

**TEACHERS' AND PRESERVICE TEACHERS' PERCEPTIONS OF GIFTEDNESS AND  
DISPROPORTIONALITY IN GIFTED EDUCATION PROGRAMS**

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## ABSTRACT

### TEACHERS' AND PRESERVICE TEACHERS' PERCEPTIONS OF GIFTEDNESS AND DISPROPORTIONALITY IN GIFTED EDUCATION PROGRAMS

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The proposed study examined the perceptions of giftedness held by teachers of gifted students and how current identification procedures relate to the underrepresentation of diverse students enrolled in gifted education programs. This relationship was examined through the following research questions: (a) What are the attitudes of teachers and teacher candidates concerning giftedness and gifted education programs? and (b) Do teachers and teacher candidates' attitudes reflect an awareness towards teaching culturally diverse gifted students? Past research suggests that in the field of gifted education there is a notable underrepresentation of minority and economically disadvantaged children enrolled in gifted education programs. This underrepresentation is most likely caused by a low admittance of minority and disadvantaged students into the programs, which often begins with teacher referrals and recommendations of specific students by their teachers. There are many reasons why teacher referral practices can be a flawed process for placing students in gifted education. Teachers consistently fail to refer minority students for several possible reasons, such as an inability to recognize unique characteristics of giftedness, not considering the effect outside circumstances have on achievement, or simply having low achievement expectations for minority students. For this study, participants, which included both graduate and undergraduate students, were surveyed digitally via Qualtrics regarding their attitudes towards gifted students and gifted education programs in general, as well as their attitudes towards teaching culturally diverse groups of students. Gagné and Nadeau's Opinions About the Gifted and Their Education Scale (1991) and portions of the Teacher Multicultural Attitude Survey created by Ponterotto et al. (1998) and Professional Beliefs about Diversity Scale created by Pohan, and Aguilar (2001) were used to create the survey that was sent to participants. Data was analyzed using mean scores to determine overall attitudes as well as on an item level by frequency to determine what the participants' specific opinions are and if there are any relevant occurring trends or patterns.

## CHAPTER ONE: REVIEW OF LITERATURE

### Introduction

Being placed in a gifted education program can be very beneficial for high-aptitude learners, as it provides an environment that is a better match for their abilities than the general education classroom (Morgan, 2020; Türkman, 2020). Student who are identified as being gifted, much like other students who receive special education services, have specific needs that need to be met in school. These needs are often reflective of the fact that they learn faster, tend to understand material more deeply than other students, and are more engaged in learning specific content in which they have an interest (Coleman et al., 2015).

### How Giftedness is Defined in Education

When creating gifted programs in schools, it is crucial to determine what giftedness is because the definition helps establish not only who receives the services, but what the services look like as well (Callahan et al., 2017). Yet, the concept of giftedness is often misunderstood, and the definition has evolved over time (Erwin & Worrell, 2011). In 1972, the U.S. Office of Education (USOE) created their own definition of giftedness that required students to demonstrate a high aptitude in at least one of multiple areas, including, intellectual, academic, psychomotor, creative thinking, leadership or visual and performing arts. Several years later Gardner proposed the Multiple Intelligences Theory, which focuses on the idea that there are multiple domains of intelligence that a person can possess (Türkman 2020). Gardner's theory and the USOE definition are important to note because they focus on more than just academic or intellectual sides of giftedness, which was the focus of nearly all prior theories. In 1989, the *Jacob Javits Gifted and Talented Students Education Act* that was reauthorized through the *Every Student Succeeds Act* (2015) defines giftedness as “students, children, or youth who give

evidence of high achievement capability in areas such as intellectual, creative, artistic, or leadership capacity, or in specific academic fields, and who need services or activities not ordinarily provided by the school in order to fully develop those capabilities” [Title IX, Part A, Definition 22. (2002)]. This definition is also significant because it focuses on potential instead of previous achievement, even though research has shown that previous achievement is often a solid predictor of future achievement (Erwin & Worrell, 2011). In addition to these overall definitions of giftedness, each state in the U.S. has their own unique definition and qualifications for giftedness (Morgan, 2020). According to the National Association of Gifted Children (NAGC) 2020-2021 State of the States in Gifted Education Survey and Report, there were 6 out of 52 states who reported that they do not have a state definition of gifted. This survey was sent out to designated representative of the state education agency for all 50 states, as well as the District of Columbia, the Department of Defense Education Activity, Puerto Rico, Guam, and the U.S. Virgin Islands. Out of the 51 state representatives who responded to the survey, it was reported that only 7 states require a universal screening process for referral for identification, and 9 require a universal screening process for identification (NAGC, 2020). Additionally, 41 states revealed that local educational agencies (LEAs) were required to follow their state’s definition of gifted and that they were required to identify gifted and talented students in their state by law, but only 10 states require the LEAs to use specific criteria and methods when identifying gifted students (NAGC, 2020). In North Carolina, each individual LEA determines how to identify students themselves, creating an inconsistency on how students are identified across the state. North Carolina’s definition of giftedness is “Academically or intellectually gifted students exhibit high performance capability in intellectual areas, specific academic fields, or in both intellectual areas and specific academic fields...Outstanding abilities are present in students from

all cultural groups, across all economic strata, and in all areas of human endeavor” (NAGC, 2020, 72). This definition is significant because it calls those to recognize abilities in diverse cultural groups; however, it focuses only on academic and intellectual achievement, unlike states, like New York, where giftedness is defined as having high academic and intellectual achievement, but also including outstanding abilities in the visual and performing arts as well (NAGC, 2020).

### **Identification of Gifted Students**

Because the definition of giftedness and requirements for gifted programs vary so much from state to state, there are numerous recommendations for instruments and processes to identify gifted behaviors and students (Callahan et al., 2017). In many states there is an initial identification process that determines which students should be referred for further testing. This initial identification is usually in the form of a teacher referral or through a universal screening measure, which is given to all students in a grade level (Callahan et al., 2017). According to the 2020-2021 State of the States in Gifted Education Survey and Report, states use a variety of methods when identifying gifted students. After the initial referral or screening process, the students are usually either tested with standardized assessments, and/or evaluated based on data on the student, like teacher ratings, grades, state testing scores (Callahan, 2017).

