T-Tests and the Wilcoxon Signed Rank Test. The Marlowe Crowne Social Desirability Scale (MCSD) was administered along with the MES. Data collected from the MCSD were used to provide insight into the likelihood that participants responded in socially desirable ways on the MES. The purpose of this study was to examine the effects of the course on candidate beliefs and self-efficacy regarding teaching learners from diverse groups. Data were collected from all willing participants. An additional demographic item was added to the instrument for the second administration each semester asking participants to report what they estimated their final grade in the class to be. This was used to discard data from participants who did not anticipate passing the course. The researcher also asked the instructor at the conclusion of the course to report the number of students who passed the course that semester. Specific grades for participants were not requested.

Instrumentation

Multicultural Efficacy Scale

The MES was designed by Guyton and Wesche (2005) to measure multicultural efficacy. Guyton and Wesche used the four dimensions of multicultural education that were identified by Bennett, Niggle, and Stage (1990) as their framework for the MES. These dimensions include knowledge, understanding, attitude, and skill. The MES was the first instrument created to include all four of these dimensions. It was designed to assess personal multicultural efficacy, intercultural experiences, minority group knowledge, attitudes about diversity, and knowledge of multicultural teaching skills (Guyton & Wesche, 2005).

In the MES scale development, items were first separated into five subscales: experience, general knowledge, efficacy, instructional knowledge, and attitude. This initial scale was

evaluated by each researcher as well as over twelve experts in multicultural education. Following a revision based on the feedback received, the researchers implemented a pilot study with items separated into six sections instead of the original five to validate the instrument. The pilot instrument contained 160 items and was administered to 665 undergraduate and graduate students in educator preparation programs from several geographic regions in the United States. The sample demographics were reported to be similar to the demographics of educators in the field at the time, and the final sample size after incomplete responses were deleted was 626.

The six sections of the pilot instrument included: experiences with diversity, knowledge about diversity, efficacy and diversity, instruction of diversity, attitudes about diversity, and conceptions of multiculturalism. Pilot data were used to reduce the number of items on the pilot instrument in two stages using factor analysis and biserial correlations. The final instrument contained two sections. The first section pertained to demographics, and the second section contained 35 items separated into three subscales: Subscale A Experience (7 items), Subscale B Attitude (7 items), and Subscale C Efficacy (20 items). The final item on the instrument did not belong to any subscales. This item required participants to select a statement that represented their opinion about the purpose of multicultural teaching and was intended to categorize participants by their view. These 35 items make up the second section of the MES and can be found in table 9.

Table 9

Items on the final MES separated by subscale

Subscale	Item
A: Experiences	1. As a child, I played with people different from me. 2. I went to school with diverse students as a teenager. 3. Diverse people lived in my neighborhood when I was a child growing up.

	4. In the past, I chose to read books about people different from me. 5. A diverse person was one of my role models when I was younger. 6. In the past, I chose to watch TV shows and movies about people different from me. 7. As a teenager, I was on the same team and/or club with diverse students.
B: Attitude	8. Teachers should adapt lesson plans to reflect the different cultures represented in the classroom. 9. Teachers should provide opportunities for children to share cultural differences in foods, dress, family life, and beliefs. 10. Discussing ethnic tradition and beliefs in schools leads to disunity and arguments between students from different cultures. 11. Children should be taught mostly by teachers of their own ethnic and cultural background. 12. It is essential to include the perspectives of diverse groups while teaching things about American history that are common to all Americans. 13. Curricula and textbooks should include the contributions of most, if not all, cultural groups in our society. 14. The classroom library should reflect the racial and cultural differences in the class.
C: Efficacy	15. I can provide instructional activities to help students to develop strategies for dealing with racial confrontations. 16. I can adapt instructional methods to meet the needs of learners from diverse groups. 17. I can develop materials appropriate for the multicultural classroom. 18. I can develop instructional methods that dispel myths about diverse groups. 19. I can analyze instructional materials for potential stereotypical and/or prejudicial content. 20. I can help students to examine their own prejudices. 21. I can present diverse groups in our society in a manner that will build mutual respect. 22. I can develop activities that increase the self-confidence of diverse students. 23. I can provide instruction showing how prejudice affects individuals. 24. I can plan instructional activities to reduce prejudice toward diverse

	groups. 25. I can identify cultural bias in commercial materials used in teaching. 26. I can help students work through problem situations caused by stereotypical and/or prejudicial attitudes. 27. I can get students from diverse groups to work together. 28. I can identify school practices that may harm diverse students. 29. I can identify solutions to problems that may arise as the result of diversity. 30. I can identify the societal forces which influence opportunities for diverse people. 31. I can identify ways in which various groups contribute to our pluralistic society. 32. I can help students take on the perspective of ethnic and cultural groups different from their own. 33. I can help students view history and current events from diverse populations. 34. I can involve students in making decisions and clarifying their values regarding multicultural issues.
Standalone Item	35. Choose the position which most closely reflects your strongest beliefs about teaching. A) If every individual learned to accept and work with every other person, then there would be no intercultural problems. B) If all groups could be helped to contribute to the general good and not seek special recognition, we could create a unified America. C) All cultural groups are entitled to maintain their own identity. D) All cultural groups should be recognized for their strengths and contributions. E) Some groups need to be helped to achieve equal treatment before we can reach the goals of a democratic society.

Reliability of the MES. Guyton & Wesche (2005) used Chronbach's alpha to measure internal reliability of the instrument. Alpha for the entire 35-item scale was reported to be .89. Alpha for the subscales were reported as .78 for experience, .72 for attitude/beliefs, and .93 for

self-efficacy. Several other studies have examined the reliability of the MES. Dodici (2011) reported reliability estimates of .87 for experience, .65 for attitude/beliefs, .94 for self-efficacy, and .87 for the composite instrument. Findings from the Dodici study were consistent with the reliability estimates reported by Guyton and Wesche with the exception of a considerably higher estimate reported for experience and a slightly lower estimate reported for attitude/beliefs. Nadelson and colleagues (2012) reported reliability estimates of .76 for experience, .68 for attitude/beliefs, .91 for self-efficacy, and .89 for the composite instrument. These results from the Nadelson study are also similar to Guyton & Wesche's estimates. The slightly lower estimate reported by Nadelson for attitude/beliefs is consistent with the estimate reported by Dodici. A fourth study reported reliability estimates of the MES to be .77 for experience, .60 for attitude/beliefs, .95 for efficacy, and .89 for the composite instrument (Espinosa, 2014). The reported results from these four studies indicate that the most variable reliability estimate is in the subscale on attitude/beliefs. The results from these studies provide evidence of adequate reliability of the MES, thus supporting the use of this instrument in this study.

Scoring and Administration. The second section of the MES contains 35 questions divided into three subscales: Section A: Background experiences with people who are diverse, Section B: Beliefs about teaching learners who are diverse, and Section C: Self-efficacy in teaching learners who are diverse. Section A contains 7 questions where participants are asked to rate statements pertaining to experiences with people different from them by choosing from a 4-point Likert-type scale where A = never, B = rarely, C = occasionally, and D = frequently. Numerical values are assigned as A = 1 point, B = 2 points, C = 3 points, and D = 4 points. Section A is intended to be used to compare results on Subscales B and C by background experiences of participants, not to measure efficacy (Guyton & Wesche, 2005). Section B

contains 7 questions where participants are asked to rate statements pertaining to their beliefs about teaching learners who are diverse by choosing from a 4-point Likert-type scale where A = agree strongly, B = agree somewhat, C = disagree somewhat, and D = disagree strongly. Numerical values are assigned as A = 4 points, B = 3 points, C = 2 points, D = 1 point. Section C contains 20 questions where participants are asked to rate statements about their own ability to implement multicultural teaching strategies where A = I do not believe I could do this very well, B = I could probably do this if I had to, but it would be difficult for me, C = I believe that I could do this reasonably well, if I had time to prepare, and D = I am quite confident that this would be easy for me to do. Numerical values are assigned as A = 1 point, B = 2 points, C = 3 points, D = 4 points. Negatively worded items are reverse coded as they reflect negative attitudes towards multicultural teaching.

Scores of 1 or 2 on an item are considered a low score, a score of 3 is considered average, and 4 is considered a high score (Guyton & Wesche, 2005). Guyton and Wesche reported sums of section scores and suggested score ranges for Section B and C. Section A results can be reported with the same suggested score ranges as Section B but are only intended to be used for comparative purposes. Guyton and Wesche's suggested score ranges for Section B (beliefs and attitudes) are: 0-15 points (low), 16-24 points (average), 25-28 points (very positive). Score ranges for Section C (self-efficacy) are: 0-54 points (low), 55-66 points (average), and 67-80 points (high).

The final question on the instrument pertains to beliefs about the purpose of multicultural teaching and is intended to categorize participants according to their beliefs (Guyton & Wesche, 2005). Participants are asked to choose a statement that most closely reflects their beliefs where:

- A = If every individual learned to accept and work with every other person, then there would be no intercultural problems,
- B = If all groups could be helped to contribute to the general good and not seek special recognition, we would create a unified America,
- C = All cultural groups are entitled to maintain their own identity,
- D = All cultural groups should be recognized for their strengths and contributions, and
- E = Some groups need to be helped to achieve equal treatment before we can reach the goals of a democratic society.

Corresponding ratings for these belief statements are: A = tolerance view, B = assimilation view, C = pluralism view, D = multiculturalism view, E = advocacy view.

Demographics. The demographic section of the MES asks the participant to provide information about gender, age, birthplace, education, racial/ethnic background, religious background, sexual orientation, physical disabilities, and parents' education as open-ended, free-write responses. There is also a question that asks participants to provide information about socio-economic status as a child and as an adult by selecting from a range of options that correspond with the provided household income table. Later studies involving the use of the MES adjusted the demographic questions in the first section (Espinosa, 2014; Strickland, 2018).

For the purposes of this study, the demographic section contained items that were most relevant to educator candidates in preparation programs and included two additional questions where participants were asked to provide their major and involvement with other courses that contained diversity related content. The question pertaining to parents' education contained choices for responses rather than open-ended, free-write responses. This study also utilized a

question used in a previous study using the MES (Strickland, 2018) that pertained to experiences with diverse groups. This question asked participants to share any other experiences that may have impacted their views on diversity or diverse learners (see Appendix A, item 36).

The purpose of this study was to investigate change in special educator candidates' attitudes (i.e., beliefs) and efficacy regarding learners who are diverse after completing a specific course designed to include content related to diverse learners. The MES was chosen as the instrument for the study because it measures both beliefs and self-efficacy regarding diverse learners.

Marlowe-Crowne Social Desirability Scale

Development. In an effort to enhance confidence in interpreting the results of the study, the MCSD was administered with the MES. Crowne and Marlowe (1960) developed this scale using a broad definition of social desirability throughout their process. The definition of social desirability used by the developers was "the need of students to obtain approval by responding in a culturally appropriate and acceptable manner" (Crowne & Marlowe, 1960, p. 353). The purpose of this scale is to account for social desirability when interpreting study results. Since its development, it has been used primarily to "assess and control for response bias in self-report research" (Barger, 2002, pg. 286). Development of this scale began with the authors creating items that contained behaviors that would be culturally approved but not likely to occur. These items, when answered true or false, had minimal negative implications regardless of answer choice (e.g., There have been times I was quite jealous of the good fortune of others; I have never deliberately said something that hurt someone's feelings).

Crowne and Marlowe began with a set of 50 items reviewed by 10 reviewers including faculty members and graduate students in the Department of Psychology at Ohio State

University. These reviewers scored each item for its social desirability using true and false answer choices. Of the 50 items, 47 items obtained 90-100% agreement from reviewers and were selected for the pilot version of the scale. The scale developers also employed methods to ensure they had not included items that would be considered indicative of maladjustment by using similar methods as the ones they employed for initial item selection as this was a primary objective in development of a new scale. The authors then administered the scale to 76 students in introductory psychology courses and conducted an item analysis. After eliminating items, the scale consisted of 33 items.

