Referral, Identification, and Retention of Underrepresented Gifted Students

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Abstract
Research shows that the percentage of Culturally and Linguistically Different (CLD) students identified for participation in gifted education programs does not correlate with the percentage of minority students in the classroom. Black and Brown students are underserved and underrepresented in gifted programs and Advanced Placement classes, when compared to their White and Asian peers. CLD gifted students are at a greater risk for underachievement, dropping out of school, and incarceration. This article review focuses on referral, identification and retention of CLD students to address the problem of underrepresentation in gifted education. The central argument is that the referral process and identification for gifted students must be culturally and linguistically sensitive and teacher training must be incorporated into professional development to achieve this goal. Once students are identified as gifted, culturally sensitive gifted programs must be utilized to increase retention.

Keywords: Underrepresented; gifted education; minority students; retention; identification.

Introduction

Gifted education has long underrepresented minority students (Card and Guiliano, 2016). "As our nation becomes increasingly more diverse, the educational system is tasked with the responsibility of developing high levels of talent among all groups of children by providing equitable education" (Ecker-Lyster & Niileksela, 2017, p. 80). Gifted education was provided in U.S. public schools as early as the 1920s. In 1972, the U.S. Department of Education issued the Marland Report which brought gifted education to the national stage. The Marland Report identified serious deficiencies in education for "America's most bright and talented students" and defined giftedness leaving a lasting legacy (Jolly & Kettler, 2008). Since this report, there have been various education acts passed, the first most notable being the Javits Act which congress passed in 1988 and provided funds for gifted education research. In 1983 *A Nation at Risk* was published arguing that gifted education was inadequate and as cited in Jolly and Kettler (2008), the 1983 publication of A Nation at Risk argued that gifted education was inadequate, findings that were re-iterated in 1993 in National Excellence: A Case for Developing America's Talent. "The problems of squandered talent were even more evident among economically disadvantaged and minority students due to fewer advanced educational opportunities" (p. 430). Yet, decades later the National Association for Gifted Children and The Council of State Directors of Programs for the Gifted (NAGC, 2015) found only thirty-two states reporting any mandate for identification or services for gifted and talented.

According to the National Center for Research on Gifted Education (NCRGE), White and Asian students are more likely to be referred and identified as gifted as opposed to their Black and Hispanic peers (Mun, et al., 2016). Students that qualify for free or reduced lunch (FRL) and English Language Learners (ELL) are also underrepresented. When combining minority status with FRL and/or ELL factors, the chances a child will be referred and identified as gifted are slim (National Center for Research on Gifted Education [NCRGE], 2020). A significant finding from a 2014-2020 research project by NCRGE found disparities in gifted identification based on race, ethnicity and poverty (McCoach, et al., 2016). This research demonstrated that EL, free or reduced lunch (FRL), Latinx and Black students, are being identified at a much lower rate than White middle-class students even after controlling for student achievement. These underserved populations are less likely to be identified even when academic achievement scores in reading and mathematics are the same as their "non-underserved" peers (NCRGE, 2020). In another study, Rimm et al. (2018) reveal that White students are identified as gifted 3.5 times higher than Black students and almost 12 times higher than

Black students eligible for FRL. The percentage went up to 15.5 times more likely to be identified than Latinx FRL students.

Demographics versus representation

The demographics of identified gifted students should correlate with the demographics of the community in which they live. For example, if a district has a large population of minority students, the gifted classroom should also represent that. Wright et al. (2017) argue students of color are consistently underrepresented in advanced educational opportunities. "African American and Hispanic students in particular, continue to be concentrated in racially and economically homogeneous schools where access and opportunity to gifted education, Advanced Placement (AP), and International Baccalaureate (IB) courses are limited" (p. 45).