### **Disproportionality in Gifted Education Programs**

While the methods for identifying students for gifted programs are not consistent across school districts and states, it is apparent that the selection of students for gifted programs may be biased. More specifically, students from ethnically diverse backgrounds and/or low Socioeconomic Status (SES) are less likely to be selected for gifted programs (Peters et al., 2019). This disproportionality is essential to address. Disproportionality rates for minorities have

been evident in several areas in schools, including test scores, discipline, and enrollment in special and gifted education programs (Peters et al., 2019). When referring to disproportionality regarding culturally diverse students within special education programs, it is inferred that the ratio of minority students to White students is not equal to the population ratio. The result of this disproportionality is not only an overrepresentation of minority students in special education programs, but an underrepresentation of minority students in gifted education programs as well, which is a common criticism that has been well established in the field of gifted education (Ecker-Lyster & Niileksela, 2017; Ford & Whiting, 2008; Neumeister et al., 2007; Peters et al., 2019). More specifically, African Americans, Native Americans and Hispanic students are typically underrepresented in gifted education programs, while White and Asian American students are consistently overrepresented (Card & Giuliano, 2016; Ford & Whiting, 2008; Neumeister et al., 2007; Peters et al., 2019). A study conducted by Rimm et al., (2018) revealed that White students are identified 3.5 times more than Black students and 12 times more than Black students who were also eligible for Free Reduced Lunch. While Asian American students typically experience positive stereotypes in school settings, and are generally overrepresented in gifted education programs, there is some research to suggest that some Asian American groups, like Southeast Asians and Pacific Islander students are underrepresented as well (Ford & Whiting, 2008; Erwin & Worrell, 2011).

**Achievement Gap.** It has been found that even when their achievement levels are comparable with previously identified gifted peers, traditionally underserved students, including minority and students living in poverty, were less likely to be identified as gifted (Seigle et al., 2016) However, a consistent achievement gap is present between White students and academically successful disadvantaged students, also referred to as the *excellence gap*, and

contributes to the disproportionality of students in special education programs (Ecker-Lyster & Niileksela, 2017; Peters et al., 2019). Research has shown that this gap in achievement can be evident as early as first grade due to the inability to access resources, including preschool programs that can help prepare students for elementary school (Seigle et al., 2016). Since the passing of the *No Child Left Behind* act in 2002, there has been a push to close this gap in public schools, including in special education programs. Despite this effort, minority and economically disadvantaged students remain overrepresented in all special education programs, and underrepresented in gifted education programs (Ecker-Lyster & Niileksela, 2017; Henfield et al., 2017; Peters et al., 2019). It has been the opinion of some researchers that since this act, the focus in education has shifted to all students receiving equal instruction instead of promoting the highest academic achievement possible by giving them whatever extra support they need, which is why many educational programs are still facing issues. More specifically, providing all students with equal instruction and opportunities in the classroom leaves students who have extra educational needs, like children who are not native English speakers, children who require special education services and gifted children, without the supports they need (McCoach & Seigle, 2007).

### **Retaining Minority Students in Gifted Programs**

It is important to consider that even though states often adopt one definition of giftedness, applying one definition to an entire population is difficult, and may result in the lack of consideration of the needs, perspectives and past opportunities of gifted students from minority backgrounds. These students may not have had the opportunities to acquire knowledge and build their academic skills like their peers have had, meaning that they are both less likely to be recognized as gifted and may have a more difficult time excelling in gifted programs the way

they are currently structured. In other words, these students may need gifted programs that can provide them with interventions and support to help build their skills to the levels that they should be (Seigle et al., 2016).

This underrepresentation is most likely caused by a low admittance of minority and disadvantaged students into the programs, as well as the failure of minority students to stay in the programs once admitted. There is a limited understanding of minority and disadvantaged students' academic performance in gifted education programs due to most previous studies on gifted education programs disregarding race/ethnicity or SES of participating students; however, some research has shown that White students are less likely to drop out of gifted education programs than minority students (Ecker-Lyster & Niileksela, 2017; Henfield et al., 2017).

Additionally, minority and disadvantaged students often live in areas with limited resources, meaning that it is likely that they don't have access to gifted programs at their schools (Peters et al., 2019). Research has shown that high-poverty schools tend to provide less resources towards their gifted programs and tend to rely only on referrals for admission, providing less opportunities for students to receive gifted education services (Yaluma, & Tyner, A., 2020).

### **Recruitment Issues and Barriers**

There are several possible explanations of why low-income and minority students are often under-identified in gifted education programs. The most influential explanations source back to how students are being identified as gifted, including an overreliance on standardized testing and IQ testing (Ford, 2010; Peters et al., 2019), and teacher referral practices (Card & Giuliano, 2016; Ecker-Lyster & Niileksela, 2017; Morgan, 2020), which often reflect the unequal educational experiences between advantaged and disadvantaged youth (Morgan, 2020).

**Overreliance on Standardized Testing.** One explanation for the increased rates of misclassification for minority and economically disadvantaged students is an overreliance on standardized testing and IQ testing (Ford, 2010; Neumeister et al., 2007; Peters et al., 2019). Many school districts identify gifted students with cutoff rates for IQ tests, including the students who score within the top 5-25%, depending on the school district (Peters et al., 2019). However, some states, like Arizona and Georgia, use national norms when identifying students for giftedness. While it is convenient to use national norms, doing so can be problematic because national norms don't reflect income, ethnicity and other differences that vary from school district to school district (Peters et al., 2019). Additionally, research has suggested that even at high SES, African Americans, Puerto Rican Americans and Native Americans have average IQ scores that are lower than White students (Ford & Whiting, 2008). It has been found that the average IQ score for African American adults is 88-91 depending on the test given, while the average score for White adults is around 103 (Weiss & Saklofske, 2020). Without considering ethnicity, the average score for children who live in poverty is even lower (Ford & Whiting, 2008).

