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THE GAP IN GIFTED EDUCATION: CAN UNIVERSAL SCREENING NARROW IT?

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Although gifted education can make a critical difference in students' lives, many American pupils who would benefit from this type of education do not get placed in gifted programs. Low-income students of color experience this problem more often than other children. This article offers various reasons for the underrepresentation of students of color in gifted education in the United States. It focuses on how universal screening works and mentions how this method needs to be implemented to increase the percentage of low-income, high-ability students in gifted education.

Although gifted education can benefit children in many ways, students of color in the United States are underrepresented in gifted programs. For example, at the elementary and middle school levels, recent research found that although African American students constituted 15% of the student population, only 10% of these pupils were enrolled in gifted programs. And even though Hispanic students accounted for 27.6% of the student population, only 20.8% of them were enrolled. In contrast, although white students constituted 47.9% of the student population, 55.2% of them were enrolled in these programs (Yaluma & Tyner, 2018).

A variety of causes lead to this concern. This article focuses on reducing this problem by increasing the use of universal screening to place students in gifted programs. It includes details on how universal screening works and how this method needs to be implemented to increase the percentage of low-income and minority students in gifted education.

The Outcomes of the Problem

Less Preparation for College

Failing to place low-income, high-ability students in a program that matches their abilities can harm them. For example, Hébert (2018) mentioned that one of the factors associated with success in college relates to the academic rigor students experience in high school. Some of this rigor involves taking Advanced Placement (AP) classes. Many low-income students of color are first-generation college students who are less prepared academically for college, in part because they experience less academic rigor in high schools than their more privileged peers. This trend contributes to the disproportionate number of these students who drop out of college (Hébert, 2018).

Lack of Stimulation

When high-ability students do not experience a stimulating environment, they often struggle in school, distract other students, and perform poor academic work (Kautz,

2017; Morgan, 2019). These pupils might get teased for being different, and they may appear to be unmotivated to their teachers. They frequently act out or misbehave because they are bored and frustrated as a result of a mismatch between their intellectual needs and the level at which they are receiving instruction (Brown, 2017).

Gifted Education

Benefits of Gifted Education

Gifted education can reduce this poor conduct as a result of offering an environment that better matches students' talents. Although research on gifted education yields mixed results (Finn & Wright, 2015), it is associated with improvement in motivation, academic performance, and engagement with learning (Grissom & Redding, 2016).

One reason gifted programs can benefit high-ability students involves the stimulating environment these programs promote. Such an environment is necessary for students' brains to make enough of the chemicals needed for learning, including dopamine, noradrenalin, and serotonin (Morgan, 2014; Oktac, Roa, & Rodríguez-Andrade, 2011).

Methods of Identification and Placement

One of the reasons data is mixed on the outcomes of gifted education is that there is a lack of consensus on how to identify high-ability students and how to place them in programs that match their talents. Each U.S. state has its own definition of gifted students. For example, while Indiana does not limit the abilities students may display to be considered high-ability learners, Kansas restricts its definition to intellectual ability (Finn & Wright, 2015). In addition, a wide variety of ways to separate high-ability students exist. Finn and Wright identified the following approaches to separating high-ability learners:

- **Acceleration.** Students might be placed in classes with students in a higher grade, or they might skip an entire grade altogether, advancing from the fifth grade, for example, to the seventh grade.
- **Complete separation.** Students attend a school within a school or a separate school. Examples of such schools include the Cincinnati Gifted Academy and Austin's Kealing Middle School.
- **Full-time "pull-out" classes.** These programs are somewhat similar to separate schools because they group high-ability students together for all of the academic curriculum. However, such programs allow these students to be with non-gifted students in homeroom and for non-academic subjects, such as physical education.
- **Part-time "pull-out" classes.** These programs allow high-ability students to take classes with other advanced students for part of the day or week. Students may take AP classes or participate in enrichment periods in which they partake in individual research projects.
- **Supplementation.** These types of programs are frequently organized not by schools but by other organizations. Students typically participate on weekends, during vacation, or after school. They may take a robotics workshop or join a university program or a science fair.

Although not enough is known about which programs are most beneficial, Finn and Wright (2015) say that acceleration generally leads to academic gains but may have social side effects as a result of limiting the time students spend with peers of the same age. However, these effects are usually harmless.