Nationally, White students comprise approximately 56% of the total school population but almost 68% of the students in Gifted and Talented Education (GATE) (U.S. Department of Education, Office for Civil Rights, 2016). Similarly, Asian American students make up less than 5% of the total school population but account for almost 10% of GATE students. In contrast, although African American students make up 17% of the school population, they are only 9% of GATE students, and Hispanic American students account for 20% of the total school population but only 12% of GATE students. The numbers for American Indian students are 1.26% of the general population and 0.97% of the GATE population (Erwin & Worrell 2011). What the above statistics show is that the percentage of the population does not correlate with the groups' percentages in gifted programs. White and Asian American students have higher percentages per population represented in gifted programs while their Black and Brown peers show much less representation.

This percentage gap between minority students in gifted education and the community demographics is evident in a study done by Sewell and Goings (2019). The authors investigated the experiences of Black students in New York City's gifted programs and found, "according to recent data, Black students account for 26.5% of the district population but only comprise 10% of the total student body in New York City's specialized high schools" (Sewell & Goings, 2019, p. 20). During the 2015–2016 school year, out of roughly 28,000 students that sat for entrance exams for elite schools, only 5,078 qualified and out of those who qualified only 524 identified as either Black or Latinx. The authors concluded that there needs to be better recruitment systems for Black and Latinx youth into gifted programs and that strategies to retain them must be used. When minority students enter a gifted program, they often find themselves as a numerical minority.

This lack of opportunity for minorities in gifted education could be viewed as similar to historical segregation in schools. Wright et al. (2017) assert, "This persistent school segregation, we argue, limits access and opportunity to gifted education, AP, and IB courses and is a direct reflection of historical and contemporary residential segregation" (p. 46). Gifted education, the authors contend, has historically been a place for white middle class students taught by white teachers. The prevalence of white children in gifted programs can give the illusion that white children have higher IQ scores and promote ignorance and indifference to maintain the status quo. This perpetuates misconceptions, biases, and stereotypes that children of color have lower IQs and less talent.

Native American students are some of the least represented in gifted education. Gentry and Fugate (2012) attribute this to the Native American population being relatively few and concentrated in rural schools. The authors also note the lack of research and attention on identifying and serving gifted Native American students in the past 30 years. While researching gifted education in reservation schools, Gentry and Fugate interviewed Principal Jaime Castellano in 2009. Dr. Castellano expressed that Arizona is a state with a mandate to identify and serve gifted children but not a single child in the Ganado Intermediate School that serves Navajo students was identified as gifted. Dr. Castellano began using multiple criteria to identify gifted students and was able to identify 200 in one year out of 1,600.

Gentry and Fugate (2012) state that Native American students are more likely to live in poverty with rural areas such as the Navajo Nation experiencing poverty rates of 40%. Hamilton et. al

(2017) researched institutional and individual poverty in relation to the percentage of students identified for gifted services. They conclude that students living in poverty are under-recognized and under-served in gifted education. Simply put, high-poverty can be used as a predictor of percentage of gifted enrollment in districts and schools. As the authors state, "Gifted education is certainly not the root of our social inequities. However, at present, it appears that gifted identification procedures may be perpetuating societal inequities rather than helping eliminate them" (Hamilton et al., 2017, p. 61). Goings and Ford (2017) also research the intersection between gifted education and students of color living in poverty. They show that systemic inequities perpetuate the lack of representation in both recruitment and retention of low-income gifted students of color.

The association between poverty and lower student outcomes have been attributed to a variety of factors including low expectations by teachers, effects of peers, mediocre curriculum, recruiting and retaining effective teachers, high turn-over of staff, inequitable funding, and limited resources (Hamilton et al., 2017). Native Americans face a "triple threat" as they are more likely to live in poverty, have higher drop-out rates, and live in remote rural areas with lack of resources. (Gentry et al., 2014). Basic resources for school such as technology, transportation to and from school and computer access (Gentry & Fugate, 2012) as well as modern conveniences such as running water and electricity are not always available on Native American reservations (DeVries & Golon, 2021). Additionally, Gentry & Fugate (2012) identify educational barriers due to the lack of teacher understanding of cultural and traditional differences, communicational styles, and learning preferences contributing to the underrepresentation and underdevelopment of Native American gifted students.