Relying on standardized testing limits the educational opportunities of minority and disadvantaged students because these tests are generally best at identifying giftedness in middle-class White students, not culturally diverse students (Ecker-Lyster & Niileksela, 2017; Ford & Whiting, 2008; Naglieri & Ford, 2003; Peters et al., 2019; Yaluma, & Tyner, A., 2020). Considering this, it is evident there shouldn't be a reliance on tests alone, and the process for selecting a student for gifted education should come from several forms of data (Ford & Whiting, 2008).

**Teacher Referral Practices.** As stated previously, in many states there is typically an initial form of identification of gifted student that is either in the form of a teacher referral or

through a universal screening measure, which is given to all students in a grade level (Callahan et al., 2017). Teacher referrals are a very popular way of identifying gifted students; however, they may not be the most reliable for a multitude of reasons.

***Weaknesses of Teacher Referral Practices.*** While teacher referrals are useful in identifying gifted students, they are often used as a mandatory starting point for identification, which may increase the disproportionality (Peters et al., 2019). While some researchers believe that teachers can reliably identify gifted students, others disagree (Callahan, 2017). There are many reasons why teacher referral practices can be a flawed process for initially identifying students for gifted education. Primarily, teachers need to possess a deep understanding of gifted characteristics before they can effectively refer students for gifted education programs, and there has been some controversy regarding how effective teachers are in nominating gifted students (Siegle et al., 2010). In other words, teachers are usually expected to refer students based on a set of identifiable traits, which minimizes the concept of giftedness (Neumeister et al., 2007). Reasons teachers consistently fail to refer minority students may include their inability to recognize unique characteristics of giftedness, not considering the effect outside circumstances have on achievement, or simply having low achievement expectations for minority students (Neumeister et al., 2007). They may also overlook giftedness because of behavior problems (either not referring them as punishment for the behavior or the behavior distracting from the student's giftedness) (Neumeister et al., 2007). This barrier to identification is especially relevant because a student's cultural background and socioeconomic status can heavily influence how they express gifted characteristics and behaviors, which teachers of different backgrounds may misinterpret their behaviors negatively (McBee, 2010). Ford (2002) talks about how general cultural differences among minority students relating to learning, behavioral and communication

styles are often misinterpreted as deficits by teachers, like hyperactivity, immaturity and lacking independence. Additionally, behavior problems, underachievement and poor work habits can be an outcome of boredom with class material, which is a consequence of gifted needs not being met (Neumeister et al., 2007). Ultimately, a lack of referrals is often a result of a insufficient training for gifted teachers and professional development courses often don't focus on referrals (Ford, 1995; Erwin & Worrell, 2011).

*Influences of Attitudes Toward the Gifted.* Cultural bias and deficit thinking, a stereotypic way of thinking where differences are interpreted in a negative way and strengths are ignored can also influence teacher referrals and leads to fewer minority and disadvantaged students being referred for gifted education programs (Ford & Whiting, 2008; Ford, 2014; Morgan, 2020). For example, a teacher not referring a student because they speak non-standard English. A student speaking nonstandard English may divert the teacher from recognizing the student's strong verbal skills (Ford & Whiting, 2008). Instead of focusing on the strengths and achievements of those students, teachers may display deficit thinking by assuming that their minority students are less capable of being academically successful than their White counterparts (Irizarry, 2015).

Disadvantaged youth often have differing educational experiences than their more advantaged peers for several reasons. Circumstances may prevent students from achieving the academic success that they deserve. For example, situations like economic challenges at home, parental separation, social difficulties and drugs and violence within school and their community can prevent a gifted student from being able to reach their full potential (Coleman et al., 2015).

Further, when determining a student's giftedness teachers may judge a student's academic performance without considering other factors that may be impacting that student's

functioning. Culture and socioeconomic status (SES) can significantly impact a student's performance during testing. For example, students who come from a low SES household may be too hungry or concerned where their next meal is coming from to perform as well as they should on a test. They also may have not had the resources at home to support them academically that their peers from higher SES backgrounds may have access to, like internet, computers, books, and access to tutors (Ecker-Lyster & Niileksela, 2017; Morgan, 2020). Research has suggested that SES can influence teacher's perceptions of giftedness as well. In a study done by Alviderez and Weinstein (1999), teachers estimated higher IQ scores for students from higher SES backgrounds and estimated lower scores for students from lower SES backgrounds. Not surprisingly, it was found by McBee (2006) that teachers were less likely to refer students from lower SES backgrounds to gifted programs than higher SES backgrounds.

**Advantages and Disadvantages of Checklists and Rating Scales.** Referral practices can be improved in several ways. For example, teachers tend to nominate students for gifted programs more effectively when the instrument they use clearly states the characteristics they are looking for in gifted children (Kolo, 1999). Rating scales are effective tools when identifying gifted children because they present specific characteristics for the teachers to identify (Ecker-Lyster & Niileksela, 2017; Siegle et al., 2010). Teachers should take a student's culture and cultural differences to mind when assessing them for giftedness and the rating scales and checklists must include characteristics that represent how giftedness may display itself in different cultures (Ford & Whiting, 2008). How certain traits/characteristics are presented on the instrument can influence a rating. Gifted characteristics can present themselves in ways that could be perceived as positive or negative. For example, the term "leader" has a very different connotation than the term "bossy" and will influence how a teacher may rate a student (Siegle et

al., 2010). However, although they are helpful, checklists and rating scales can also be problematic tools when determining giftedness (Ford & Whiting, 2008). Giftedness (as mentioned earlier in the ESSA) is not just high achievement, but also the potential to be high achieving, so by checking off a student's current traits and performance potential achievement can be overlooked (Ford & Whiting, 2008). Although it utilizes more time and resources, universal screening assessments, which are already used by several states, can be a solution to the issues with teacher referrals. Card and Giuliano (2016) found that the use of universal screening rather than relying on teacher referrals leads to a 45% increase in the chance of being identified as gifted. When the referral process was transferred from teachers to a universal screener, more students of color were identified, suggesting that teachers' attitudes may influence referral practices.