Causes of the Underrepresentation of Students of Color

Inequalities in Wealth

Inequalities in wealth contribute to the underrepresentation of low-income students in gifted education in several ways. Wealthy parents have more options for placing their kids in a gifted program. In some states, for instance, some parents can afford to pay for an IQ test that makes it possible for their child to enroll. This test costs about \$300 to \$500 in Florida. Parents sometimes pay this fee when their children are too young to receive the tests their school districts offer. In Palm Beach County, although white students constituted only 33% of the elementary school population during a recent school year, 70% of white kindergarteners were identified as gifted (Isger, 2016).

Virginia is another state where wealth makes it easier to place a child in a gifted program. In Fairfax County, parents can appeal when their child is determined to be ineligible for such a program. However, for a psychologist to reassess a child, a fee of \$500 or more needs to be paid. A more important reason minority parents fail to take advantage of the appeal process in this county involves their lack of awareness of how to navigate the system (Balingit, 2018).

Minority families often have fewer contacts from more privileged groups, limiting the access to information that wealthier white families have (Grissom & Redding, 2016). Their lower social capital prevents them from benefiting from the methods that white families use. In Fairfax County, for example, this circumstance appears to prevent many African American and Hispanic parents from taking advantage of the appeal process. In the past decade, less than 50 black and Hispanic second graders were admitted through this process, an astonishingly low number considering that a total of 1,737 second-graders were placed in gifted education through this method (Balingit, 2018).

Unfortunately, the income gap between black and white Americans and the one between Hispanic and white Americans is large. In fact, this gap is almost as large today as it was five decades ago (Campos, 2017). In 2017, the *New York Times* reported that for every \$100 white families earned in America, black families earned only \$57.30 (Badger, 2017).

Lack of Minority Teachers

In addition to the effects of income inequality, the lack of teachers of color contributes to the problem. Even when students of color meet crucial requirements for gifted services, they are generally less likely to be identified as gifted, in part because the process involves teacher referrals. The shortage of African American and Hispanic teachers is a factor because teachers of the same race as their students tend to believe their students are gifted more often than teachers of a different race. Research on this topic shows that schools with more African American and Hispanic teachers are likely to recommend higher proportions of students of color in gifted-and-talented programs (Grissom & Redding, 2016). One reason for this trend is that teachers of color tend to be more aware of the cultural characteristics of students of the same race than teachers of a different race. Without this knowledge, teachers are more likely to use ineffective methods with their students (Gollnick & Chinn, 2013).

Unfortunately, the hiring of minority teachers has not kept up with the growth of students of color. The Albert Shanker Institute (2015) reported that although in 2011-12 minority elementary and secondary students comprised over 40% of all elementary and secondary students, minority elementary and secondary teachers constituted less than 20% of all teachers.

Poor Methods of Identifying Low-Income Students

Another cause of the underrepresentation of students of color in gifted education involves inadequate identification methods. School personnel usually view performance on achievement tests as the sole reason to place students in gifted education as they ignore low-income students' potential to achieve (Olszewski-Kubilius & Clarenbach, 2012). Although schools have increased the use of a variety of factors for identifying giftedness, such as artistic talent and creativity, the main method is academic ability (Grissom & Redding, 2016). This process is discriminatory. Many low-income, high-ability students perform poorly on tests as a result of out-of-school factors and do not get placed in gifted education even though they have above average learning ability.

Harsh Living Conditions

As a result of harsh living conditions, low-income students frequently live in a less stimulating environment. They also tend to eat less nutritious food (Olszewski-Kubilius & Corwith, 2018). The way these children interact with parents usually contributes to poor literacy development (Sparks, 2015). And poor nutrition does not provide them with the energy needed to learn at an optimal level (Burrows, Whatnall, Patterson, & Hutchesson, 2017). Educators therefore need to consider the impact of out-of-school factors. A more authentic method than the use of tests to determine academic ability is to first expose children to a challenging learning environment to assess their learning potential. In too many cases, schools use a process that focuses on students' weaknesses instead of the strengths they bring to school (Olszewski-Kubilius & Clarenbach, 2012).

Failing to consider how powerful out-of-school factors can be in impeding academic achievement and perceiving low-income

students as lacking interest is a major barrier to the identification of low-income, high-ability students. This problem is possibly the most significant reason for not placing more of them in gifted classes and is sometimes described as "deficit thinking." It occurs when teachers believe that differences in language or culture are signs of inferiority instead of out-of-school factors. Rather than emphasize students' strengths, this kind of thinking focuses on their weaknesses (Olszewski-Kubilius & Clarenbach, 2012).