Scoring/Reliability. Initial reliability was computed by the authors to be .88 using the Kuder-Richardson formula 20 (Crowne & Marlowe, 1960). The authors obtained a test-retest correlation of .89. However, several later studies reported lower reliability in the .70s (Barger, 2002). Over the years, several short forms of the scale have been developed and adopted for use. Debate continues as to reliability of the short forms as well as the complete scale. A more recent study was conducted to investigate the reliability of the complete scale as well as its short forms. Barger (2002) found that the complete scale demonstrated internal reliability of .73 with normal distribution. Results for the short forms were lower with internal consistency in the .60s and reliability computed to be .44 to .45. An examination of 10 studies revealed the complete scale to have better psychometric properties than any of the short forms.

Scoring of the MCSD involves tallying up the number of socially desirable responses. A low score (0-8) indicates less concern with responding in a socially desirable way. An average score (9-19) indicates average concern with responding in a socially desirable way. A high score (20-33) indicates an elevated concern with responding in a socially desirable way and indicates responses should be interpreted with caution (Crowne & Marlowe, 1960).

Procedure

Pre- and post-surveys were administered according to the IRB approved procedures during the two semesters the course under investigation was offered in one academic year. Both courses were taught by the same instructor. At the end of each survey administration, coded survey responses were entered into SPSS version 25. Only complete surveys were entered. Incomplete surveys were discarded from the data. Data was then analyzed using SPSS.

Data Analysis

A non-experimental, pre/post evaluation using the MES was implemented. Results were analyzed in order to determine if successful completion of a course that included standards related to diverse learners caused a change in participant beliefs or self-efficacy regarding learners who are diverse. The pre-test/post-test data collected from the MES were analyzed using both descriptive and statistical analyses. Data from the MCSD were used to provide additional information about survey results.

Survey responses were entered into SPSS software program and analyzed. Analyzed demographic data produced frequency tables. Paired sample t-tests for dependent samples were used to analyze differences in pre and post-test responses for subscale total scores for sections B and C. Frequency tables were produced for Section A: background experiences with people who are diverse and were used for comparative purposes as recommended by the developers (Guyton & Wesche, 2005). The final question related to participant views about the purpose of multicultural teaching was also used for comparative purposes. Section B: beliefs about teaching learners who are diverse was used to answer research question one related to attitudes of candidates. Section C: self-efficacy in teaching learners who are diverse was used to answer

research question two related to self-efficacy of candidates. Total scores from the MCSD were also analyzed and included for comparative purposes.

Since the sample size was small (n=18), the researcher was concerned about the power of the paired sample t-tests. A power analysis reporting effect size was conducted using G*Power (Faul, Erdfelder, Lang, & Buchner, 2007). Since the calculated effect sizes for subscales B and C were either small or moderate, nonparametric tests were also run using the related-samples Wilcoxon Signed Rank Test in SPSS.

Summary

This chapter provided information about the procedures used to conduct this study and analyze data in an effort to answer the research questions. This chapter described the design and provided information about the setting, program, and course under investigation. This chapter also described participant recruitment, consent, and demographics. Finally, this chapter provided information about the instruments used and how the data from these instruments were analyzed. Chapter IV contains results obtained from data analysis.

CHAPTER IV. RESULTS

The purpose of this study was to investigate changes in educator candidate attitudes and self-efficacy regarding learners who are diverse following completion of a course that included standards related to diverse learners. Information about previous experiences with diverse groups was also collected and used for comparative purposes. This chapter includes findings from the data collected using the MES and MCSD. Data from the MCSD were used to provide additional information to consider when interpreting results of the MES.

The study addressed the following research questions:

1. To what extent does participation in a required course designed to address diversity-related standards impact change in the *attitudes* of special education candidates towards teaching learners who are diverse (e.g., ethnicity, race, geographical origin, language, religion, socioeconomic status, gender, sexual identification)?
2. To what extent does participation in a required course designed to address diversity-related standards impact change in the *self-efficacy* of special education candidates towards teaching learners who are diverse (e.g., ethnicity, race, geographical origin, language, religion, socioeconomic status, gender, sexual identification)?

Participant Demographics

Of the 26 possible participants, only 18 (69%) usable surveys were collected. All 18 participants provided complete demographic information. In terms of race/ethnicity and gender, the percentages of the sample resembled those of the program and college with 100% of the sample describing themselves as non-Hispanic or Latino White females. Participants ranged in age from 19 to 23 at the time of the pre-test (see Table 10). Fifty-six percent reported their hometown (e.g., they place they grew up) as in-state while 44% reported their hometown as out

of state. This differs slightly from College statistics that reported 67% of students as in-state and 33% of students as out of state. In regard to sexual orientation and religious/spiritual identity, 100% of respondents (n=18) reported themselves as heterosexual and 94% of respondents (n=17) reported themselves as Christian while the remaining 6% (n=1) reported themselves as spiritual with no specific religious affiliation.

Table 10

Age of Participants

Age	Pre
19 years	11.1% (n=2)
20 years	38.9% (n=7)
21 years	44.4% (n=8)
23 years	5.6% (n=1)
Total	100% (n=18)

Parents' education was reported by 100% (n=18) of respondents. Pre-test data revealed that father's education ranged from high school diploma to doctorate degree with approximately 6% (n=1) reporting high school diploma, 44% (n=8) reporting bachelor's degree, 22% (n=4) reporting master's degree, 6% (n=1) reporting specialist degree, and 22% (n=4) reporting doctorate degree. Interestingly, post-test data yielded different results with approximately 11% (n=2) reporting high school diploma, 44% (n=8) reporting bachelor's degree, 22 % (n=4) reporting master's degree, 11% (n=2) reporting specialist degree, and 11% (n=2) reporting doctorate degree. Mother's education ranged from high school diploma to doctorate degree with pre-test and post-test data also yielding different results. Pre-test data indicated that approximately 11% (n=2) reported high school diploma, 39% (n=7) reported bachelor's degree,

39% (n=7) reported master's degree, 6% (n=1) reported specialist degree, and 6% (n=1) reported doctorate degree. Post-test data differed with 11% (n=2) reporting high school diploma, 39% (n=7) reporting bachelor's degree, 39% (n=7) reporting master's degree, and 11% (n=2) reporting doctorate degree. The survey contained an option for "don't know" for both father's and mother's education, but none of the participants chose that option for either survey administration. See Tables 11 and 12.

Table 11

Father's Education

	Pre	Post
High school diploma	5.6% (n=1)	11.1% (n=2)
Bachelor's degree	44.4% (n=8)	44.4% (n=8)
Master's degree	22.2% (n=4)	22.2% (n=4)
Specialist degree	5.6% (n=1)	11.1% (n=2)
Doctorate degree	22.2% (n=4)	11.1% (n=2)
Don't know	0% (n=0)	0% (n=0)
Total	100% (n=18)	100% (n=18)

Table 12

Mother's Education

	Pre	Post
High school diploma	11.1% (n=2)	11.1% (n=2)
Bachelor's degree	38.9% (n=7)	38.9% (n=7)
Master's degree	38.9% (n=7)	38.9% (n=7)
Specialist degree	5.6% (n=1)	0% (n=0)
Doctorate degree	5.6% (n=1)	11.1% (n=2)
Don't know	0% (n=0)	0% (n=0)
Total	100% (n=18)	100% (n=18)

In order to obtain information regarding approximate socio-economic status (SES) as a child, a table was provided on the survey with corresponding household incomes for the different levels of SES (see Table 13). Pre-test and post-test data for approximate socio-economic status yielded different results. Pre-test data showed that participants believed they grew up primarily in upper middle to upper class homes with approximately 6% (n=1) reporting middle class, 39% (n=7) reporting upper middle class, 50% (n=9) reporting upper class, and 6% (n=1) did not respond. Post-test data also showed that participants believed they grew up primarily in upper middle to upper class homes with approximately 11% (n=2) reporting middle class, 39% (n=7) reporting upper middle class, 44% (n=8) reporting upper class, and 6% (n=1) did not respond (see Table 14). Participants were also asked to report their approximate SES as an independent adult. This item was included in the survey to gather information about participants who may be living independently from their parents while earning their initial teaching certification. Results from this item indicate that approximately 80% of participants found this item not applicable with the other 20% reported lower, middle, upper, and upper middle. These findings cannot be accurately interpreted due to the inability to ascertain whether respondents reported these findings as individuals living independently from their parents or guardians. Future survey administrations should contain an additional question regarding whether the participants support themselves financially.

Table 13

SES and Corresponding Incomes

Socio-economic Status	Corresponding Household Annual Income
Lower	$0 - $19,999
Lower middle	$20,000 - $39,999
Middle	$40,000 - $59,999
Upper middle	$60,000 – $79,999
Upper	$80,000+

Table 14

Approximate SES as a Child

	Pre	Post
Lower	0% (n=0)	0% (n=0)
Lower middle	0% (n=0)	0% (n=0)
Middle	5.6% (n=1)	11.1% (n=2)
Upper middle	38.9% (n=7)	38.9% (n=7)
Upper	50% (n=9)	44.4% (n=8)
No response	5.6% (n=1)	5.6% (n=1)
Total	100% (n=18)	100% (n=18)

Data Analysis

Experiences with Diverse Groups

Self-report results from demographics. When asked about past experiences involving diverse groups on the pre-test, 94.4% (n=17) of participants reported involvement with clubs as a child, 100% (n=18) reported involvement with athletic teams as a child, 83.3% (n=15) reported involvement with religious organizations as a child, and 0% (n=0) reported no involvement with diverse groups as a child. When asked about past experiences involving diverse groups on the post-test, 83.3% (n=15) of participants reported involvement with clubs as a child, 100% (n=18) reported involvement with athletic teams as a child, 83.3% (n=15) reported involvement with religious organizations as a child, and 0% (n=0) reported no involvement with diverse groups as a child. When asked about current experiences involving diverse groups on the pre-test, 83.3% (n=15) of participants reported involvement with clubs as a college student, 11.1% (n=2) reported involvement with athletic teams as a college student, 83.3% (n=15) reported

involvement with religious organizations as a college student, and 0% (n=0) reported no involvement with diverse groups as a college student. When asked about current experiences involving diverse groups on the post-test, 83.3% (n=15) of participants reported involvement with clubs as a college student, 16.7 % (n=3) reported involvement with athletic teams as a college student, 77.8% (n=14) reported involvement with religious organizations as a college student, and 5.6% (n=1) reported no involvement with diverse groups as a college student. Participants were also asked to describe any "other" experiences they might have that weren't listed as options. No "other" activities were reported as a child. Two participants reported sorority involvement on the pre-test while only one participant reported sorority involvement on the post test. No additional examples of "other" activities were provided by any other participants. See Table 15.

Table 15

Experiences with Diverse Groups from Self-Report

	As a child		As a college student	
	Pre	Post	Pre	Post
Experiences through clubs	94.4% (n=17)	83.3% (n=15)	83.3% (n=15)	83.3% (n=15)
Experiences through athletics	100% (n=18)	100% (n=18)	11.1% (n=2)	16.7% (n=3)
Experiences through religious organizations	83.3% (n=15)	83.3% (n=15)	83.3% (n=15)	77.8% (n=14)
No experiences	0% (n=0)	0% (n=0)	0% (n=0)	0% (n=0)
Other experiences:	0% (n=0)	0% (n=0)	11.1% (n=2) Sorority	5.6% (n=1)

An additional item required participants to describe any other experiences that may have impacted their views on diversity. Of the 18 participants, 88.9% (n=16) provided a response at

either the pre-or post-test survey administration. Of the 16 participants who did provide a response, 50% responded at both the pre- and post-test survey administrations. Responses included descriptions including schooling, volunteering, family, working in the school systems, travel abroad, and athletics. Complete responses are provided in Table 16.