### **Purpose of the Current Study**

The purpose of this descriptive study was to investigate attitudes and perceptions of teachers and teacher candidates who are affiliated with schools in the rural, Appalachian area of the United States. Research suggests (Ecker-Lyster & Niileksela, 2017; Seigle et al., 2016) that there is a specific need for more research concerning not only the methods used by schools to identify students for gifted programs, but to delve further into the teacher perspectives as they relate to cultural diversity. The research questions are: (a) What are the attitudes of teachers and teacher candidates concerning giftedness and gifted education programs? and (b) Do teachers and teacher candidates' attitudes reflect an awareness of teaching culturally diverse gifted students?

## CHAPTER TWO: METHODS

### Participants

For this research, participants were recruited from both graduate and undergraduate education courses at Western Carolina University, specifically Education Curriculum and Instruction (ECDI) classes. Western Carolina University allows students enrolled in courses to participate in research conducted on campus or online. This group was selected because it was predicted to be made up of either experienced teachers or preservice teachers that have had some experience in the field. There were a total of 27 participants in this study.

### Instruments

#### Demographic Survey

For the demographic section of the survey, the participants were asked age, gender, whether they are practicing teacher or teacher candidate, their year in program, number of years teaching, and ethnicity.

#### Opinions About the Gifted and Their Education

Questions from *Gagné and Nadeau's Opinions About the Gifted and Their Education Scale (1991)* were used to assess the attitudes of teachers regarding several aspects of gifted education, including how much/what support gifted students should receive, the social value and rejection of gifted students, and their attitudes towards the school acceleration and ability grouping of gifted students. It has 34 questions and uses a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Sample statements from this survey are *Special programs for gifted children have the drawback of creating elitism* and *The specific educational needs of the gifted are too often ignored in our schools.*

## **Opinions on Teaching Culturally Diverse Students**

Questions from the *Teacher Multicultural Attitude Survey* created by Ponterotto et al. (1998) and *Professional Beliefs about Diversity Scale* created by Pohan and Aguilar (2001) were used to analyze participants' perspectives on and attitudes towards teaching culturally diverse students. The *Teacher Multicultural Attitude Survey* has 30 questions and uses a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Eight statements from this survey were used in the current study. Sample statements from this survey are *I find teaching a culturally diverse student group rewarding* and *To be an effective teacher, one needs to be aware of cultural differences present in the classroom*. The *Professional Beliefs about Diversity Scale* has 25 questions and uses a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Nine statements from this survey were used in the current study. Sample statements from this survey are *Teachers often expect less from students from the lower socioeconomic class* and *In order to be effective with all students, teachers should have experience working with students from diverse racial and ethnic backgrounds*. Both instruments have been found to produce acceptable levels of score reliability (Ponterotito et al., 1998; Chiner et al., 2015).

## **Definitions and Characteristics of Giftedness**

Participants were also asked to rate their agreement on a number of possible definitions of giftedness as well as potential characteristics and behaviors of a gifted child. There were 9 definitions of giftedness and 12 potential characteristics of giftedness. Consistent with the rest of the survey, these questions utilized a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*) for responses. Sample definitions from this survey are *leadership ability* or

*potential and scoring in the 98<sup>th</sup> percentile or above. Sample characteristics from this survey are self-motivated and boredom or uninterested in classroom material.*

### **Procedure**

For this study, participants completed a survey digitally via Qualtrics. As previously referenced, this survey was a combination of demographic information, as well as Gagné and Nadeau's Opinions About the Gifted and Their Education Scale (1991), the Professional Beliefs about Diversity Scale created by Pohan, and Aguilar (2001), the Teacher Multicultural Attitude Survey created by Ponterotto et al. (1998) and items concerning characteristics and definitions of giftedness. The participants, who were members of EDCI (Curriculum and Instruction) classes at Western Carolina University, were emailed the link to the survey by their professor. Participation in the survey was voluntary but extra credit points in the courses were offered as compensation for taking the survey by some professors. Data was collected from five courses from the Summer 2024 and Fall 2024 semesters.

### **Analysis**

When using the *Opinions About the Gifted and Their Education Scale (1991)*, Gagné suggested analyzing the data using mean scores. He interpreted mean scores below 2 as a very negative attitude, and mean scores above 4 as a very positive attitude, with scores in between indicating an uncertain opinion towards that aspect of gifted education. The same approach will be taken when analyzing the data from the current survey as well. Questions were also analyzed at the item level by frequency to determine what the participants' opinions are and if there were any relevant occurring trends or patterns.

## CHAPTER THREE: RESULTS

### Demographics

For the demographic section of the survey, the participants were asked age, gender, whether they are practicing teacher or teacher candidate, their year in program, number of years teaching, and ethnicity. There were 27 total respondents. Figure 1 summarizes the reported ages of the participants: 55% of the respondents were college and early career aged (18-25) and 45% of the respondents were 25 and older. Seventy percent of the respondents were female and 25% of the respondents were male. Ninety-two percent of the respondents reported to be White. Seventy four percent of the respondents reported that they are teacher candidates. All participants were either juniors, seniors or graduate students. Fourteen out of twenty-seven respondents said they are or have been a practicing teacher, even though only 7 people reported that they are not teacher candidates, which indicates that some of the participants were counting previous internship experience as teacher experience. Figure 2 details the years of experience that were reported by the participants. Thirty percent of the participants reported to have more than 5 years of experience and 70% have five or less years of experience.