Methods of Placing Students in Gifted Programs

Teacher and Parent Referrals

Although the low percentage of students of color in gifted education is a complex issue with multiple causes, one way to minimize this problem is by implementing universal screening. This method can be a powerful way to reduce the bias associated with selecting low-income students for gifted education. Unfortunately, instead of implementing this method, schools usually use a referral-based system that starts when teachers or parents nominate students (Hamilton et al., 2018).

The referral-based system could lead to bias for a few reasons. First, some teachers may use their middle class values to determine giftedness. But these values frequently do not align with the behaviors low-income students exhibit, leading to reduced rates of referrals for these students (Hamilton et al., 2018). In addition, the lack of teachers of color is a factor because such teachers tend to hold higher expectations of students of color than white teachers do (Ford, Grantham, & Whiting, 2008; Gershenson, Holt, & Papageorge, 2016). This is an important difference because low teacher expectations are strongly associated with the underrepresentation of minority students in gifted programs (Ford, Grantham, & Whiting, 2008). Further, parent nomination may contribute to bias because

parental involvement in schools, awareness of school services, and initiative vary among parents from different socioeconomic and racial groups (Lakin, 2016). Researchers generally agree that low-income parents are less involved in improving their children's academic success than their high-income counterparts (Smith, 2006).

Universal Screening

The use of a universal screening process for talent can reduce the bias associated with the referral-based system because universal screening is based on testing *all* students rather than relying on teacher or parent recommendations. Although this approach requires more time and money, it typically reduces the number of low-income students who are not identified to be placed in a gifted program even though they deserve it. In fact, two notable researchers with expertise in gifted education recently mentioned that using universal screening is one of the clearest steps for improving gifted programs for underprivileged students (Plucker & Peters, 2018).

Research on Universal Screening

Research on universal screening suggests that it can dramatically increase the proportion of students of color in gifted education. One of the most important studies conducted on this topic occurred when this method was implemented with second graders at a large urban school district. The Naglieri Nonverbal Ability Test (NNAT) was used for screening. And lower cutoff scores for English Language Learners and students eligible for free-or-reduced lunch determined whether a district psychologist would assess them further with an IQ test. One important goal of this study was to increase the number of IQ tests the district psychologists would perform (Card & Giuliano, 2015).

Before the use of the universal screening program, students were identified through parent and teacher referrals. After the program

was implemented, large increases occurred in the proportion of minority students placed in gifted programs without changing the standards for gifted eligibility. The program led to a 130% increase in the gifted rate for Hispanic students and to an 80% increase for black students. The findings of this study suggested that teachers and parents frequently fail to recognize the learning potential of low-income and minority children (Card & Giuliano, 2015).

One of the advantages of universal screening is that it promotes the use of local norms as a result of gathering data on all students. This occurs because students from the same school or district are increasingly compared with each other rather than with those across the nation or the state. When high-poverty schools use national or state norms, it often leads to the identification of students who are not representative of the district or school population. However, when local norms are used, more low-income students from underrepresented groups tend to be identified (Plucker & Peters, 2018). Peters and Gentry (2012) found that local norms increased the percentages of underserved children who were identified as gifted.

Limitations of Universal Screening

Although universal screening is a promising method, many schools may not be able to use this approach because it is costly. Since universal screening leads more students to be identified for IQ testing, schools have to pay more for the resources needed to test these students. Card and Giuliano (2015) mentioned that the costs of these tests are high, since each test takes about 3 hours to complete. In fact, as a result of a budget crisis, the district where they conducted their study discontinued the payments to the testing staff, leading to a sharp decline in the proportion of children placed in gifted education.

Further, universal screening can be implemented poorly. The best-case scenario is to offer every student the 3-hour IQ test. Since schools do not have the budget to proceed this way, they use either the referral method or a screening test to determine who gets tested. However, a screening test may not benefit low-income students unless the appropriate steps are taken.

The effectiveness of a universal screening test depends on its validity and its cutoff. Its validity involves the relationship between the screening test and the confirmatory assessment. Its cutoff is the score required to take the confirmatory assessment. If the cutoff score is low and the nomination validity is high, the nomination process is beneficial because the screening process saves cost and places qualified students in gifted programs. However, when the cutoff is high and the validity is low, more chances exist for biased placement (Mcbee, 2016).