Gifted students and risks of being underserved

Dropout and incarceration of gifted students is still being debated as studies vary on percentages (Landis & Rechley, 2013). A study on gifted delinquent students conducted in the Arapahoe County juvenile court system, brought to light that "15 percent of incarcerated youth tested in the top 3 percentile on standardized intelligence scales" (Silverman, 2004, p.1). Silverman suggests, based on her studies, that the percentage of gifted incarcerated youth might be as high as 25% but it is hard to get an exact figure as these children are often unrecognized as gifted and talented.

Landis and Rechley (2013) state that "those identified as gifted is a puzzling irony for educators" because gifted students demonstrate high academic potential but underachieving gifted students are less likely to be referred by teachers (p. 221). The authors assert dropout rates of gifted youth is a national concern as it can lead to negative outcomes such as reduced earnings and increased need for government assistance. Hanover Research Center published a study in 2015 that looked at the reasons why gifted students drop-out of school, strategies to prevent dropout rates, and ways to engage gifted learners in school. The report incorporated research from Joseph Renzulli and Sunghee Park conducted in 2002 that identified the characteristics of gifted students that dropped out of school to determine the reasons they did so. The findings showed gifted students who dropped out of school fit into the following categories:

- Gifted students from low SES families;
- Racially and culturally diverse students, especially Hispanic and Native Americans;
- Gifted students whose parents have low levels of education;
- Students who participated less in extracurricular activities;
- Gifted students who have low educational aspirations; and,
- Gifted students who have a child or are expecting a child (Hanover Research Center, 2015, p. 7).

However, the research also indicates that among gifted children, higher socioeconomic level students also drop out at higher rates due to underachievement, identity development, and a perceived hostile school environment. Some experts estimate that approximately 18 percent of gifted students drop-out of school, others assert that dropout is "relatively uncommon among academically gifted learners" (Hanover Research Center, 2015, p. 6).

Teachers as the gate-keepers

The equitability of gifted identification has been a focus of debate. Questions such as, who is considered gifted, what models should educators use for identification, and how to recognize giftedness in an equitable way continue to be analyzed and discussed. “Most states require a teacher or parent referral as an initial step in their identification protocols, followed by further assessment for gifted services at multiple points across grades K–12” (Worrell et al., 2019, p. 561). Gifted student identification usually starts with the teacher as the “gate-keeper” referring a student through either an individual Student Assistance Team process (SAT) or through a “sweep” where teachers nominate the top students in their class for gifted testing. The problem with the teacher referral model is that teachers tend to overwhelmingly nominate students with high academic achievement and verbal skills. This leads to an underrepresentation of culturally and linguistically diverse students, and students from low-income families.

Card and Giuliano (2016) tested a hypothesis of universal screening (screening all students instead of a few who are hand-picked) in a large and diverse school district in Florida. In 2005, the district moved to a universal screening method occurring in first and second grades instead of the former method of using teacher and parent referrals. The number of gifted children identified through the universal screening method increased by large amounts. Card and Giuliano (2015) found that with no changes to gifted screening standards universal screening resulted in an increase of 180% among disadvantaged students being identified as gifted, with Hispanic students identification increasing 130% and Black students increasing 80%. This research led to three main conclusions. 1) universal screening programs led to increases in students identified as gifted, 2) the newly identified students were disproportionately poor, Black, and Hispanic, ELL, and from districts with higher proportions of minority and poor families, and 3) universal screening did not significantly change the distribution of IQ scores of identified students (Card & Giuliano, 2016). Unfortunately, budget cuts led to cuts in universal screening and the process did not continue in this district.

Another issue in the under-referral of minority students is in teacher nominations. The research shows that Asian and White students are more likely to be referred for gifted programs than Black and Latinx students. Low-income students also receive fewer referrals by teachers (Ecker-Lyster & Niileksela, 2017). This lower rate of referrals may be due to the teacher's negative attitudes and stereotyping of underprivileged and minority students. These negative attitudes or biases can be overt or subtle and often are unrecognized by the teacher. Elhoweris (2008) finds that negative teacher expectations of student performance have deleterious effects on teaching behavior and student test scores, behavior, and referrals. They cite research in which teachers looking at hypothetical student profiles referred students with no specified ethnicity at a slightly higher rate than those labeled African-American. Elhoweris argues that culturally diverse children benefit from teachers that present rich and powerful instruction and believe students are capable of grasping meaningful ideas. Therefore, teachers should broaden their perspectives, be aware of personal values, and investigate how their perspectives can impact economically disadvantaged, and culturally and linguistically different gifted children (Szymanski and Shaff, 2013).