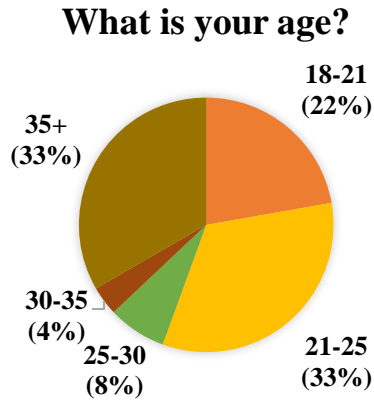


Figure 1

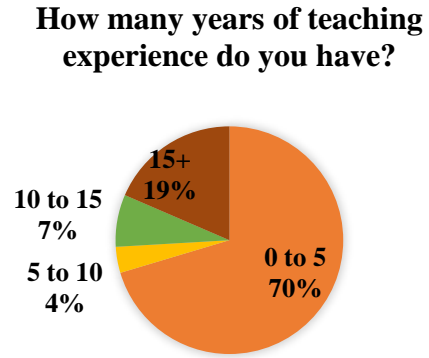


Figure 2

### Opinions About the Gifted

Questions from *Gagné and Nadeau's Opinions About the Gifted and Their Education Scale (1991)* were used to assess the attitudes of teachers regarding several aspects of gifted education, including how much/what support gifted students should receive, the social value and rejection of gifted students, and their attitudes towards the school acceleration and ability grouping of gifted students. Overall, the participants produced a mean response of 3.14 on this scale, indicating that they have an overall neutral attitude towards gifted education and gifted students. However, their opinions varied based on each subtopic. More specifically, 97% of respondents agreed that our schools should offer special education services for the gifted. Only 26% agreed that the gifted waste their time in regular class. As seen in Figure 3, 81% of the respondents agreed that the specific educational needs of the gifted are too often ignored in our schools. Additionally, 70% disagreed that our schools are already adequate in meeting the need of the gifted and 82% agreed that the gifted need special attention in order to fully develop their talents. However, 56% agree that special programs for gifted children have the drawback of creating elitism and participants are very divided on whether we have a greater moral

responsibility to give special help to children with difficulties than to gifted children -- 33% disagreed and 37% agreed, as seen in Figure 4. Additionally, almost half the participants felt that resources should be dedicated to the “average” child.

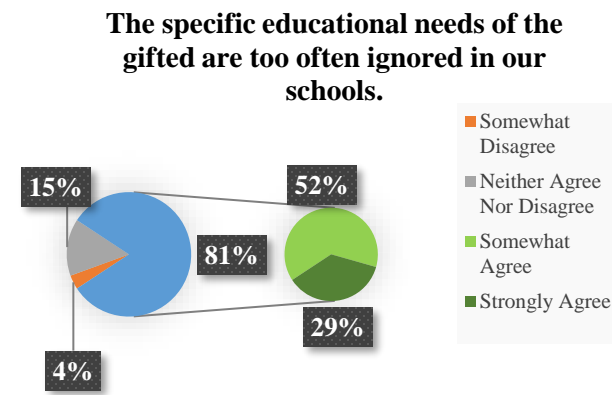


Figure 3

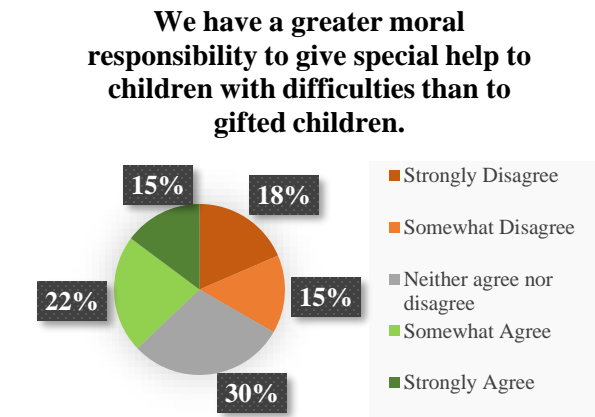


Figure 4

Sixty-seven percent of the respondents agreed that in order to progress, a society must develop the talents of gifted individuals to a maximum and 96% agree that gifted persons are a valuable resource for our society. However, over half of the respondents disagreed that the leaders of tomorrow’s society will come mostly from the gifted of today. Only 33% of the respondents agreed that the best way to meet the needs of the gifted is to put them in special classes and 56% agreed that by separating students into gifted and other groups, we increase the labeling of children as strong-weak, good-less good, etc. Thirty-three percent agreed and 33% disagreed that gifted children should be left in regular classes, since they serve as intellectual stimulant for the other children.

## Opinions on Teaching Culturally Diverse Students

Questions from the *Teacher Multicultural Attitude Survey* created by Ponterotto et al. (1998) and *Professional Beliefs about Diversity Scale* created by Pohan, & Aguilar (2001) were used to analyze participants' perspectives on and attitudes towards teaching culturally diverse students, which is shown in Figure 5. Ninety three percent of the respondents agreed that they find a culturally diverse student group rewarding. Eighty-nine percent agreed that to effectively teach gifted students, one needs to be aware of cultural differences present in the classroom, and 82% agreed when dealing with bilingual children, communication styles often are interpreted as behavioral problems.

Sixty-seven percent of the respondents agreed that tests, particularly standardized tests, have frequently been used as a basis for segregating students. Sixty-seven percent of the respondents agreed that teachers often expect less from students from the lower socioeconomic class, 81% respondents agreed that large numbers of students of color are improperly placed in special education classes by school personnel and 82% agreed that students from lower socioeconomic backgrounds typically have fewer educational opportunities than their middle-class peers.