Table 16

Responses on Other Experiences Shaping Views on Diversity

Case	Pre	Post
1	I went to a very diverse school K-12. It was all girls, but we had every race, social class, strength/weakness, etc. Because I was raised in this environment, I believe I have a lot of experience regarding this topic.	I went to a very diverse all girls school from K-12. I have a ton of experience in this area.
2	*No response*	Times that I have volunteered at places with kid with disabilities
3	Living in a diverse area as a child, you are able to see first-hand the struggles of diversity. Also working at a Camp for diverse people opened my eyes to a world I was not always aware of.	Being a child whose grandmother and father were a different nationality made it easy to understand diverse learning. Living with diverse culture opens up new doors for future teachers.
4	Growing up in public school and working in public schools for a year has had a great influence on my views of diversity.	Working in ___ County has allowed me to work with adults and students who are from different backgrounds and cultures.
5	*No response*	Students should be constantly taught that their differences in the classroom are unique and will strengthen the dynamics of the classroom.
6	*No response*	Working with diverse people through a church setting
7	*No response*	*No response*
8	I notice that the same group of diverse people stick together.	*No response*

9	Time spent in the Dominican Republic and Panama, volunteering with Diverse groups in US	Service learning, pre-teaching, mission trips to other countries and diverse places in US, worked at camp
10	*No response*	*No response*
11	The high school I attended was 99% white & less than 1% African American. I think this has made me unequipped to work w/diverse settings.	*No response*
12	Grew up with slightly racist mom and opposite dad, but have been dating boyfriend of a different race for 4+ years which has opened my eyes & educated me & my family	Refer to previous survey
13	I have been on several mission trips throughout the United States and have assisted people of mostly different ethnic backgrounds other than my own. I have volunteered seven years working with students with special needs.	I have worked with diverse learners for several years and found that there is so much more to learn from each other, rather than "one-way" learning.
14	I worked at a camp this summer where I saw teachers teach different types of students with diverse learners. I realized just how hard it's going to be to reach these children and connect with all of them.	Played sports in an area and w/people different from me. Taught me there is a big difference in culture close by.
15	"N/A"	*No response*
16	I went to a very diverse school system & it helped me become friends with people who were different from me.	I have always attended schools with diverse students.
17	Going from a private school to a public school I see how huge the gap is for one culture to excel in school compared to other cultures.	I work at an afterschool with a mix of kids from all different cultures and that has really shaped how I view other cultures and races.
18	*No response*	*No response*

Note. Potentially identifying information has been removed from these responses.

Of the 18 participants, approximately 78% (n=14) were undergraduates majoring in K-12 special education, 17% (n=3) were undergraduates majoring in birth-6th grade special education, 5% (n=1) were master's students majoring in K-12 special education, and no participants reported being master's students majoring in birth-6th grade special education. Because exposure to content and experiences related to diverse learners are also included in one undergraduate diversity course and potentially in all field experiences for students majoring in special education in this program, participants were also asked about their previous courses and field experiences. By design, all participants are in initial certification programs which require three field experiences prior to clinical residency/internship. The diversity course is only required for undergraduate students and is typically taken prior to their first practicum experience. Of the 17 undergraduates, approximately 76% (n=13) had already taken the diversity course and 24% (n=4) were taking the course at the same time as the course under investigation. Field experience participation was examined for all 18 participants. Self-reports indicated that approximately 11% (n=2) had already completed at least one field experience, 11% (n=2) were completing a field experience during the semester they participated in the study and 94% (n=17) planned to complete a field experience in the future. See Table 17 for a breakdown by major. From this data, it appears that most of the sample was near the beginning of their program with all required students having previously taken or currently taking the diversity course and only 14% (n=2) having already completed a field experience.

Table 17

Participant Major and Exposure to Diversity Content or Experiences

	UG K-12 (Total n=14)	UG birth-6th (Total n=3)	Grad K-12 (Total n=1)	Total
Diversity course - previous	71.4% (n=10)	100% (n=3)	n/a	(n=13)
Diversity course-concurrent	28.5% (n=4)	0% (n=0)	n/a	(n=4)
Field experience-previous	14.2% (n=2)	0% (n=0)	0% (n=0)	(n=2)
Field experience-concurrent	14.2% (n=2)	0% (n=0)	0% (n=0)	(n=2)
Field experience(s) - future	92.8% (n=13)	100% (n=3)	100% (n=1)	100% (n=17)

Note. No graduate level students majoring in birth-6th grade participated in the study.

MES results. Participants responded to seven questions in Subscale A of the MES about their personal experiences with diversity. These seven items consisted of statements pertaining to experiences with people different from them while they were growing up. Participants were asked to rate the statements using a 4-point Likert-type scale where A = Never, B = Rarely, C = Occasionally, and D = Frequently. Table 18 displays the statements and percentages of participant responses for Subscale A: Background experiences with people who are diverse. Since self-reported demographic data revealed different responses for pre- and post-test survey administrations, responses on Subscale A from both survey administrations were compared and are included in this table as well.

Table 18

Response Percentages for Subscale A (Experiences) of the MES

Statement	Never		Rarely		Occasionally		Frequently	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1. As a child, I played with people different from me.	0%	0%	5.6%	0%	44.4%	66.7%	50%	33.3%
2. I went to school with diverse students as a teenager.	0%	0%	27.8%	38.9%	27.8%	11.1%	44.4%	50%
3. Diverse people lived in my neighborhood when I was a child growing up.	5.6%	22.2%	38.9%	33.3%	50%	33.3%	5.6%	11.1%
4. In the past, I chose to read books about people different from me.	11.1%	0%	11.1%	27.8%	55.6%	50%	22.2%	22.2%
5. A diverse person was one of my role models when I was younger.	11.1%	22.2%	38.9%	16.7%	22.2%	33.3%	27.8%	27.8%
6. In the past, I chose to watch TV shows and movies about people different from me.	0%	0%	11.1%	5.6%	61.1%	61.1%	27.8%	33.3%
7. As a teenager, I was on the same team and/or club with diverse students.	0%	5.6%	16.7%	22.2%	33.3%	33.3%	50%	38.9%

Beliefs About Teaching Learners Who are Diverse

Participants responded to seven questions in Subscale B of the MES about their personal beliefs about teaching learners who are diverse. Participants were asked to rate the statements using a 4-point Likert-type scale where A = Agree strongly, B = Agree somewhat, C = Disagree somewhat, and D = Disagree strongly. Table 19 displays the statements and percentages of

participant responses for Subscale B: Beliefs about teaching learners who are diverse. Responses from both survey administrations are presented for comparison.

Table 19

Response Percentages for Subscale B (Beliefs) of the MES

Statement	Disagree Strongly		Disagree Somewhat		Agree Somewhat		Agree Strongly	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
8. Teachers should adapt lesson plans to reflect the different cultures represented in the classroom.	0%	0%	5.6%	0%	38.9%	11.1%	55.6%	88.9%
9. Teachers should provide opportunities for children to share cultural differences in foods, dress, family life, and beliefs.	0%	0%	5.6%	0%	0%	11.1%	94.4%	88.9%
10. Discussing ethnic tradition and beliefs in schools leads to disunity and arguments between students from different cultures.	66.7%	22.2%	27.8%	61.1%	0%	16.7%	5.6%	0%
11. Children should be taught mostly by teachers of their own ethnic and cultural background.	66.7%	55.6%	27.8%	44.4%	0%	0%	5.6%	0%
12. It is essential to include the perspectives of diverse groups while teaching things about American history that are common to all Americans.	0%	0%	0%	0%	27.8%	27.8%	72.2%	72.2%
13. Curricula and textbooks should include the contributions of most, if not all, cultural groups in our society.	0%	0%	0%	0%	22.2%	16.7%	77.8%	83.3%
14. The classroom library should reflect the racial and cultural differences in the class.	0%	0%	16.7%	0%	33.3%	5.6%	50%	94.4%

Self-efficacy in Teaching Learners Who are Diverse

Participants responded to 20 questions in Subscale C of the MES about their multicultural teaching self-efficacy. These 20 items consisted of statements about their ability to implement multicultural teaching strategies. Participants were asked to rate the statements using a 4-point Likert-type scale where A = I do not believe I could do this very well, B = I could probably do this if I had to, but it would be difficult for me, C = I believe that I could do this reasonably well, if I had time to prepare, and D = I am quite confident that this would be easy for me to do. Table 20 displays the statements and percentages of participant responses for Subscale C: Multicultural efficacy. Responses from both survey administrations are presented for comparison.

Table 20

Response Percentages for Subscale C (Multicultural Efficacy) of the MES

Statement	I do not believe I could do this very well.		I could probably do this if I had to, but it would be difficult for me.		I believe I could do this reasonably well, if I had time to prepare.		I am quite confident that this would be easy for me to do.	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
15. I can provide instructional activities to help students to develop strategies for dealing with racial confrontations.	0%	0%	38.9%	11.1%	55.6%	66.7%	5.6%	22.2%
16. I can adapt instructional methods to meet the needs of learners from diverse groups.	0%	0%	11.1%	0%	50%	38.9%	38.9%	61.1%
17. I can develop materials appropriate for the multicultural classroom.	0%	0%	16.7%	0%	50%	50%	33.3%	50%
18. I can develop instructional methods that dispel myths about diverse groups.	5.6%	0%	16.7%	11.1%	66.7%	44.4%	11.1%	44.4%

19. I can analyze instructional materials for potential stereotypical and/or prejudicial content.	5.6%	0%	0%	11.1%	66.7%	38.9%	27.8%	50%
20. I can help students to examine their own prejudices.	0%	0%	22.2%	5.6%	38.9%	61.1%	38.9%	33.3%
21. I can present diverse groups in our society in a manner that will build mutual respect.	0%	0%	16.7%	5.6%	22.2%	44.4%	61.1%	50%
22. I can develop activities that increase the self-confidence of diverse students.	5.6%	0%	5.6%	11.1%	38.9%	33.3%	50%	55.6%
23. I can provide instruction showing how prejudice affects individuals.	5.6%	0%	16.7%	0%	61.1%	72.2%	16.7%	27.8%
24. I can plan instructional activities to reduce prejudice toward diverse groups.	5.6%	0%	22.2%	5.6%	50%	66.7%	22.2%	27.8%
25. I can identify cultural bias in commercial materials used in teaching.	5.6%	5.6%	22.2%	5.6%	61.1%	55.6%	11.1%	33.3%
26. I can help students work through problem situations caused by stereotypical and/or prejudicial attitudes.	5.6%	0%	11.1%	16.7%	38.9%	50%	44.4%	33.3%
27. I can get students from diverse groups to work together.	5.6%	0%	5.6%	0%	38.9%	33.3%	50%	66.7%
28. I can identify school practices that may harm diverse students.	5.6%	0%	0%	0%	50%	50%	44.4%	50%
29. I can identify solutions to problems that may arise as the result of diversity.	5.6%	0%	16.7%	5.6%	33.3%	66.7%	44.4%	27.8%
30. I can identify the societal forces which influence opportunities for diverse people.	5.6%	0%	16.7%	22.2%	61.1%	27.8%	16.7%	50%