In order for teacher referrals to be equitable, teachers need to understand the characteristics of culturally and linguistically diverse gifted children. Traditionally, teachers use academic abilities in reading, mathematics, vocabulary and writing to identify gifted students and are unaware of other gifted abilities such as non-verbal intelligence and creative thinking skills. Rimm et al. (2018) identify barriers for gifted identification. One of the barriers being that even the categorization of gifted as a “single population” fails to show the diversity of gifted students (p. 104).

Teachers may be unaware that academic achievement scores are only one component to identifying giftedness. Rimm et al., (2018) research shows that many gifted children are underachievers, do poorly on academic tests, have twice exceptionalities, or show other behaviors that do not coincide with teachers’ perception of giftedness. In fact, teacher nominations as the sole gate-keeper to gifted testing has been shown to be “a highly suspect and invalid identification strategy” (p.

269) even though it is a popular method. The authors contend that teachers tend to overwhelmingly nominate "teacher pleasers" who appear nicely dressed, clean and speak middle-class English (p. 268). These students turn in complete, neat work in a timely manner. These students are high-achievers but not necessarily gifted. Conversely, the authors note that African American, Hispanic American, and Native American students are often disadvantaged in the nomination and referral process.

Gifted screening

Various protocols have been utilized to support teachers in referring students to gifted education that make referrals more equitable. One such protocol is the Scales for Rating Behavioral Characteristics of Superior Students created by Joseph Renzulli. The scales were created to help teachers identify students' characteristics in a variety of gifted abilities including mathematics, reading, science, creativity, dramatics, arts, leadership, and technology (Renzulli, et al., 2010). This form helps establish local norms and aids in identifying students that might not be referred because of academic scores.

Another well used observation tool used by some school districts is the Teacher's Observation of Potential in Students (TOPS). According to Rimm et al. (2018), TOPS was designed to observe the academic strengths of 5-9 year-old students of color. TOPS is part of a comprehensive approach to identifying gifted and talented students while recognizing that non-teacher pleasing behavior might influence teacher nominations. There are nine organized domains in TOPS: Learns easily, shows advanced skills, displays curiosity and creativity, has strong interests, shows advanced reasoning and creativity, shows advanced reasoning and problem solving, displays spatial abilities, shows motivation, shows social perceptiveness, and displays leadership.

The HOPE Teacher Rating Scale, created by researchers at Purdue University, was designed to help identify gifted and talented students. The HOPE scale would ideally be used through universal screening by classroom teachers and was originally part of "a 3-year project designed to identify and serve high-potential students from low-income families in out-of-school enrichment programs" (Gentry et al., 2015, p. 3). Later the screener was used as part of a project for serving gifted Native American youth in grades 5–12 on four different reservations. The creators advocate use of the HOPE scale as a culturally and economically sensitive screener in order to be as equitable as possible in the identification of gifted students.

Teacher gifted rating scales have several purposes. An important first step in identifying students with giftedness is through the teacher referral process. As noted earlier, the referral process for gifted education can have underlying biases that lead to the underrepresentation of culturally, economically and linguistically diverse (CLD) students (Yoon & Gentry, 2009). Wright et al. (2017) states that teachers' deficit thinking, i.e., recognizing cultural differences but with the viewpoint that these cultural norms are student deficits, are a primary contributing factor for under referral, screening, and placement of CLD students. Deficit thinking could lead to fewer teacher gifted screening referrals for CLD students due to a perceived belief that culturally different communication and learning styles are a disadvantage to learning.