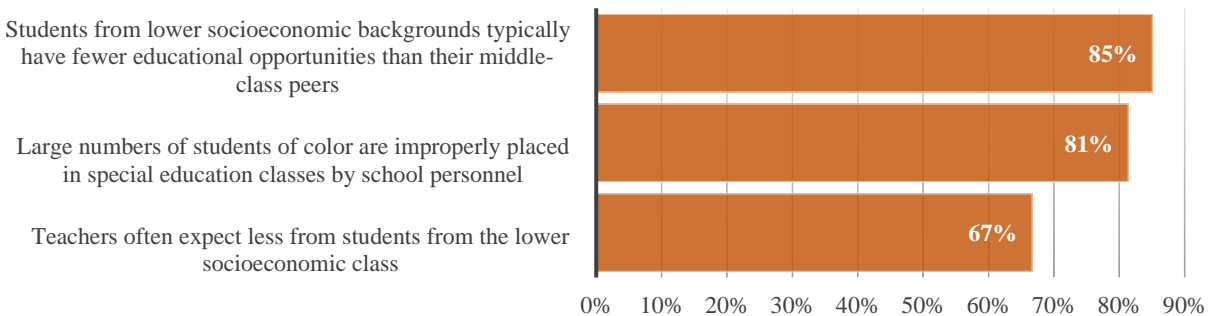


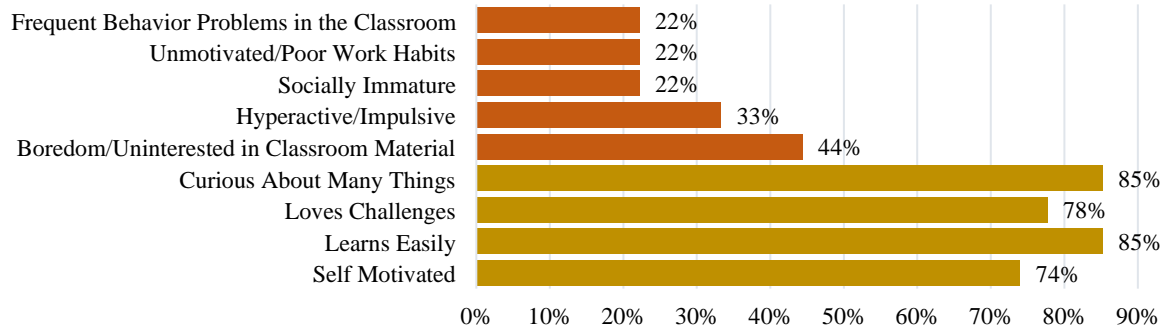
Figure 5

## **Definitions and Characteristics of Giftedness**

When asked about definitions of giftedness, 52% of the respondents agreed that scoring in the 98<sup>th</sup> percentile or above is an indicator of giftedness. Seventy-four percent of the respondents agree that creative or productive thinking is an indicator of giftedness and 70% agreed that a high-level ability at tasks requiring creative thinking is an indicator of giftedness. Sixty-three percent agreed that leadership ability or potential is an indicator of giftedness.

As displayed in Figure 6, when asked what characteristics could potentially be a characteristic of a gifted student, ninety-seven percent agreed that being able to work and understand at a level above the average level can be a characteristic of giftedness. Seventy-four percent or more of the participants agreed with positive characteristics being characteristics of giftedness like self-motivated (74%), learns easily (85%), loves challenges (78%), and curious about many things (85%). Under 45% of the participants agreed with more negative characteristics being characteristics of giftedness like boredom or uninterested in classroom material (44%), hyperactive/impulsive (33%), socially immature (22%), unmotivated or poor work habits (22%) and frequent behavior problems in the classroom (22%).

## Can This Be a Characteristic of Gifted Students?



*Figure 6*

## CHAPTER FOUR: DISCUSSION

The present study aimed to examine the perceptions of giftedness held by teachers of gifted students and how current identification procedures relate to the underrepresentation of diverse students enrolled in gifted education programs. Two research questions were examined: (a) What are the attitudes of teachers and teacher candidates concerning giftedness and gifted education programs? and (b) Do teachers and teacher candidates' attitudes reflect an awareness towards teaching culturally diverse gifted students?

### **Perceptions of Giftedness**

Regarding the first research question, which sought to examine the attitudes of teachers and teacher candidates concerning giftedness and gifted education programs, the participants expressed a generally neutral attitude towards giftedness and gifted programs; however, their responses varied based on the topic. Research suggests that gifted education programs provide an environment that is a better match for the abilities of gifted students than the general education classroom. Students who are identified as being gifted, much like other students who receive special education services, have specific needs that need to be met in school (Morgan, 2020; Türkman, 2020). Consistent with this research, the participants of the current survey were generally in favor for gifted education services, as almost all of the participants agreed that our schools should offer special education services for the gifted. The majority of participants of the current survey agreed that in order to progress, a society must develop the talents of gifted individuals to a maximum and almost all of the participants of the current survey agreed that gifted persons are a valuable resource for our society, indicating that there was lots of support for gifted people in regards to helping society grow. Additionally, a high percentage of participants

of the current survey agreed that the gifted need special attention in order to fully develop their talents and that the specific educational needs of the gifted are too often ignored in our schools. However, even though the participants generally showed support for schools offering special education services for the gifted, the majority of the participants agreed that special programs for gifted children have the drawback of creating elitism and most participants felt that gifted students can achieve in a regular classroom. This is consistent with previous research that has shown that some teachers are fearful of elitism in their students and feel that gifted students are already “privileged” (McCoach & Siegle, 2007). They may believe that putting gifted students in special classes may create a sense of superiority and elitism in these students because if they are in regular education classes, they will always be the best, but if they work in groups with other gifted students, they are challenged by their peers and will be forced to evaluate their opinions and skills (Holman, 2020). This being said, it is possible that teachers may be less likely to refer students if they feel that gifted students should spend their time in regular class. Additionally, participants of the current survey were very divided on whether we have a greater moral responsibility to give special help to children with difficulties than to gifted children, suggesting that children with difficulties need our support to thrive, while gifted children do not. This perspective is interesting to consider because just like special education programs, gifted programs provide a more appropriate curriculum for students that allows for a deeper understanding of academic content (Bate & Clark, 2013). A study conducted by Delcourt et al., (2007) found that standardized test scores were significantly higher of students who were placed in a specialized gifted program compared to gifted students who were not and other previous studies have found that students in specialized gifted programs generally view school more positively and increased academic expectations of themselves (Bate & Clark 2013). In short,

gifted students also require special help to grow academically and cognitively, much like children with difficulties and the unawareness of some of the participants regarding this indicates that some additional professional development regarding gifted programs may be necessary. Moving forward, there are several ways to combat elitism in gifted education programs, such as providing gifted and regular education students the same resources, allowing gifted students to mix with regular education students during the day and allow gifted and regular education teachers to be involved in each other's professional development (Haberlin, n.d.).