31. I can identify ways in which various groups contribute to our pluralistic society.	5.6%	5.6%	22.2%	16.7%	38.9%	44.4%	33.3%	33.3%
32. I can help students take on the perspective of ethnic and cultural groups different from their own.	5.6%	0%	16.7%	11.1%	50%	44.4%	27.8%	44.4%
33. I can help students view history and current events from diverse populations.	5.6%	0%	5.6%	5.6%	61.1%	22.2%	27.8%	72.2%
34. I can involve students in making decisions and clarifying their values regarding multicultural issues.	5.6%	0%	22.2%	5.6%	44.4%	44.4%	27.8%	50%

Multicultural Teaching Perspective

The final item on the MES asks participants to choose a position that most closely reflects their strongest beliefs about multicultural teaching. This item is intended only to categorize participants according to their identified beliefs where the lowest level of multiculturalism is *Tolerance* and the highest is *Advocacy*. At the beginning of the course under investigation almost half (44.5%) of the participants chose items corresponding to the lowest three levels of multicultural views and slightly over half chose items corresponding to the highest two levels of multicultural views (55.5%). At the conclusion of the course, second survey administration results indicated that 27.9% aligned with the lowest three levels of multiculturalism while the remaining 72.2% aligned with the highest two ratings. The percentage of participants aligned with the highest level, *Advocacy*, did not change from pre- to post-administration and was chosen by 11.1% (n=2) of the participants during both. See Table 21 for response percentages and corresponding category of view on multicultural teaching

Table 21

Response Percentages for MES Multicultural Teaching Beliefs and Corresponding Ratings

Belief Statement	Pre	Post	Corresponding Rating
A. If every individual learned to accept and work with every other person, then there would be no intercultural problems.	27.8%	16.7%	Tolerance View
B. If all groups could be helped to contribute to the general good and not seek special recognition, we would create a unified America.	5.6%	5.6%	Assimilation View
C. All cultural groups are entitled to maintain their own identity.	11.1%	5.6%	Pluralism View
D. All cultural groups should be recognized for their strengths and contributions.	44.4%	61.1%	Multiculturalism View
E. Some groups need to be helped to achieve equal treatment before we can reach the goals of a democratic society	11.1%	11.1%	Advocacy View

MES Subscale Results

Subscale scores were determined by converting individual item responses to numerical values and then determining the sum of all items within each subsection (Guyton & Wesche, 2005). For Subscale A and Subscale C, numerical values were assigned as A = 1 point, B = 2 points, C = 3 points, and D = 4 points. For Subscale B, numerical values were assigned as A = 4 points, B = 3 points, C = 2 points, D = 1 point. Scores of 1 or 2 are considered low scores, a score of 3 is considered average, and 4 is considered a high score. The researcher coded the responses with these numerical values and calculated summed scores using SPSS. Subscale A (Experiences) is only to be used for comparative purposes, but it shares the following score range with Subscale B (Beliefs): 0-15 points (low), 16-24 points (average), 25-28 points (very positive). Subscale C utilizes the score range: 0-54 points (low), 55-66 points (average), and 67-

80 points (high). Tables 22 and 23 provide information on Subscale scores during both survey administrations.

Table 22

MES Subscale Mean Score Results

Subscale/Survey Administration	Minimum		Maximum		Mean	
	Pre	Post	Pre	Post	Pre	Post
Subscale A- Experiences with Diversity (7 items)	16	14	26	28	21.22	20.72
Subscale B- Beliefs about teaching diverse learners (7 items)	19	21	25	25	22.22	22.67
Subscale C – Multicultural teaching efficacy (20 items)	27	54	78	78	61.61	67.11

Table 23

MES Subscale Score Ranges

	"Low"		"Average"		"High"/ "Very Positive"	
	Pre	Post	Pre	Post	Pre	Post
Subscale A- Experiences with Diversity	0%	5.6% (n=1)	83.3% (n=15)	77.7% (n=14)	16.7% (n=3)	16.7% (n=3)
Subscale B- Beliefs about teaching diverse learners	0%	0%	94.4% (n=17)	94.4% (n=17)	.06% (n=1)	.06% (n=1)
Subscale C – Multicultural teaching efficacy	16.7% (n=3)	5.6% (n=1)	39% (n=7)	33.3% (n=6)	44.4% (n=8)	61.1% (n=11)

Social Desirability

The MCSD was administered at both pre- and post-test survey administrations. This instrument was administered to account for social desirability when interpreting the results of the study. Responses to individual items are assigned a numerical value (e.g., 0 or 1). Then, a sum is calculated for all item responses. Score ranges for the instrument are: low (0-8), average (9-19), or high (20-33). Low scores indicate less concern with responding in a socially desirable way, average scores indicate average concern, and high scores indicate an elevated concern with responding in a socially desirable way. The researcher coded the responses with these numerical values and calculated summed scores using SPSS. Percentage of item responses are displayed in Table 24. Table 25 displays total scores for the MCSD and their corresponding categories of concern. These scores indicate that 33.3% (n=6) of participants displayed high social desirability during the time of the pre-test and 16.7% (n=3) displayed high social desirability during the time of the post-test.

Table 24

Response Percentages for Individual Items on the MCSD

Statement	True		False	
	Pre	Post	Pre	Post
1. Before voting I thoroughly investigate the qualifications of all the candidates.	66.7%*	66.7%*	33.3%	33.3%
2. I never hesitate to go out of my way to help someone in trouble.	66.7%*	72.2%*	33.3%	27.8%
3. It is sometimes hard for me to go on with my work if I am not encouraged.	38.9%	50%	61.1%*	50%*
4. I have never intensely disliked someone.	22.2%*	22.2%*	77.8%	77.8%

5. On occasion I have had doubts about my ability to succeed in life.	61.1%	72.2%	38.9%*	27.8%*
6. I sometimes feel resentful when I don't get my way.	61.1%	66.7%	38.9%*	33.3%*
7. I am always careful about my manner of dress.	88.9%*	72.2%*	11.1%	27.8%
8. My table manners at home are as good as when I eat out in a restaurant.	66.7%*	66.7%*	33.3%	33.3%
9. If I could get into a movie without paying and be sure I was not seen I would probably do it.	5.6%	16.7%	94.4%*	83.3%*
10. On a few occasions, I have given up doing something because I thought too little of my ability.	72.2%	83.3%	27.8%*	16.7%*
11. I like to gossip at times.	72.2%	88.9%	27.8%*	11.1%*
12. There have been times when I felt like rebelling against people in authority even though I knew they were right.	50%	66.7%	50%*	33.3%*
13. No matter who I'm talking to, I'm always a good listener.	83.3%*	83.3%*	16.7%	16.7%
14. I can remember "playing sick" to get out of something.	83.3%	61.1%	16.7%*	38.9%*
15. There have been occasions when I took advantage of someone.	16.7%	55.6%	83.3%*	44.4%*
16. I'm always willing to admit it when I make a mistake.	38.9%*	44.4%*	61.1%	55.6%
17. I always try to practice what I preach.	88.9%*	100%*	11.1%	0%
18. I don't find it particularly difficult to get along with loud mouthed, obnoxious people.	55.6%*	50%*	44.4%	50%

19. I sometimes try to get even rather than forgive and forget.	16.7%	16.7%	83.3%*	83.3%*
20. When I don't know something, I don't at all mind admitting it.	94.4%*	66.7%*	5.6%	33.3%
21. I am always courteous, even to people who are disagreeable.	72.2%*	66.7%*	27.8%	33.3%
22. At times I have really insisted on having things my own way.	72.2%	77.8%	27.8%*	22.2%*
23. There have been occasions when I felt like smashing things.	55.6%	61.1%	44.4%*	38.9%*
24. I would never think of letting someone else be punished for my wrong-doings.	77.8%*	88.9%*	22.2%	11.1%
25. I never resent being asked to return a favor.	83.3%*	61.1%*	16.7%	38.9%
26. I have never been irked when people expressed ideas very different from my own.	33.3%*	22.2%*	66.7%	77.8%
27. I never make a long trip without checking the safety of my car.	27.8%*	22.2%*	72.2%	77.8%
28. There have been times when I was quite jealous of the good fortune of others.	77.8%	83.3%	22.2%*	16.7%*
29. I have almost never felt the urge to tell someone off.	16.7%*	11.1%*	83.3%	88.9%
30. I am sometimes irritated by people who ask favors of me.	38.9%	44.4%	61.1%*	55.6%*
31. I have never felt that I was punished without cause.	22.2%*	33.3%*	77.8%	66.7%
32. I sometimes think when people have a misfortune, they only got what they deserved.	22.2%	33.3%	77.8%*	66.7%*

33. I have never deliberately said something that hurt someone's feelings.	11.1%*	11.1%*	88.9%	88.9%

Note. Responses marked with * received a numerical value of 1 indicating a socially desirable response when calculating total score.

Table 25
MCSD Total Score Mean Score Results and Ranges

	Pre	Post
Scores		
Minimum	8	6
Maximum	28	25
Mean	17.72	15.83
Ranges		
Low	5.6% (n=1)	11.1% (n=2)
Average	61.1% (n=11)	72.2% (n=13)
High	33.3% (n=6)	16.7% (n=3)

Note. Data from participants with high scores should be interpreted with caution.

Research Questions

Research Question One

*To what extent does participation in a required course designed to address diversity-related standards impact change in the **attitudes** of special education candidates towards teaching learners who are diverse (e.g., ethnicity, race, geographical origin, language, religion, socioeconomic status, gender, sexual identification)?*

In order to address research question one and determine if significant differences were found, a paired-sample t-test using an alpha level of .05 was conducted to compare total scores on Subscale B (beliefs about teaching learners who are diverse) at the beginning of the semester in which the course was taken and at the end (n=18). There was not a statistically significant

difference in the pre-test (M =22.2, SD =1.517) and post-test (M = 22.67, SD = 1.188) scores; $t(17)$=-9.84, p=.339, *ns*; d_z = .23. Therefore, the researcher retained the null hypothesis that there was no statistically significant difference in attitudes of special education candidates towards teaching learners who are diverse resulting from completing this course. Further, Cohen's effect size value suggested low practical significance (Cohen, 1998). In an effort to increase confidence in the findings due to concerns regarding power, a non-parametric Wilcoxon Signed Rank Test was also conducted to enhance interpretation of the findings. The Wilcoxon Signed Rank Test also indicated that no statistically significant differences existed in pre- and post-test scores; Z=52, p = .303.

Research Question Two

To what extent does participation in a required course designed to address diversity-related standards impact change in the ***self-efficacy*** *of special education candidates towards teaching learners who are diverse (e.g., ethnicity, race, geographical origin, language, religion, socioeconomic status, gender, sexual identification)?*

In order to address research question two and determine if significant differences were found, a paired-sample t-test using an alpha level of .05 was conducted to compare total scores on Subscale C (multicultural efficacy) at the beginning of the semester in which the course was taken and at the end (n=18). Results indicated that a statistically significant difference did exist between the pre-test (M =61.61, SD =11.693) and post-test (M = 67.11, SD = 7.545) scores; $t(17)$=-2.35, p=.031; d_z = .55. Therefore, the researcher rejected the null hypotheses that there was no statistically significant difference in multicultural efficacy of special education candidates towards teaching learners who are diverse as a result of completing this course. Further, Cohen's effect size value suggested moderate practical significance (Cohen, 1998). In

an effort to increase confidence in the findings due to concerns regarding power, a non-parametric Wilcoxon Signed Rank Test was also conducted in order to enhance interpretation of the findings. The Wilcoxon Signed Rank Test also indicated that a statistically significant difference in pre- and post-test scores was reached; Z=108, p = .038.

Summary

This study addressed two research questions to determine if completing a course that contained standards related to diverse learners had any effect on participant beliefs about teaching learners who are diverse or on participant self-efficacy regarding teaching learners who are diverse. This chapter presented results from participant demographic responses; MES Subscales A, B, and C; MES responses to item 35 regarding beliefs about teaching diverse learners; and the MCSD.