The gifted rating scales can help teachers identify and refer students that might not otherwise be noticed as gifted, including students with creative and non-academic talents (Rimm et al., 2018). As an example, Westberg (2012) discusses a student, not proficient in English, who did not qualify for gifted nomination based on standardized test scores. However, he did qualify after the committee examined his creativity and motivation scale scores completed by his classroom teacher as well as work samples. Westberg (2012) researched several teacher rating scales for gifted identification and concluded that while there are questions on the validity and reliability of teacher judgment, teachers can provide valuable information on students' characteristics and behavior not measured in a test. However, the author cautions against using one sole measure for gifted identification, whether a standard test score or a teacher rating scale.

Identification: Traditional vs alternative protocols

Identification procedures for gifted education have not been explicit. State laws vary in identifying students, leading to too much interpretation. “In the last thirty years, theories of giftedness have expanded from an IQ-only based pedagogy to include: task commitment, motivation, creativity, multiple intelligences, talent development vs. natural ability, and practical intelligence” (Durtschi, 2019, p. 20). Hodges et al. (2018) conducted a meta-analysis of gifted and talented identification processes based on 54 studies and 191,287,563 students. The studies found that Black, Hispanic, and Native American students are underrepresented in gifted identification due in part to the over use of traditional identification methods such as IQ tests and standardized testing. The authors’ findings provide evidence that non-traditional identification methods such as non-verbal tests, student portfolios and affective checklists help narrow the underrepresentation gap although the findings also showed these methods did not fully close the gap and there is still a need for better identification methods.

Renzulli (1978), as cited in Hodges et al. (2018), initially highlighted the need to consider gifted behaviors and characteristics for the identification of giftedness and not solely rely on performance and cognitive ability tests such as IQ. Rimm et al. (2018) similarly advocates caution when using IQ scores for cultural, linguistic and economically disadvantaged students. “Consider that educated families spend dozens of hours familiarizing their children with learning tasks that are often similar to IQ test items (p. 268)”. For students that come from culturally and linguistically diverse backgrounds, IQ scores can be a misleading measure of student potential. Hodges et al. (2018) found that 43 of the 50 states' definitions of "giftedness" emphasized intellectual and academic abilities, while only 25 emphasized potential abilities.This information shows that most schools rely on traditional test scores to identify students as gifted.

Some states have moved towards a comprehensive matrix-identification model including data from varying sources such as cognitive ability, achievement, creativity, motivation, observations, and student and parent input. An example of a matrix-identification model is the Frasier Talent Developmental Profile 2 (FTAP-2 now called TAPAS). FTAP-2 is an assessment protocol created by Geoffrey Moon for use in New Mexico public schools as an alternative to the IQ and academic-based only gifted testing. Moon was interviewed by the North American Journal of Psychology in 2013 and explained that the FTAP-2 is used for alternative assessment of intellectual ability for gifted identification “to evaluate students who have been determined to have socioeconomic disadvantages, disabilities, cultural differences, or language barriers that would interfere with their ability to perform on individually administered tests” (Greathouse & Shaughnessy, 2013, p. 367). Moon, an advocate for underrepresented gifted populations, states that no one test is perfect because gifted students have a range of profiles and multiple data points must be considered. In the interview, Moon discusses the necessary criteria for a protocol to evaluate students who are determined to have factors that might interfere with ability to perform on individual tests, stating:

> The protocol needs to find students who have high intellectual potential as compared to students with similar backgrounds. Success is ultimately measured by comparing the proportions of students from various backgrounds who are qualified by the protocol, and by whether the protocol-identified students develop in a way that reflects intellectual potential. (Greathouse & Shaughnessy, 2013, p.368)

Moon also supports some flexibility for administrators using the protocol in determining giftedness when factors that might limit previous learning opportunities or jeopardize the fairness of standard assessment practices are present. Alternative protocols help identify students that would not otherwise qualify for gifted services. Moon asks, “Since the risks involved in identifying a student for gifted education and talent development are low, and the risks involved in failing to identify are comparatively high, I think a relatively small burden of proof should be applied” (Greathouse & Shaughnessy, 2013). Moon also emphasized that he believes strongly that gifted students “should be

identified in equal proportions across demographic subgroups" (Greathouse & Shaughnessy, 2013, p.374).