Concerning the definition of giftedness, participants were somewhat in line with *Gardner's Multiple Intelligence Theory* and other definitions of giftedness that involve more than just academic excellence, like the Every Student Succeeds Act (ESSA) definition, which defines giftedness as high achievement capability in areas such as intellectual, creative, artistic, or leadership capacity or in specific academic fields. The majority of participants agreed ability or potential in the visual arts along with specific academic aptitude. Additionally, many of the participants of the current survey agreed that creative or productive thinking is an indicator of giftedness and that a high-level ability at tasks requiring creative thinking is an indicator of giftedness. However, even though many definitions of giftedness, like the ESSA, include high creativity as an indicator of giftedness, creativity is not necessarily correlated with high IQ (Davis, 2004). Interestingly enough, the majority of the participants of the current survey also agreed that leadership ability or potential is an indicator of giftedness even though over half of the participants also disagreed that the leaders of tomorrow's society will come mostly from the gifted of today. This raises the question why they believe that gifted people will help society progress but will not be the leaders of it. In the past, researchers have supported the link between leadership and giftedness, although it has been indicated that students need classroom instruction

in order to further develop these skills (Ogurlu & Sevim, 2017). The participants disagreement with gifted students becoming future leaders may be an indication that current gifted programs are not incorporating leadership training into their curriculum, or they are not familiar enough with leadership themselves to attribute these characteristics to their students. This being said, teachers of gifted students should strengthen their leadership knowledge through specialized training (Al-naim et al., 2023).

### **Cultural Awareness and Giftedness**

Regarding the second research question, which sought to examine whether teachers and teacher candidates' attitudes reflect an awareness towards teaching culturally diverse gifted students, participants' responses reflected mixed attitudes as well. Research has shown that minority and economically disadvantaged students may be less likely to be referred for gifted programs due to teachers' cultural bias and deficit thinking (Ford & Whiting, 2008; Ford, 2014; Morgan, 2020). However, almost all of the participants of the current survey agreed that they find a culturally diverse student group rewarding. The participants appeared to recognize that cultural differences can be misinterpreted in the classroom. For instance, a high percentage of the participants of the current survey agreed that to effectively teach gifted students, one needs to be aware of cultural differences present in the classroom, and when dealing with bilingual children, communication styles often are interpreted as behavioral problems. This is significant because research has suggested that teachers may not refer students because of behavior problems in the classroom, which can be a result of cultural misinterpretation (Neumeister et al., 2007). For example, a student speaking nonstandard English may divert the teacher from recognizing the student's strong verbal skills, and they may not get referred by that teacher (Ford & Whiting, 2008).

Overall, the participants of the current survey's responses reflected a lot of cultural awareness within the classroom. For instance, over 80% of the participants of the current survey agreed that large numbers of students of color are improperly placed in special education classes by school personnel and that students from lower socioeconomic backgrounds typically have fewer educational opportunities than their middle-class peers. Additionally, almost 70% agreed that teachers often expect less from students from the lower socioeconomic class. This is significant because research has shown that teachers consistently fail to refer minority students for several possible reasons, such as an inability to recognize unique characteristics of giftedness, not considering the effect outside circumstances have on achievement, or simply having low achievement expectations for minority students (Neumeister et al., 2007), so the fact that it is being acknowledged by many of the participants demonstrates an awareness of how cultural bias and deficit thinking translates within the classroom. Deficit thinking can appear in classrooms in the form of teachers assuming that their minority students are less capable of being academically successful than their White counterparts, instead of focusing on the strengths and achievements of those students (Irizarry, 2015), which was acknowledged by most of the participants of the current survey as well. Culture and social economic status (SES) can significantly impact a student's performance during testing. The participants of the current survey also acknowledged that teachers expect less from students from low SES backgrounds, and it was found by McBee (2006) that teachers were less likely to refer students from lower SES backgrounds to gifted programs than higher SES backgrounds. These students are often not as high performing in the classroom, as they may have not had the resources at home to support them academically that their peers from higher SES backgrounds may have access to (Ecker-Lyster & Niileksela, 2017; Morgan, 2020). Participants displayed an overall awareness of how environmental and cultural

influences can impact a student's achievement, and that this is an ongoing problem. They indicated that action needs to be taken to eliminate the effects of this in the classroom. Nevertheless, it is important to note that there is a difference between awareness and implementation. The fact that respondents to this survey indicated an awareness of diversity and culturally sensitive practices does not imply that they actually employ those practices in their classrooms.

When asked about potential characteristics of giftedness, high percentages of the participants of the current survey agreed with positive characteristics being characteristics of giftedness like being self-motivated, learning easily, loving challenges, and being curious about many things. However, low percentages of the participants of the current survey agreed with more negative characteristics being potential characteristics of giftedness like being bored or uninterested in classroom material, being hyperactive/impulsive, being socially immature, being unmotivated or having poor work habits and having frequent behavior problems in the classroom. This is significant because it appears that participants of the current survey related giftedness with productivity and having high motivation, even though according to Ford (1996), self-motivation is not necessarily a characteristic of gifted students. In addition, many of the characteristics that were not highly agreed with can be perceived as a common characteristic of minority and economically disadvantaged children, indicating that these participants did not appear to have a clear understanding of how giftedness may manifest in minority and/or economically disadvantaged students. The participants in the current survey demonstrated awareness of cultural diversity in the classroom. However, their responses indicated that they may have narrow views of giftedness and may not have been aware of how culture and environment can affect the expression of giftedness in minority students. As previously

discussed, these participants demonstrated an awareness of cultural diversity within the classroom but are likely not applying this knowledge in their teaching practice when it comes to minority and economically disadvantaged gifted students. Ford (2002) talks about how general cultural differences among minority students relating to learning, behavioral and communication styles are often misinterpreted as deficits by teachers like: having a strong preference for oral communication can be misinterpreted as rudeness, behavior problems or being socially immature, having a strong need to be active/mobile can be misinterpreted as being hyperactive, inattentive and immature, having a preference for social or group learning can be misinterpreted as immaturity or lacking independence, and expressing oneself easily with emotions can be misinterpreted as immaturity or having weak cognitive skills. Additionally, behavior problems, underachievement and poor work habits can be an outcome of boredom with class material (Neumeister et al., 2007).