Paired sample t-tests were conducted for MES Subscales B and C to address the two research questions. Based on the results of this study, completing the course under investigation did not result in statistically significant differences in participants' beliefs about learners who are diverse, but it did result in statistically significant differences in participants' self-efficacy regarding teaching learners who are diverse. In addition to paired sample t-tests, a non-parametric analysis was conducted using the Wilcoxon Signed Rank Test. Results from the Wilcoxon Signed Rank Test support the results from both of the paired sample t-tests. Chapter V presents discussion of the results of this study.

CHAPTER V. DISCUSSION

The purpose of this study was to investigate changes in educator candidate attitudes and self-efficacy regarding learners who are diverse following completion of a course that included standards related to diverse learners. Information about previous experiences with diverse groups was collected and used for comparative purposes. Data regarding participant inclinations towards producing socially desirable responses was also collected. This chapter includes interpretation of the findings from the data collected using the MES and MCSD.

The study addressed the following research questions:

1. To what extent does participation in a required course designed to address diversity-related standards impact change in the *attitudes* of special education candidates towards teaching learners who are diverse (e.g., ethnicity, race, geographical origin, language, religion, socioeconomic status, gender, sexual identification)?
2. To what extent does participation in a required course designed to address diversity-related standards impact change in the *self-efficacy* of special education candidates towards teaching learners who are diverse (e.g., ethnicity, race, geographical origin, language, religion, socioeconomic status, gender, sexual identification)?

Discussion of Findings

Summary of Findings

Research Question 1 - Attitudes. The paired sample t-test analysis results did not indicate a statistically significant difference in participant attitudes towards teaching learners who are diverse after completing a course designed to include standards regarding diverse learners; $t(17)=-9.84$, $p=.339$, *ns*; $d_z = .23$. Wilcoxon Signed Rank Tests supported this finding; $Z=52$, $p = .303$.

Research Question 2 – Self-efficacy. The paired sample t-test analysis results did indicate a statistically significant difference was achieved in participant attitudes towards teaching learners who are diverse after completing a course designed to include standards regarding diverse learners, although only a moderate effect size was obtained; $t(17)=-2.35$, $p=.031$; $d_z = .55$. Wilcoxon Signed Rank Tests supported this finding; $Z=108$, $p = .038$.

Interpretation of Findings

Research Question 1 - Attitudes. The results of this study indicated that no changes in attitudes or beliefs about teaching diverse learners occurred as a result of taking the semester-long course under investigation. While considering the implications of these findings, it is important to note that this subscale had the most variable reliability estimate when tested by multiple researchers. However, the finding from this study is consistent with disposition research reporting that attitudes and beliefs do not change quickly or as a result of one event (Johnson & Reiman, 2007; Kidd, et al., 2007). In fact, being receptive to unfamiliar or uncomfortable content likely depends on several factors (e.g., past experiences, new experiences, social groups, openness, current level of development in the content area) (Garmon, 2005; McHatton et al., 2013). However, some research indicates that positive changes in attitudes and beliefs towards culturally diverse learners as demonstrated through teaching practices does occur for a large number of pre-service candidates (Kumar & Hamer, 2012).

Another factor impacting the lack of change in attitudes in this study could be that 94.4% of participants began the semester with "average" ratings on beliefs as reported on the MES as opposed to "low" or "high" scores. The remaining 5.6% (n=1) earned a "high" score. Pre-test scores ranged from 19-25 (M=22.2) while post-test scores ranged from 21-25 (M= 22.67). All participants scored at the top of the "average" range with the maximum score of 25 being the

very start of the "high" range. This might suggest that participants' already held attitudes and beliefs consistent with course objectives prior to taking the course. Another explanation could be that the participants, being educator candidates, could have responded the way they thought they should instead of how they actually felt (i.e., socially desirable responses). For example, item 36 on the combined instrument used for this study asked participants to share other experiences that may have impacted their views on diversity or diverse learners. Some of the responses do not seem to fit with responses expected of individuals with average to high scores on Subscale A of the MES (e.g., "I notice that the same group of diverse people stick together"; "The high school I attended was 99% white and less than 1% African American. I think this has made me unequipped to work with diverse settings"; "Played a sport in an area and with people different from me. Taught me there is a big difference in culture close by"). Although scores from pre- and post-test measures produced different results, the MCSD data suggest that anywhere from 16.7% (n=3) to 33.3% (n=6) had a high inclination to provide socially desirable responses.

Additionally, these participants were all preparing to be special educators and chose to work with learners who have disabilities who are also considered "different" from the majority population. Participant attitudes about learners from other diverse backgrounds could be related to their choice to work with learners with disabilities. The fact that these participants were all special education candidates could also have influenced the way they interpret statements regarding diverse learners. Although the instructions for this section of the MES provided definitions of "diverse" and "people different from me" to include people of different races, ethnic groups, cultures, religions, socio-economic classes, sexual orientations, and physical abilities, the statements themselves did not differentiate (e.g., "I went to school with diverse students as a teenager") (Guyton & Wesche, 2005).

Another explanation for pre-test beliefs consistently being in the "average" range could be that participants had already been exposed to diversity-related content or experiences. Participant demographic and background self-reported information indicated that 100% of participants had experiences with people who were diverse through clubs, religious organizations, or athletics in their childhood. The percentage of participants engaged in activities with people who are diverse dropped significantly for college experiences to approximately 80%. In addition, 76% of the 17 undergraduates (n=13) had already taken a course required by their College of Education that centered around diversity of learners and included a service-learning component. The remaining 24% were taking that diversity course concurrently with the course under investigation. These previous and concurrent events and experiences could have impacted participant attitudes and beliefs prior to or during the course.

Current recommended practices include infusing disposition development and instruction on multicultural teaching throughout programs using a variety of well-planned experiences (Lynn & Smith-Maddox, 2007; Mills, 2012, 2013; Mills & Ballantyne, 2010; Morrison, 2014; Robertson et al., 2017; Villegas, 2007). An additional suggestion is to understand educator candidates' cultural worldview and dispositions towards diverse learners prior to beginning instruction and design instruction that begins by meeting them where they are and making changes as necessary to help them make forward progress (McHatton et al., 2013).

Research Question 2 – Self-efficacy. The results of this study indicated that statistically significant changes in self-efficacy about teaching diverse learners did occur as a result of taking the semester-long course under investigation. Pre-test scores ranged from 27-78 (M=61.6) while post-test scores ranged from 54-78 (M= 67.1). At the beginning of the semester, self-efficacy reported by 16.7% (n=3) participants fell into the "low" range, 39% (n=7) fell into the "average"

range, and 44.4% (n=8) fell into the "high" range. Post-test scores revealed 5.6% (n=1) identified in the low range, 33.3% in the "average" range, and 61.1% in the "high" range. While this increase in self-efficacy may have been an intended outcome of the course, it cannot be attributed to the course alone.

Several of the possible explanations for research question one also apply to research question two. Participants' desire to teach learners with disabilities could have influenced their responses. The majority of the items were general and did not mention specific "types" of diversity. Participants may have responded thinking primarily about individuals with disabilities as diversity when selecting their responses. In addition, participants may have provided socially desirable responses. After completing this course and the other college required diversity course, participants may have felt like they should be able to perform the tasks described in the items.

Additionally, participants were all White, heterosexual females aged 19-23 who came from two parent homes. Approximately 88% of participants had at least one parent earn a bachelor's degree, and approximately 90% came from self-reported upper middle- or upper-class backgrounds. These background characteristics could impact participant definition or perspective of diversity when interpreting and responding to items. Another possible explanation for these results is that this was a self-report and not observed through practice. Demographic data suggested that participants were in the early stages of their educator candidate programs. Therefore, participants might have indicated higher self-efficacy than efficacy measured through observation would reveal as they had not had opportunities to perform the tasks and may not have understood what the tasks would entail. A study comparing observed and self-reported culturally proficient teaching practices in the schools supports this finding. Study results revealed

that respondents scored higher on self-report than they did through observational measures (Debnam, Pas, Bottiani, Cash, & Bradshaw, 2015).

Other Findings. Although not intended, an interesting finding resulted from the inclusion of demographic data, Subscale A of the MES regarding past experiences, and the MCSD for pre- and post-test. All of these components requested information that should not change from pre- to post-test, but data revealed differences in all three of these components across administrations. At the time of data analysis, the researcher thought that an improvement to the study would be to limit the inclusion of these items to either pre- or post-test as requesting the information twice increased participation time for respondents and the inconsistent responses made analysis and interpretation more difficult.

After further consideration, the researcher identifies this variation in responses as a useful finding. Self-report research lends itself to concerns regarding reliability and validity. In addition to concerns related to social desirability, participant memory or accuracy of responses could also impact study results and interpretation. Reponses in the following categories were not identical for participants from pre- to post-test: father's education, mother's education, approximate socio-economic status, childhood and current experiences, and items related to social desirability. Examining only pre-test responses or only post-test responses could lead a researcher to draw inaccurate conclusions. This finding supports the need to use multiple measures and multiple methods of inquiry when attempting to answer research questions.

Another interesting finding pertains to the item intended to categorize participants by their view on multicultural teaching. When asked to choose a statement that corresponded with a belief statement about perspectives of multicultural teaching, a little over half of the participants (55%) chose statements assigned to the two highest levels of views on multicultural teaching

(e.g., multiculturalism view and advocacy view) at pre-test and 72.2% chose statements assigned to these two levels at post-test. This item was included in the scale as a means of categorizing cases when interpreting results. Due to the small sample, this was not possible to do in a statistically sound manner.

Limitations

This study was designed to evaluate a specific course and its contribution to specific program objectives. This was a purposeful, general approach for a first study and results were not intended to generalize to a larger population. Even after considering the overall purpose of the study, notable limitations exist. First, this study contained a very small sample (n=18). Part of this is due to the nature of the research questions. This study was specifically examining pre-service teachers majoring in special education. It is well-documented that there is a shortage of special education teachers across the nation and that there is a critical need to produce more (DE, 2020). However, despite that need, enrollment in special education certification programs remains low and is even declining (West & Shepherd, 2016). At this particular institution, special education majors seeking initial certification represented only 5% of the entire population of education majors at the time of the study. In addition, all of the participants in this study were White, heterosexual, females who came from two-parent homes and reported being from upper-middle to upper-class homes. Demographic data from the College of Education at this institution (2019) revealed that this was consistent with overall representation in terms of ethnicity and gender. Data on sexual orientation and family characteristics were not available.

Another limitation to this study was the number of survey administrations. This study was conducted during two of three semesters in one academic year. These were the only two semesters the course was offered that year. Both courses were taught by the same instructor.

Conducting the study over multiple years would produce a larger sample and could increase the diversity of the participants. Yet, being that the purpose of this study was to evaluate a course to provide information regarding program design, conducting the study over several years would delay the program's ability to make needed changes in order to prepare effective special education teachers who demonstrated attitudes and beliefs and efficacy in working with learners who are diverse. An additional limitation is that the two semesters the course was offered were not identical in terms of length of course or content delivery. The first administration took place during a 5-week mini-semester, whereas the second administration occurred during a 15-week regular semester. The pacing of the class overall and the length of individual classes could have impacted participant attention, attitude, and involvement with the course material.

As mentioned previously, social desirability could have impacted participant responses and the results of this study. The use of self-report surveys could reduce the usefulness of the findings due to inaccuracy of responses attributed to social desirability inclinations or lack of understanding of the directions, statements, or own personal history. Additionally, the small sample size did not permit comparison of total subscale scores with previous experiences as a child, growing up, or with other required courses or field experiences. A study with a larger sample could lend itself to better understanding of how these factors impact attitudes and self-efficacy regarding learners who are diverse.