The FTAP-2 protocol is administered after teachers have nominated students for gifted screening. Teacher nominations can be helpful but also very unreliable in itself. Teachers, without proper training, tend to confuse high-achieving students with gifted students, referring students with high verbal skills in English and test-taking ability. This is why it is imperative that teachers receive training in gifted characteristics and protocols. Without proper training on identifying gifted characteristics, screening tools such as the FTAP-2 will not close the gap for underrepresented gifted students. Other researchers, such as Card and Guiliano (2016), emphasize use of universal screening as being more important than a specific choice of screening tool. Lakin (2016) asserts that "any good ability assessment" should result in higher rates of identification of underrepresented groups (p. 8).

Teacher professional development

Along with gifted rating scales, teachers who identify and work with gifted students (which could include most classroom teachers) need training on how to screen and nominate gifted students, including how criteria is determined and the screening administration process. Such training would include identifying and understanding gifted characteristics, especially in underrepresented populations. Szymanski and Shaff (2013) studied teacher beliefs about gifted students, finding that the dominating belief was that gifted students learn quickly, retain considerable general knowledge, and that students with a lot of energy and who give unexpected, sometimes 'smart-aleck answers' could not be gifted.

Teachers may have good intentions to develop potential in students but do not necessarily have the skills to identify those who are gifted and talented. Szymanski and Shaff (2013) discuss the disconnect between pre-service teacher training in multicultural education and working with gifted and talented students. Siegle et. al (2010), researched the importance of gifted teacher training that educates teachers to investigate personal "beliefs, stereotypes, biases, and expectations that influence their selection of students for gifted and talented programs (p.338)".

Szymanski and Shaff, (2013) point to the overwhelming majority of teachers in elementary education that are White, middle-class females, as those making referrals for gifted students, and who may have an inadequate understanding of racial and cultural differences. The authors further state that pre-service gifted education does well in providing teachers with understanding gifted characteristics although it does not do enough to teach about the needs of multicultural gifted students. "Likewise, multicultural education courses that focus on developing competencies for working with culturally, linguistically, and ethnically diverse students rarely mention the needs of gifted students" (Szymanski and Shaff, 2013, p. 6). Professional development opportunities for gifted education, identification, and the needs of underrepresented gifted students are lacking in pre-service teaching programs and in school systems. The NAGC (2015) reports that only five states require professional development in gifted education for general education teachers but did not specify a set number of hours.. With teachers as the gate-keepers of the referral process, it is crucial that teachers are provided training in how to identify multicultural biases in regards to gifted students.

Defining giftedness: More than academics

In order to close the gap in gifted education to include more underrepresented populations, the definition of giftedness must be understood as more than high academic accomplishments. Some states such as Colorado, Iowa, and Maryland, have expanded the definition of giftedness to include creativity and leadership skills while Washington has explicit language that incorporates differences in socioeconomic status (NAGC, 2015). Hopefully more states follow suit in recognizing and utilizing identification methods that close the underrepresented gifted gap. Rimm et al. (2018) states, "Identification must be based on superior potential instead of superior performance" and notes that at

least 19 States now “advocate the use of multiple criteria for the identification of gifted students” (p. 266). Some states in the U.S. are adopting a more comprehensive approach to gifted testing by using non-verbal intelligence measures. These measures are more inclusive of cultural differences because they emphasize "fluid reasoning ability" that is less dependent on language and academics (Ecker-Lyster & Niileksela, 2017, p. 81).

The question that must be asked is what is gifted? Creative/divergent thinking giftedness is often overlooked in gifted identification. The Torrance Tests created by E. Paul Torrance, measures creativity and how a child’s mind works. It is important to note that high creativity does not always mean high achievement (Rimm et al., 2018) and highly creative children can struggle with conformity and impulsivity. The Torrance tests should never exclude a child from gifted services but may be a way to identify a child that might not have been identified as gifted using other measures. This is important when identifying culturally and linguistically gifted students and students that are nonconforming or resistant to teacher behavior expectations.