The district in the Card and Giuliano study increased the percentage of minority students placed in gifted education because it improved the nomination validity. This occurred as a result of using the NNAT, a test that assesses similar cognitive abilities to those as the confirmatory assessment. In contrast, allowing parents or teachers to nominate students can be viewed as a screening process with low validity (Mcbee, 2016). Since the Card and Giuliano study investigated the use of a test that increased nomination validity and since it led to an increase in the identification of students of color for IQ testing, universal screening was implemented well in this case. However, universal screening can be of no value for increasing underrepresented students in gifted education if implemented with high cutoff scores and low nomination validity.

Conclusion

The underrepresentation of low-income students of color in gifted education is a serious problem that needs to be addressed. According to recent statistics, a large percentage of students (about 51%) in public schools come from low-income households (Hamilton et al., 2018). Failing to place low-income, high-ability students in gifted education programs reduces their chances of academic success in later years.

A variety of causes contribute to this problem, including a shortage of teachers of color, poverty, and biased methods of identifying students. Inequalities in wealth and poverty, for example, are associated with limited parental spending, lack of access to learning material, and limited word exposure, especially when students are not in school. These conditions lead many low-income students to be behind academically when they start school. And they often stay on a low track in later years, in part because the schools they attend are usually inferior in quality (Morgan, 2018).

Although the research on tracking is mixed, studies show that it has a positive effect on academically talented learners who receive an accelerated curriculum. Unfortunately, high-ability students of color from low-income households are less likely to be enrolled in rigorous classes when compared with their wealthier counterparts, reducing their chances of doing well in college courses and lowering their chances of graduating (Olszewski-Kubilius & Corwith, 2018).

One of the ways to place more low-income, high-ability students in gifted education is by implementing a universal screening program. Although concerns exist about the cost and time to use this method, any district with a genuine desire to place its talented students equitably in gifted programs should consider this approach. Such districts need to ensure that this method is implemented well.

To do this, the program needs to include a low cutoff and high nomination validity.

To address concerns relating to cost, Lakin (2016) recommended for universal testing to serve multiple purposes. For example, ability test data can benefit general classroom teachers by facilitating instructional differentiation for students with varying cognitive strengths and weaknesses. When testing is used in this manner, schools have more reasons to justify the expense and time taken for using universal screening. By implementing universal screening wisely, schools can improve the education of many students from low-income families. Such an approach will create more opportunities for these pupils to succeed in later years.