### **Cultural Awareness and Standardized Testing**

Another common barrier for identifying minority and economically disadvantaged gifted students is the use of standardized tests. It has been found from previous research that standardized tests are best suited for identifying giftedness in middle-class White students, and may prevent identification of some gifted minority and economically disadvantaged students (Ecker-Lyster & Niileksela, 2017; Peters et al., 2019; Yaluma, & Tyner, A., 2020). Additionally, culture and SES can significantly impact a student's performance during testing as well. Overall, it appeared that the participants of the current survey had an awareness of the downsides of standardized testing, as over half of the participants agreed that tests, particularly standardized tests, have frequently been used as a basis for segregating students. However, approximately half of the participants of the current survey also agreed that scoring in the 98<sup>th</sup> percentile or above is

an indicator of giftedness, suggesting that despite the fact that these tests can be culturally insensitive, they can still be reliable identifiers of gifted students.

### **Closing the Gap**

It is important to close the gap in gifted education because there are several risks to minority and economically disadvantaged children being underserved. For example, when gifted students are not given the appropriate education to meet their needs, they are more likely to drop out of school (Landis & Rechley, 2013). Additionally, when Silverman (2004) tested delinquent students, she found that 15 percent of incarcerated youth tested within the gifted range on standardized tests, indicating that criminal behavior and incarceration may be a potential risk as well. In order to include more underrepresented populations in gifted education programs there is a call for improved professional development trainings, using more universal screening measures to identify gifted students and potentially hire more gifted educators of color as well.

Although the participants of the current survey appeared to have a good awareness of cultural diversity within the classroom, they may benefit from professional development trainings in this area as well because their responses also indicated that they may have narrow views of giftedness and may not have been aware of how culture and environment can affect the expression of giftedness in minority students. This being said, professional development workshops on teaching gifted students should be required for teachers and include a portion on underachievement in gifted students, as well as identifying characteristics of gifted students, and how those characteristics may manifest in minority and economically disadvantaged students. There should be an emphasis that productivity does not equate to giftedness, which was the opinion of many of the respondents to the current survey, and a focus on considering a student's culture when interpreting their abilities. Additionally, because many of the participants of the

current survey indicated that they understand some teachers expect less from students from low SES backgrounds, professional development courses for all teachers should be aimed at this as well.

Because teacher referrals may contribute to increased rates of misclassification for minority and economically disadvantaged students, replacing referral processes with universal screening measures for initial identification could help identify more students of color. Card and Giuliano (2016) found that the use of universal screening measures resulted in a significant increase in the identification of Black, Hispanic and disadvantages students as being gifted.

Another potential solution to increasing the number of minority and economically disadvantaged students in gifted programs is to advocate for increased gifted educators of color. Teachers with minority backgrounds may increase not only the number of students referred for the program by being able to better identify gifted characteristics in these students, but may also increase retention of these students in the programs as well. One reason that gifted minority students may not stay in gifted programs once identifies could be their own perceptions of gifted programs. For example, minority students may be hesitant to stay because they believe that they are one of the only ones of their race or background in these programs due to the current underrepresentation and face stereotype threat (Cohen, 2022), and according to Ford and Whiting (2011), minority students who are viewed as gifted and high-achieving may be hesitant to participate in gifted programs because they feel that they are rejecting their culture and may face pressure from peers to underachieve. However, if these students had teachers of a similar race and background, minority students may see these teachers as role models, and feel more understood and comfortable in the programs as a result (Neumeister et al., 2007).

It should be considered that reforming the way students are selected for gifted programs and hiring more educators of color cannot be done without action of the administration. According to Grantham and Ford (1998), the principal's role in gifted education includes emphasizing teacher effectiveness in meeting students' needs and the development and implementation of gifted programs. Promoting teachers' effectiveness of gifted programs for students of color would be to hire more educators of color, which is in the hands of the principal. Referral processes are included in the development and implementation of gifted programs, so improving teacher referral practices and implementing universal screening measures is the principal's responsibility as well. This being said, gifted-based professional development should extend to administrators as well, and teachers should be encouraged to advocate for these changes to their administration.

## CHAPTER FIVE: LIMITATIONS AND FUTURE RESEARCH

While this study offers insight into the perceptions of giftedness and culturally diverse students of teachers and preservice teachers, there are several key limitations that may impact the applicability of the findings. Foremost, this was a descriptive study, which provides only information regarding what is happening and does not explain why. In addition, these findings cannot be generalized to another population. This limits some of the understanding of the matter. Future studies should take this into account, and potentially collect additional data on their participants' past professional development experiences, as well as data regarding the number and minority status of their previous gifted students. Further, future research could provide professional development trainings for the participants and assess their perceptions using a pre and posttest to determine the effectiveness. Next, the participants were all from a university in a rural setting and the majority of the participants were White, demonstrating a significant lack of diversity in the sample. The results of this study indicate a need for future research that recruits teachers from other settings, including urban, suburban and with a more diverse racial makeup to determine if other demographics may have an impact on the findings. Finally, it should also be considered that the participants for this study were pulled from Education of Curriculum and Instruction (EDCI) classes. This may have been impactful on the results because not only are the participants receiving an education that is recent and updated, but many ECDI classes at Western Carolina University focus on cultural diversity and social justice issues within the classroom. Future researchers may want to explore the opinions of veteran teachers who have not recently received education aside from professional development.

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