Implications and Recommendations for Future Research

Although these initial findings appear to indicate that participation in this course produces a positive effect on self-efficacy of pre-service teachers, it is important to investigate further. A comparison of objectives from this course and the other required diversity courses could reveal overlap or gaps in programming for special education majors. Investigating attitudes

and self-efficacy at several points in the program could also provide information about which program components yield positive results regarding program objectives.

A longitudinal design could include a mixed-method investigation into pre-service special education teacher attitudes and beliefs using multiple measures. Possible components could include a measure designed to report self-awareness and bias, level of cultural sensitivity, attitudes and beliefs, and self-efficacy that are implemented throughout the program in both coursework and field experiences. This could yield data that indicates the extent to which the overall program is meeting objectives as well as information about objectives that might need further attention. The use of multiple measures and the examination of multicultural attitudes and self-efficacy over time is consistent with other recommendations in the research (Dall'Alba & Sandberg, 2006; Diez, 2007; Florian, 2012; Guyton & Wesche, 2005; Kidd et al., 2007; Robertson et al., 2017; Robinson, 2017; Robinson & West, 2012; Ukpokodu, 2011; Villegas, 2007).

Finally, the purpose of this study was to investigate special education candidate attitudes and self-efficacy regarding learners who represent diversity other than disability. There is a noticeable gap in the literature on the intersectionality of disability and other types of diversity (Artiles, 2013; Blanchett et al., 2009; Garcia & Ortiz, 2013; Hernández-Saca et al., 2018, Robertson et al., 2017; Trent et al., 2008). Given that special educators are primarily White, monolinguistic, females and that there is still over-representation of other diverse learners in special education, it is imperative that special education teachers possess the dispositions and skills necessary to provide equitable and effective instruction (Elik et al., 2010; McHatton & McCray, 2013, Palardy & Rumberger, 2008; Stronge et al., 2011; Vázquez-Montilla et al., 2014; Villegas, 2007). Educator candidates do not independently come equipped with the attitudes and

efficacy to promote social justice in classrooms; therefore, it is essential that educator preparation programs embed teaching for social justice throughout their programs (Silverman, 2009).

Conclusion

This study served as an initial investigation into one specific course in one special education candidate preparation program intended to address objectives related to diverse learners. While the results obtained from this study appear to be consistent with research on dispositions and also appear to be positive regarding the course's impact on self-efficacy in teaching learners who are diverse, there are limitations that must be considered when interpreting the results.

Further study into the design of this program should investigate the entire program instead of limiting investigation into one course. Additionally, multiple measures utilizing both quantitative and qualitative methods could produce more reliable findings and more detailed information about pre-service teacher attributes, dispositions, skills, and needs throughout the program. These findings could better inform programmatic changes.

Last, the field of special education is lacking in regard to research on the intersectionality of disability and diversity. Due to the fact that self-contained special education educator preparation programs are notoriously small, meeting this need would require longitudinal studies and/or collaboration across programs. This need is shared in the field of education as a whole as we strive to prepare teachers who teach for social justice (Mills & Ballantyne, 2016).

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APPENDIX A: MULTICULTURAL EFFICACY SCALE

Appendix A

MULTICULTURAL EFFICACY SCALE
(Guyton & Wesche, 2005)

DIRECTIONS:

Step 1: Demographic Information

Fill out the demographic information on the sheets provided. This information is necessary to the research study and will be kept strictly confidential. However, if you are uncomfortable answering any of the questions, you may leave them blank.

TO THE RESPONDER: The demographic information requested below is necessary for the research process. Please be assured that this information and all of your responses on this instrument will be kept **strictly confidential**. Data will be reported in such a way that identification of individuals will be impossible. Your code name allows this information to be compared with your responses at a later time while not revealing your identity.

Code Name:
On the line below, please provide a code name that contains the first three letters of your mother's maiden name followed by the first three letters of your current street address.
Example: mother's maiden name: Green, street name: College = Code name: GRECOL

Code Name-_____ Age: _____

Anticipated Grade in Course (for second survey administration only): Circle one:

A B C D F

Other Courses
Please check whether you have previously taken, are currently taking, or plan to take the following courses in the future:

Previously taken:	Currently taking:	Plan to take in future:
□ FOUN 3000	□ FOUN 3000	□ FOUN 3000
□ RSED 4910 – practicum	□ RSED 4910 - practicum	□ RSED 4910 – practicum
□ neither	□ neither	□ neither

Gender Identity (e.g., man, woman, gender fluid, transgender man or woman) (Please describe):

_____

Current Major:
□ Collaborative special education – Undergraduate program
□ Early childhood/elementary special education – Undergraduate program
□ Collaborative special education – Master's program
□ Early childhood/elementary special education – Graduate program

Birthplace: City _____ State/Province _____ Country_____

"Hometown" (where you spent the majority of your childhood years):

City _____ State/Province _____ Country_____

Racial/Ethnic Background:

□ American Indian or Alaska Native	□ Black or African American	□ Native Hawaiian or Other Pacific Islander
□ Asian	□ Hispanic or Latino	□ White

Religious/Spiritual Identity: (Please describe) _____

Sexual Orientation (e.g., hetero-, homo-, pan-sexual): (Please describe) _____

Parents' Education (Highest Degree/Diploma):

Father:	Mother:
□ Did not graduate high school	□ Did not graduate high school
□ High school diploma	□ High school diploma
□ College, bachelor's degree	□ College, bachelor's degree
□ College, master's degree	□ College, master's degree
□ College, specialist degree	□ College, specialist degree
□ College, doctorate degree	□ College, doctorate degree
□ Don't know	□ Don't know

Approximate Socio-Economic Status (Please check one in each column):

As a child/dependent	As an adult (current) **IF** living independently	Corresponding Household Annual Income
□ Lower	□ Lower	$0 - $19,999
□ Lower Middle	□ Lower Middle	$20,000 - $39,999
□ Middle	□ Middle	$40,000 - $59,999
□ Upper Middle	□ Upper Middle	$60,000 – $79,999
□ Upper	□ Upper	$80,000+
□ Don't Know	□ Not Applicable	

Past experiences (Please check all that apply in each column) (Strickland, 2018):
Mark any of your social, athletic, religious, and educational experiences that have involved diverse groups:

As a child	As a college student
□ Clubs □ Athletic teams □ Religious organizations □ Other: Please describe:	□ Clubs □ Athletic teams □ Religious organizations □ Other: Please describe:

Step 2: Item and Response selection
Please select the response that best describes you by filling in the letter of your answer choice on the provided blank for each item.

SECTION A
Definition: The authors intend the terms "diversity" and "people different from me" to include people of different races, ethnic groups, cultures, religions, socio-economic classes, sexual orientations, and physical abilities.

Directions: Please choose the word that best describes your experiences with people different from you and record the corresponding answer choice in the blank.

Key:
A) never B) rarely C) occasionally D) frequently

1) _____As a child, I played with people different from me.
2) _____I went to school with diverse students as a teenager.
3) _____Diverse people lived in my neighborhood when I was a child growing up.
4) _____In the past, I chose to read books about people different from me.
5) _____A diverse person was one of my role models when I was younger.
6) _____In the past, I chose to watch TV shows and movies about people different from me.
7) _____As a teenager, I was on the same team and/or club with diverse students.

SECTION B

Directions: Respond to each statement by choosing one answer that best describes your reaction to it. Since we are simply trying to get an accurate sense of your opinions on these matters, there are no right or wrong answers.

Key:
A) agree strongly B) agree somewhat C) disagree somewhat D) disagree strongly

8) _____Teachers should adapt lesson plans to reflect the different cultures represented in the classroom.

9) _____Teachers should provide opportunities for children to share cultural differences in foods, dress, family life, and beliefs.

10) _____Discussing ethnic tradition and beliefs in schools leads to disunity and arguments between students from different cultures.

11) _____Children should be taught mostly by teachers of their own ethnic and cultural background.

12) _____It is essential to include the perspectives of diverse groups while teaching things about American history that are common to all Americans.

13) _____Curricula and textbooks should include the contributions of most, if not all, cultural groups in our society.

14) _____The classroom library should reflect the racial and cultural differences in the class.

SECTION C

Directions: To the best of your knowledge, self-assess your own ability to do the various items listed below. Write your answer choice on the line next to each item.

Key:

A) I do not believe I could do this very well.
B) I could probably do this if I had to, but it would be difficult for me.
C) I believe I could do this reasonably well, if I had time to prepare.
D) I am quite confident that this would be easy for me to do.

15) _____I can provide instructional activities to help students to develop strategies for dealing with racial confrontations.
16) _____I can adapt instructional methods to meet the needs of learners from diverse groups.
17) _____I can develop materials appropriate for the multicultural classroom.
18) _____I can develop instructional methods that dispel myths about diverse groups.
19) _____I can analyze instructional materials for potential stereotypical and/or prejudicial content.
20) _____I can help students to examine their own prejudices.
21) _____I can present diverse groups in our society in a manner that will build mutual respect.
22) _____I can develop activities that increase the self-confidence of diverse students.
23) _____I can provide instruction showing how prejudice affects individuals.
24) _____I can plan instructional activities to reduce prejudice toward diverse groups.
25) _____I can identify cultural bias in commercial materials used in teaching.
26) _____I can help students work through problem situations caused by stereotypical and/or prejudicial attitudes.
27) _____I can get students from diverse groups to work together.
28) _____I can identify school practices that may harm diverse students.
29) _____I can identify solutions to problems that may arise as the result of diversity.
30) _____I can identify the societal forces which influence opportunities for diverse people.
31) _____I can identify ways in which various groups contribute to our pluralistic society.
32) _____I can help students take on the perspective of ethnic and cultural groups different from their own.

Key:

A) I do not believe I could do this very well.
B) I could probably do this if I had to, but it would be difficult for me.
C) I believe I could do this reasonably well, if I had time to prepare.
D) I am quite confident that this would be easy for me to do.

33) _____I can help students view history and current events from diverse populations.

34) _____I can involve students in making decisions and clarifying their values regarding multicultural issues.

Note: the following items are different from the others on this page.

35) _____Choose the position which most closely reflects your strongest beliefs about teaching. Write your answer choice on the line above.

A) If every individual learned to accept and work with every other person, then there would be no intercultural problems.
B) If all groups could be helped to contribute to the general good and not seek special recognition, we could create a unified America.
C) All cultural groups are entitled to maintain their own identity.
D) All cultural groups should be recognized for their strengths and contributions.
E) Some groups need to be helped to achieve equal treatment before we can reach the goals of a democratic society.

F) Please share any other experiences that may have impacted your views on diversity or diverse learners.

_____

_____

_____

_____

_____

APPENDIX B: MARLOWE-CROWNE SOCIAL DESIRABILITY SCALE

Appendix B

Marlowe-Crowne Social Desirability Scale
(Crowne & Marlowe, 1960)

DIRECTIONS:
Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is TRUE or FALSE as it pertains to you personally. Circle the corresponding answer choice.