References

- Albert Shanker Institute. (2015). *The state of teacher diversity in American education*. Washington, DC: Albert Shanker Institute.
- Badger, E. (2017, September 18). Whites have huge wealth edge over blacks (but don't know it). *The New York Times*. Retrieved from <https://www.nytimes.com/interactive/2017/09/18/upshot/black-white-wealth-gap-perceptions.html>
- Balingit, M. (2018, September 3). Why are black and Hispanic students underrepresented in this Northern Virginia gifted program? *The Washington Post*. Retrieved from https://www.washingtonpost.com/local/education/why-are-black-and-hispanic-students-underrepresented-in-this-northern-virginia-gifted-program/2018/02/03/1c8cd98a-090f-11e8-b48c-b07fa957bd5_story.html?utm_term=.8fefe71731e0
- Brown, E. F. (2017). Serving gifted students in general ed classrooms. Washington, DC: National Association for Gifted Children. Retrieved from <https://www.nagc.org/blog/serving-gifted-students-general-ed-classrooms>
- Burrows, T. L., Whatnall, M. C., Patterson, A. J., & Hutchesson, M. J. (2017). Associations between dietary intake and academic achievement in college students: A systematic review. *Healthcare*, 5(4), 1-13.
- Compos, P. F. (2017, July 29). White economic privilege is alive and well. *The New York Times*. Retrieved from <https://www.nytimes.com/2017/07/29/opinion/sunday/black-income-white-privilege.html>
- Card, D., & Giuliano, L. (2015). *Can universal screening increase the representation of low income and minority students in gifted education?* Cambridge, MA: National Bureau of Economic Research. Retrieved from <http://www.nber.org/papers/w21519.pdf>
- Finn, C. E., & Wright, B. L. (2015). *Failing our brightest kids: The global challenge of educating high-ability students*. Cambridge, MA: Harvard Education Press.
- Ford, D. Y., Grantham, T. C., & Whiting, G. W. (2008). Culturally and linguistically diverse students in gifted education: Recruitment and retention issues. *Exceptional Children*, 74(3), 289-306.
- Gershenson, S., Holt, S. B., & Papageorge, N. (2016). Who believes in me? The effect of student-teacher demographic match on teacher expectations. *Economics of Education Review*, 52, 209-224.
- Gollnick, D. M., & Chinn, P. C. (2013). *Multicultural Education in a Pluralistic Society*. Upper Saddle River, NJ: Pearson Education.
- Grisson, J. A., & Redding, C. (2016). Discretion and disproportionality: Explaining the underrepresentation of high-achieving students of color in gifted Programs. *AERA Open*, 2(1), 1-25.
- Hamilton, R., McCoach, B. D., Tutwiler, S. M., Siegle, D., Gubbins, E. J., Callahan, C. M., Brodersen, A.V., & Mun, R. U. (2018). Disentangling the roles of institutional and individual poverty in the Identification of Gifted Students. *Gifted Child Quarterly*, 62(1), 6-24.
- Hébert, T. P. (2018). An examination of high-achieving first-generation college students from low-income backgrounds. *Gifted Child Quarterly*, 62(1), 96-110.
- Isger, S. (2016, August 13). Why gifted kindergarten is 70 percent white. *The Palm Beach Post*. Retrieved from <https://www.mypalmbeachpost.com/news/local-education/why-gifted-kindergarten-percent-white/XiKryBJ6KblTHNkdrSIuVM/>
- Kautz, J. M. (2017). No "gift" giving here: The inadequate gifted education programs in New York state and the need for gifted education reform. *Journal of Law & Policy*, 25(2), 687-721.
- Lakin, J. M. (2016). Universal screening and the representation of historically underrepresented minority students in gifted education: Minding the gaps in Card and Giuliano's research. *Journal of Advanced Academics*, 27(2), 139-149.
- McBee, M. T. (2016). What you don't look for, you won't find: A commentary on Card and Giuliano's examination of universal screening. *Journal of Advanced Academics*, 27(2), 131-138.
- Morgan, H. (2014). Maximizing student success with differentiated learning. *The Clearing House*, 87(1), 34-38.

- Morgan, H. (2018). *The world's highest-scoring students: How their nations led them to excellence*. New York: Peter Lang Publishing.
- Morgan, H. (2019). The lack of minority students in gifted education: Hiring more exemplary teachers of color can alleviate the problem. *The Clearing House*, 92(4-5), 156-162.
- Oktac, A., Roa, S., & Rodriguez-Andrade, M. O. (2011). Equity issues concerning gifted children in mathematics: A perspective from Mexico. In B. Atweh, M. Graven, W. Secada, & P. Valero (Eds.), *Mapping equity and quality in mathematics education* (pp. 351-364). New York: Springer.
- Olszewski-Kubilius, P., & Clarenbach, J. (2012). *Unlocking emergent talent: Supporting high achievement of low-income, high ability students*. Washington, DC: The National Association for Gifted Children.
- Olszewski-Kubilius, P., & Corwith, S. (2018). Poverty, academic achievement, and giftedness: A literature review. *Gifted Child Quarterly*, 62(1), 37-55.
- Peters, S. J., & Gentry, M. (2012). Group-specific norms and teacher rating scales: Implications for underrepresentation. *Journal of Advanced Academics*, 23(2), 125-144.
- Plucker, J. A., & Peters, S. J. (2018). Closing poverty-based excellence gaps: Conceptual, measurement, and educational issues. *Gifted Child Quarterly*, 62(1), 56-67.
- Smith, J. G. (2006). Parental involvement in education among low-income families: A case study. *School Community Journal*, 16(1), 43-56.
- Sparks, S. D. (2015, April 21). Key to vocabulary gap is quality of conversation, not dearth of words. *Education Week*. Retrieved from <https://www.edweek.org/ew/articles/2015/04/22/key-to-vocabulary-gap-is-quality-of.html>
- Yaluma, C. B., & Tyner, A. (2018, January). Is there a gifted gap? Gifted education in high-poverty schools. Washington, DC: Thomas B. Fordham Institute

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