Native American students are a population that is underrepresented and underidentified in gifted education. Gentry and Fugate (2012) researched Native American gifted students and state, “the sad truth is that very little energy, resources, and focus have been given to discovering and developing giftedness, creativity, and talent among Native American populations” (p. 10). While many Native American students struggle with reading and writing (some speaking mixtures of English and their Native language), DeVries and Golon (2021) note, “Many of these students have been identified as gifted, particularly in the area of spatial intelligence, and have obtained IQ scores in the gifted range” (p. 50). High secondary school drop-out rates in Native American populations indicate the importance of better meeting their learning needs, including recognizing and identifying Native American giftedness and talents (Siegle et al., 2016).

Many Native Americans meet the federal definition of giftedness if educators are sufficiently trained in characteristics to look for and refer these students for gifted screening. Gentry and Fugate (2012) argue that for Native American youth “specific considerations should be given to develop spiritualistic, naturalistic, leadership, visual/spatial, artistic, musical, creative problem solving, and communication (naat’ aanii) strengths” (p. 10). Siegle et al. (2016) writes:

> Native American students process information in a distinct and unique manner that is not effectively engaged in the traditional sequential and analytical learning model set forth by most schools and curriculum providers. . . . A global and relational instructional style more effectively engages Native American students with a variety of choices in individual learning, use of examples from contemporary Native American life, and real world application of ideas and skills (p. 109).

Gentry et al. (2014) researched Native American students from the Diné, Lakota, and Ojibwe tribes with the purpose of challenging assumptions and misconceptions to create new understanding in order to develop and cultivate gifts and talents. The authors’ research focused on literature-based assumptions and misconceptions on communication and learning styles of Native American youth and advocates for programs and curriculum that is tied to culture, learning preferences, and cognitive styles. Both Gentry et al. (2014) and DeVries and Golon (2021) discuss Navajo students that appear to fail in academic areas but show gifted abilities in visual-spatial intelligence. DeVries and Golon (2021), in their research in Page, Arizona, found 80% of Native American gifted youth possessed high levels of visual-spatial intelligence. Their research showed that traditionally many Native American languages did not have a form of written language and instead knowledge was passed on through storytelling. The authors suggest that teachers understand and utilize visual-spatial classroom strategies such as introducing the big-picture of a lesson first, hands-on activities, and whole word/visualization instead of a phonetics-based only approach to reading.

Gentry et al. (2014) states that many Lakota and Diné students are referred for Special Education due to lack of communication norms instead of valued for their non-verbal strengths.

Communication, sending and receiving messages, is deeply affected by culture and fall along continuums from direct to indirect and non-verbal to verbal (Ford et al., 2004). Gubbins et al. (2018) list communication skills such as asking questions, initiating conversations or activities, being assertive, and contributing to class conversations, that are often used as measures of intelligence on gifted rating scales. They argue, however, that these communication behaviors are not culturally appropriate for all students and not necessarily an indicator of learning potential or giftedness.

One way that teachers can develop gifts and talents in diverse cultures is to understand learning preferences. For example, Native American students prefer sharing and cooperative learning, Navajo children prefer to watch before engaging in active participation (Gentry et al., 2014). DeVries and Golon (2021) assert that when teachers use curricula that are inclusive to the learning preferences of diverse learners, education becomes more relevant and meaningful to the individual learner.

Retention of underrepresented gifted students

Much attention and research has been conducted on the need for culturally sensitive instruments for referring and recruitment of gifted students. Another area that needs to be addressed is retention of culturally and linguistically diverse students once they are determined to be gifted. Ford and Whiting (2011) discuss the underrepresentation of African American youth in gifted education with the focus on the unique challenges this population faces in gifted and AP classes. The authors assert that CLD "students can only improve when educational professionals focus on the twin and inseparable goals of increasing recruitment and retention" (p.132). Ford and Whiting (2011) researched African American gifted youth and found that social issues, peer pressure, and racial identity played a large role in dropping out of gifted programs. The authors found evidence that some African American students chose to not participate in gifted or advanced classes because of social, emotional, and psychological reasons. Additionally, the authors found that some African American males will underachieve in order to not appear as "acting White", a myth, Ford and Whiting explain, that if students of color are intelligent, academically advanced, speak standard English, and are high-achievers, they are somehow rejecting their culture. Some students, due to peer and societal pressure, underachieve to avoid being this label.