1. Before voting I thoroughly investigate the qualifications of all the candidates.

   TRUE FALSE

2. I never hesitate to go out of my way to help someone in trouble.

   TRUE FALSE

3. It is sometimes hard for me to go on with my work if I am not encouraged.

   TRUE FALSE

4. I have never intensely disliked someone.

   TRUE FALSE

5. On occasion I have had doubts about my ability to succeed in life.

   TRUE FALSE

6. I sometimes feel resentful when I don't get my way.

   TRUE FALSE

7. I am always careful about my manner of dress.

   TRUE FALSE

8. My table manners at home are as good as when I eat out in a restaurant.

   TRUE FALSE

9. If I could get into a movie without paying and be sure I was not seen I would probably do it.

   TRUE FALSE

10. On a few occasions, I have given up doing something because I thought too little of my ability.

TRUE FALSE

11. I like to gossip at times.

TRUE FALSE

12. There have been times when I felt like rebelling against people in authority even though I knew they were right.

TRUE FALSE

13. No matter who I'm talking to, I'm always a good listener.

TRUE FALSE

14. I can remember "playing sick" to get out of something.

TRUE FALSE

15. There have been occasions when I took advantage of someone.

TRUE FALSE

16. I'm always willing to admit it when I make a mistake.

TRUE FALSE

17. I always try to practice what I preach.

TRUE FALSE

18. I don't find it particularly difficult to get along with loud mouthed, obnoxious people.

TRUE FALSE

19. I sometimes try to get even rather than forgive and forget.

TRUE FALSE

20. When I don't know something, I don't at all mind admitting it.

TRUE FALSE

21. I am always courteous, even to people who are disagreeable.

TRUE FALSE

22. At times I have really insisted on having things my own way.

TRUE FALSE

23. There have been occasions when I felt like smashing things.

TRUE FALSE

24. I would never think of letting someone else be punished for my wrong-doings.

TRUE FALSE

25. I never resent being asked to return a favor.

TRUE FALSE

26. I have never been irked when people expressed ideas very different from my own.

TRUE FALSE

27. I never make a long trip without checking the safety of my car.

TRUE FALSE

28. There have been times when I was quite jealous of the good fortune of others.

TRUE FALSE

29. I have almost never felt the urge to tell someone off.

TRUE FALSE

30. I am sometimes irritated by people who ask favors of me.

TRUE FALSE

31. I have never felt that I was punished without cause.

TRUE FALSE

32. I sometimes think when people have a misfortune, they only got what they deserved.

TRUE FALSE

33. I have never deliberately said something that hurt someone's feelings.

TRUE FALSE

Please review your responses and make sure you have marked/provided an answer for all survey items. Your participation in this study is greatly appreciated.

APPENDIX C: IRB APPROVAL

Auburn University Human Research Protection Program

EXEMPTION REVIEW APPLICATION

For information or help completing this form, contact: **The OFFICE OF RESEARCH COMPLIANCE,**
Location: 115 Ramsay Hall **Phone:** 334-844-5966 **Email:** IRBAdmin@auburn.edu

Submit completed application and supporting material as one attachment to irbsubmit@auburn.edu.

1. PROJECT IDENTIFICATION **Date**

a. Project Title Special Educator Preparation: Are We Preparing Candidates who Possess the Dispositions to be Effective Educators for Diverse Learners?

b. Principal Investigator Kelly Brumbeloe Schweck Degree(s) B.S./M.Ed Special Education
Rank/Title Doctoral Candidate Department/School SERC
Phone Number 334 844-3588 AU Email brumbka@auburn.edu
Faculty Principal Investigator (required if PI is a student) Dr. Caroline Dunn
Title Full Professor Department/School SERC
Phone Number 334 844-2086 AU Email dunnca1@auburn.edu
Dept Head Dr. Jamie Carney Department/School SERC
Phone Number 334 844-7676 AU Email carnejs@auburn.edu

c. Project Personnel (other than PI) - Identify all individuals who will be involved with the conduct of the research and include their role on the project. Role may include design, recruitment, consent process, data collection, data analysis, and reporting). Attach a table if needed for additional personnel.

Personnel Name Alexcia Moore Degree(s) B.S./M.Ed Special Education
Rank/Title Doctoral Student Department/School SERC
Role recruitment, consent, data collection
AU affiliated? ■ YES ☐ NO If no, name of home institution
Plan for IRB approval for non-AU affiliated personnel?

Personnel Name Betty Schiffer Degree(s) B.S./M.Ed/PhD Special Edu
Rank/Title Director, EAGLES Department/School SERC
Role recruitment, consent, data collection
AU affiliated? ■ YES ☐ NO If no, name of home institution
Plan for IRB approval for non-AU affiliated personnel?

Personnel Name Degree(s)
Rank/Title Department/School
Role
AU affiliated? ☐ YES ☐ NO If no, name of home institution
Plan for IRB approval for non-AU affiliated personnel?

d. Training - Have all Key Personnel completed CITI human subjects training (including elective modules related to this research) within the last 3 years? ■ YES ☐ NO

e. Funding Source- Is this project funded by the investigator(s)? ■ YES ☐ NO
Is this project funded by AU? ☐ YES ■ NO If YES, identify source
Is this project funded by an external sponsor? ☐ YES ■ NO If YES, provide the name of the sponsor, type of sponsor (governmental, non-profit, corporate, other), and an identification number for the award.
Name Type Grant #

f. List other IRBs associated with this research and submit a copy of their approval and/or protocol.
n/a

2. Mark the category or categories below that describe the proposed research:

☑ 1. Research conducted in established or commonly accepted educational settings, involving normal educational practices. The research is not likely to adversely impact students' opportunity to learn or assessment of educators providing instruction. 104(d)(1)

☑ 2. Research only includes interactions involving educational tests, surveys, interviews, public observation if at least ONE of the following criteria. (The research includes data collection only; may include visual or auditory recording; may NOT include intervention and only includes interactions). **Mark the applicable sub-category below (i, ii, or iii).** 104(d)(2)

☑ (i) Recorded information cannot readily identify the participant (directly or indirectly/linked); **OR**

- surveys and interviews: no children;
- educational tests or observation of public behavior: can only include children when investigators do not participate in activities being observed.

☐ (ii) Any disclosures of responses outside would not reasonably place participant at risk; **OR**

☐ (iii) Information is recorded with identifiers or code linked to identifiers and IRB conducts limited review; no children. **Requires limited review by the IRB.***

☐ 3. Research involving Benign Behavioral Interventions (BBI)** through verbal, written responses (including data entry or audiovisual recording) from adult subjects who prospectively agree and ONE of the following criteria is met. (This research does not include children and does not include medical interventions) **Mark the applicable sub-category below (I, ii, or iii).** 104(d)(3)(i)

☐ (A) Recorded information cannot readily identify the subject (directly or indirectly/linked); **OR**

☐ (B) Any disclosure of responses outside of the research would not reasonably place subject at risk; **OR**

☐ (C) Information is recorded with identifiers and cannot have deception unless participant prospectively agrees. **Requires limited review by the IRB.***

☐ 4. Secondary research for which consent is not required: use of identifiable information or identifiable bio-specimen that have been or will be collected for some other 'primary' or 'initial' activity, if one of the following criteria is met. Allows retrospective and prospective secondary use. **Mark the applicable sub-category below (I, ii, iii, or iv).** 104(d)(4)

☐ (i) Biospecimens or information and must be publically available;

☐ (ii) Information recorded so subject cannot readily be identified, directly or indirectly/linked; investigator does not contact subjects and will not re-identify the subjects; **OR**

☐ (iii) Collection and analysis involving investigators use of identifiable health information when use is regulated by HIPAA "health care operations" or "research or "public health activities and purposes" (does not include biospecimens (only PHI and requires federal guidance on how to apply); **OR**

☐ (iv) Research information collected by or on behalf of federal government using government generated or collected information obtained for non-research activities.

☐ 5. Research and demonstration projects which are supported by a federal agency/department AND designed to study and which are designed to study, evaluate, or otherwise examine: (i) public benefit or service programs; (ii) procedures for obtaining benefits or services under those programs;(iii) possible changes in or alternatives to those programs or procedures; or (iv) possible changes in methods or levels of payment for benefits or services under those programs. (must be posted on a federal web site). 104(d)(5) (must be posted on a federal web site)

☐ 6. Taste and food quality evaluation and consumer acceptance studies, (i) if wholesome foods without additives are consumed or (ii) if a food is consumed that contains a food ingredient at or below the level and for a use found to be safe, or agricultural chemical or environmental contaminant at or below the level found to be safe, by the Food and Drug Administration or approved by the Environmental Protection Agency or the Food Safety and Inspection Service of the U.S. Department of Agriculture. The research does not involve prisoners as participants. 104(d)(6)

New exemption categories 7 and 8: Both categories 7 and 8 require Broad Consent. (Broad consent is a new type of informed consent provided under the Revised Common Rule pertaining to storage, maintenance, and secondary research with identifiable private information or identifiable biospecimens. Secondary research refers to research use of materials that are collected for either research studies distinct from the current secondary research proposal, or for materials that are collected for non-research purposes, such as materials that are left over from routine clinical diagnosis or treatments. Broad consent does not apply to research that collects information or biospecimens from individuals through direct interaction or intervention specifically for the purpose of the research.) **The Auburn University IRB has determined that as currently interpreted, Broad Consent is not feasible at Auburn and these 2 categories WILL NOT BE IMPLEMENTED at this time.**

***Limited IRB review* – the IRB Chairs or designated IRB reviewer reviews the protocol to ensure adequate provisions are in place to protect privacy and confidentiality.**

****Category 3 – Benign Behavioral Interventions (BBI)* must be brief in duration, painless/harmless, not physically invasive, not likely to have a significant adverse lasting impact on participants, and it is unlikely participants will find the interventions offensive or embarrassing.**

3. PROJECT SUMMARY

a. Does the study target any special populations? (Mark all applicable)

Minors (under 19)	☐ YES ■ NO
Pregnant women, fetuses, or any products of conception	☐ YES ■ NO
Prisoners or wards (unless incidental, not allowed for Exempt research)	☐ YES ■ NO
Temporarily or permanently impaired	☐ YES ■ NO

b. Does the research pose more than minimal risk to participants? ☐ YES ■ NO

Minimal risk means that the probability and magnitude of harm or discomfort anticipated in the research are not greater in and of themselves than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests. 42 CFR 46.102(i)

c. Does the study involve any of the following?

Procedures subject to FDA regulations (drugs, devices, etc.)	☐ YES ■ NO
Use of school records of identifiable students or information from instructors about specific students.	☐ YES ■ NO
Protected health or medical information when there is a direct or Indirect link which could identify the participant.	☐ YES ■ NO
Collection of sensitive aspects of the participant's own behavior, such as illegal conduct, drug use, sexual behavior or alcohol use.	☐ YES ■ NO
Deception of participants	☐ YES ■ NO

4. Briefly describe the proposed research, including purpose, participant population, recruitment process, consent process, research procedures and methodology.

The purpose of this research is to examine the impact a course required of special education majors seeking initial certification has on student beliefs and self-efficacy regarding teaching school-age learners who are diverse. This research is being used as dissertation research in addition to informing program faculty for the purposes of program revision/development.

Participants would be enrolled in an initial teaching certification program in special education and enrolled in RSED 5/6160/6 (Framework for Collaboration and Service Delivery in Schools). Both undergraduate and graduate students in initial certification programs take this course. Undergraduates do not take the course until the beginning or end of their Junior year and should be 19 years of age or older. Graduate students may take the course at any time in their program and should also be 19 years of age or older.

All students who take this course Summer 2019 and Fall 2019 will be recruited to participate as long as they are 19 years of age or older. Due to the PI's role as advisor & supervisor to special education majors, the PI has designated two possible proxy personnel (project personnel listed on page 1 of application) to minimize any potential discomfort to participants during recruitment and participation. Recruitment and obtaining consent will be handled by a proxy (project personnel listed on application). Recruitment will occur in person during class time during the first week of classes each semester as arranged with the instructor. The exact date and time will be arranged with the instructor at least 2 weeks in advance of the first day of each semester. RSED 6166 is the distance section of the course. It is delivered concurrently with the on-campus sections using Panopto and Canvas or Zoom depending on student needs. Off-campus participants can either view the recorded session later or participate in real-time at the instructor's discretion. If an online section of the class is being offered those semesters and students are enrolled in those sections, then recruitment of off-campus students will occur at the same time on-campus students are recruited using the same means through which instruction is normally delivered (e.g. Canvas, Panopto, Zoom).

NOTE: Answer continued in "Appendix to Exempt Application". Due to security settings on form, I was not able to decrease font size or increase allowable characters for this item.

5. Describe how participants/data/specimens will be selected. If applicable, include gender, race, and ethnicity of the participant population.

All eligible participants will be selected.

6. **Does the research involve deception? ☐ YES ■ NO If YES, please provide the rationale for deception and describe the debriefing process.**

7. **Describe why none of the research procedures would cause a participant either physical or psychological discomfort or be perceived as discomfort above and beyond what the person would experience in daily life.**

Participants are only being asked to complete a survey. Questions are related to demographics and beliefs about teaching students who are diverse. No identifying information is being collected. Any demographic questions that participants may not feel comfortable answering can be left blank.
Because the PI serves as participants' academic advisor and supervisor, a proxy (project personnel) will conduct all interactions with participants so that participants do not feel pressure to participate due to the PI's position of power.
Although a small portion of class time is being used for survey administration, the contents of the survey directly relate to content presented in the course and serves to improve the program.

8. **Describe the provisions to maintain confidentiality of data, including collection, transmission, and storage.**

Participants will not be asked for their names or other personally identifiable information. Participants will be asked to provide a code name (consisting of the first three letters of their mother's maiden name and the first three letters of their current street name) in order to link pre- and post-course survey data. However, the researcher will not keep a log connecting code names to specific participants and will not be able to identify participants by their code names.

9. **Describe the provisions included in the research to protect the privacy interests of participants (e.g., others will not overhear conversations with potential participants, individuals will not be publicly identified or embarrassed).**

Other than explaining the research, collecting consent, and administering surveys, no interactions will occur between project personnel and the participants. There are no opportunities for participants' survey responses to be discovered by anyone other that the PI. In the event that the instructor(s) of the course ask for survey results, no results will be shared until the participants have graduated or exited the program.

10. **Will the research involve interacting (communication or direct involvement) with participants?** ■ YES ☐ NO **If YES, describe the consent process and information to be presented to subjects. This includes identifying that the activities involve research; that participation is voluntary; describing the procedures to be performed; and the PI name and contact information.**

When project personnel visit the class to recruit participants, the project personnel will follow a recruitment script that identifies the purpose of the research, explains activities that would be required, and explains that participation is voluntary and responses are anonymous. (Recruitment script attached)

11. **Additional Information and/or attachments.**

In the space below, provide any additional information you believe may help the IRB review of the proposed research. If attachments are included, list the attachments below. Attachments may include recruitment materials, consent documents, site permissions, IRB approvals from other institutions, etc.

Requesting exemption for letter of consent. Will provide information letter instead to protect the identities of participants.

Attached documents:
Permission from Department Head to conduct research in RSED 5160/6160/6166 - actual instructor for both semesters has not yet been determined or published. Recruitment Script
Information Letter
Instrument - Multicultural Efficacy Scale and Marlowe-Crowne Social Desirability Scale combined (paper version and qualtrics version)
CITI training certificates (PI, personnel, faculty)

Principal Investigator's Signature Kelly Brumbelow Schweck **Date** 3/20/19

If PI is a student,
Faculty Principal Investigator's Signature Caroline Dunn **Date** 3/20/19

Department Head's Signature [signature] **Date** 3/20/2019

Appendix to Exempt Application

Continuation of response for Item 4:

During the same recruitment session, proxies will administer the hard copy survey in person to consenting participants who are on-campus. Proxies will then collect the surveys and deliver them to the PI. No identifiable information will be contained in the surveys. All participants will be asked to create code names containing the first three letters of their mother's maiden name and the first three letters of their current street name. If any students are enrolled in the distance education RSED 6166, the survey will be provided electronically. The PI or project personnel will ask the instructor of the course to email off-campus students a link to the survey in Qualtrics which also contains the information letter for the study. Qualtrics surveys will be housed in the PI's Auburn University Qualtrics Account. No identifiable information (i.e. names, IP addresses) will be collected with Qualtrics survey. The number of students enrolled in the off-campus section is usually very small (less than 5).

Two weeks prior to the end of each semester, the PI or project personnel will contact the instructor to arrange the date and time of the second survey administration. Project personnel (not the PI) will visit the class again to administer the second survey and ask the instructor to email the Qualtrics survey to off-campus students again. Surveys will be delivered to the PI in the same manner as the first administration.

The PI will enter all survey responses into SPSS and perform statistical analyses to compare survey results from the 1st administration to the 2nd administration. Both individual items and section differences will be examined. SPSS is on the PI's University owned and maintained laptop that is password protected and meets Auburn University's duo-authorization login requirements.

The survey shouldn't take longer than 30 minutes to complete. Participants will be entered into a drawing to receive 1 of 3 $10 gift cards. There will be one drawing at the end of the semester for those who complete both the pre- and post-course surveys. See script and information letter for details.

APPENDIX D: RECRUITMENT SCRIPT

RECRUITMENT SCRIPT (verbal, in person)

My name is Alexcia Moore/Betty Patten. I am here on behalf of Kelly Schweck. Mrs. Schweck is a doctoral candidate from the Department of Special Education, Rehabilitation, and Counseling at Auburn University. She would like to invite you to participate in her research study to examine the impact this course (RSED 5160/6160/6166) has on your feelings about working with learners who are diverse. You may participate if you are at least 19 and enrolled in a special education initial teaching certification program. Please do not participate if you are not enrolled in an initial teaching certification program or at least 19 years old.

As a participant, you will be asked to complete a survey two times. Once at the beginning of this semester and once at the end. The survey should take no more than 30 minutes each time.

Due to Mrs. Schweck's role as your advisor and field experience supervisor she has asked me and (either Alexcia Moore or Betty Patten) to present and collect surveys so that you do not feel obligated to participate if you choose not to.

Your responses will be anonymous. You will be asked to provide a code name so that your responses from the beginning of the semester and end of the semester can be compared. However, there will be no record of who the code names belong to. Your code name should consist of the first three letters of your mother's maiden name followed by the first three letters of your current street address.

If any results from the study are shared with your instructor(s), it would only be results about overall changes demonstrated by the entire group of participants and this information would not be shared until you have graduated or exited the program. There are some demographic questions that you may feel uncomfortable answering. If you choose not to answer a question, you may leave that question blank. Please be sure you respond to all of the remaining survey items though.

Your participation in this study could help your program make improvements to courses and content for future special education majors. Participation or non-participation will have no impact on your current program.

If you choose to participate and complete both surveys, you will be entered into a drawing to win one of three $10 gift cards at the end of the semester. At the conclusion of the semester in which you participate, code names for participants who complete both surveys will be entered into a hat. Three participants will be chosen randomly from the hat. Names of the three participants will be posted on the door of HC 1232A, a shared doctoral student office space) with instructions to contact either me or (Alexcia Moore/Betty Patten) to collect the gift card.

If you would like to participate in this research study, I will give you an information letter to read. The data you provide will serve as your consent to participate. Then, I will give you the survey that you can complete now. If an alternate date/time to participate is desired, please let me know and I will arrange it. I will also return at the end of the semester to distribute the survey to you to complete again. For any distance students who are enrolled in the course, I will send you an email with information and a link to the survey to complete if you choose to provide me with your email address.

Do you have any questions now? If you have questions later, please contact Mrs. Schweck at brumbka@auburn.edu or you may contact her advisor, Dr. Dunn, at dunnca1@auburn.edu.

APPENDIX E: INFORMATION LETTER

AUBURN
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COLLEGE OF EDUCATION

DEPARTMENT OF
SPECIAL EDUCATION, REHABILITATION, AND COUNSELING

(NOTE: DO NOT AGREE TO PARTICIPATE UNLESS AN IRB APPROVAL STAMP WITH CURRENT DATES HAS BEEN APPLIED TO THIS DOCUMENT.)

INFORMATION LETTER
For a Research Study entitled
"Special Educator Preparation: Are We Preparing Candidates Who Possess the Dispositions to be Effective Educators for Diverse Learners?"

You are invited to participate in a research study to examine the effectiveness of RSED 5160/6160/6166 in preparing candidates to work with learners who are diverse. The study is being conducted by Kelly Schweck, doctoral candidate, under the direction of Dr. Caroline Dunn, professor in the Auburn University Department of Special Education, Rehabilitation, and Counseling. You were selected as a possible participant because you are enrolled in RSED 5160/6160/6166 (Framework for Collaboration and Service Delivery in Schools) and are age 19 or older.

What will be involved if you participate? If you decide to participate in this research study, you will be asked to complete a survey at the beginning and end of the semester you are taking RSED 5160/6160/6166. Your total time commitment will be approximately 1 hour total (30 minutes per survey administration).

Are there any risks or discomforts? The risks associated with participating in this study are potentially feeling compelled to participate due to Mrs. Schweck's role as your advisor and field experience supervisor or feeling concerned about Mrs. Schweck reading your responses. In order to minimize these risks, Mrs. Schweck has designated two other investigators to administer and collect surveys and has ensured that no record of participants' names exists. You will be asked to generate a code name containing the first three letters of your mother's maiden name and the first three letters of your street address. This code name will be requested on both survey administrations, but there is no master list connecting actual names to code names.

2084 Haley Center, Auburn, AL 36849-5222; Telephone: 334-844-7676; Fax: 334-844-7677
www.auburn.edu/serc

Are there any benefits to yourself or others? If you participate in this study, you can expect to possibly contribute to the field by helping to improve programming for students majoring in special education at Auburn University. We/I cannot promise you that you will receive any or all of the benefits described.

Will you receive compensation for participating? To thank you for your time you will be offered a chance to win one of three $10 gift cards. At the conclusion of the semester in which you participate, code names for participants who complete both surveys will be entered into a hat. Three participants will be chosen randomly from the hat. Names of the three participants will be posted on the door of HC 1232A, a shared doctoral student office space, with instructions to contact an alternate investigator to collect the gift card.

Are there any costs? If you decide to participate, you will not have any costs associated.

If you change your mind about participating, you can withdraw at any time during the study. Your participation is completely voluntary. If you choose to withdraw, your data can be withdrawn as long as it is identifiable. Your decision about whether or not to participate or to stop participating will not jeopardize your future relations with Auburn University, the Department of Special Education, Rehabilitation, and Counseling or Kelly Schweck.

Any data obtained in connection with this study will remain anonymous. We will protect your privacy and the data you provide by not requesting names or recording IP addresses if the survey is completed online. Information obtained through your participation may be used to fulfill an educational requirement, published in a professional journal, or presented at a professional meeting.

If you have questions about this study, *please ask them now or* contact Kelly Schweck at brumbka@auburn.edu or Dr. Caroline Dunn at dunnca1@auburn.edu. A copy of this document will be given to you to keep.

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SPECIAL EDUCATION, REHABILITATION, AND COUNSELING

If you have questions about your rights as a research participant, you may contact the Auburn University Office of Research Compliance or the Institutional Review Board by phone (334)-844-5966 or e-mail at IRBadmin@auburn.edu or IRBChair@auburn.edu.

HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE IF YOU WANT TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, THE DATA YOU PROVIDE WILL SERVE AS YOUR AGREEMENT TO DO SO. THIS LETTER IS YOURS TO KEEP.

Kelly Schweck 4/10/19

Investigator's signature Date

Kelly Schweck

Print Name

The Auburn University Institutional Review Board has approved this document for use from to . Protocol #19-153. "Special Educator Preparation: Are We Preparing Candidates Who Possess the Dispositions to be Effective Educators for Diverse Learners?"

The Auburn University Institutional Review Board has approved this Document for use from 04/11/19 to ---------- Protocol # 19-153 EX 1904