Ford and Whiting suggest that schools offer multicultural counseling for CLD gifted students, mentors and role models, multicultural training for educators, and a multicultural curriculum. Students will leave gifted programs, AP courses, and other advanced academic clubs and activities when students feel they are in the minority. Additionally, the authors point to teachers (and parents) that may misinterpret any lower grades received by Black students as a message of "I don't want to be here,". This may lead to fewer referrals of Black students into gifted and advanced classes or programs, further intensifying the stereotype of the CLD student.

Conclusion

In the State of the States in Gifted Education (NAGC, 2015), the report lists responses from states on changes in state rules and regulations impacting gifted education. Out of the 33 states with administrators that replied, 30 responded that changes in funding, program initiatives, or additional training were implemented. Some states have added initiatives to support underrepresented gifted populations and work with ELL and low-income programs. Recognizing that there are populations that are underrepresented in gifted education is the first step to closing the existing gap. The second step is to take action to remedy the problem. Gifted education classes need to look like the changing demographics of the students in the schools. With the changing demographics in U.S. schools, more Black and Brown students should be in gifted programs and attending AP courses. Some states are making progress towards a more inclusive gifted education.

An important part of gifted education is recruiting and identifying students who are gifted. Traditionally, this has been a process looking at academic test scores and teacher nominations to decide which children are screened and tested for giftedness. Research shows that CLD students are underrepresented in gifted education and therefore concludes that there are flaws in the referral and

identification process. As long as teachers are the gate-keepers, deciding who to refer for gifted screening, there will continue to be a gap between White and minority students due to intentional or unintentional bias. Without proper training and culturally sensitive screeners, teachers will continue to nominate students perceived to be gifted. These will be the students with the highest test scores, who behave well in school, turn in work in a timely manner, and speak middle-class English. Teachers may not be aware of biases in gifted nominations without training on gifted characteristics, behaviors, bias training, utilizing gifted screeners, and multicultural education focused on the gifted learner.

One way to ensure the recruitment process does not continue to miss minority students is to use a universal screening process. Universal screening is an attempt to systematize identifying who might be gifted irrelevant of the child's behavior, socio-economic, racial, and ethnic status (Card and Giuliano, 2016). Using a universal screening process where all students in a grade level are screened for gifted instead of a teacher nomination process, takes away any chance of bias by the teacher. Universal screening, however, is not practiced in many districts because it is more costly and time consuming.

Once students are referred and screened for giftedness, assessments must use a comprehensive approach that considers the gifted abilities of CLD students. Gifted assessments such as the FTAP-2 (now TAPAS), are alternative protocols that go beyond traditional verbal testing and IQ scores. These more holistic approaches to gifted testing utilize multiple data points and consider factors that might limit previous opportunities to learn or jeopardize fairness of standard assessment practices.

It is not enough to identify students as gifted but educators must find ways to retain underrepresented students in gifted programs. Sewell and Goings, (2019) point to the importance of making gifted environments more culturally relevant and responsive. The authors advocate for culturally affirming gifted programs in K-12 that support students academically, socially, and culturally in order for students to feel valued. Mentorship programs and culturally sensitive curriculum are two ways to support underrepresented students in gifted programs.

Why is it so important that educators tackle the issues surrounding equity in gifted programs? When looking at a societal level, the same demographics of students that are underrepresented in gifted education are also overrepresented in dropout rates, incarceration, low secondary education enrollment, and underrepresented in STEM professions. Gifted students can be the underachievers in society or they could become the next generation of inventors, artists, mathematicians, historians, writers, scientists and creators.

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