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Gifted Education in the United States: Perspectives of Gender Equity

ABSTRACT. An overview of education for gifted and talented children and adolescents in the United States will be presented. Issues of gender equity will be discussed and suggestions for creating equal opportunities for all students will be outlined.

KEYWORDS: gender equity, gifted education, equal opportunity

Introduction

The National Association for Gifted Children in the United States estimates that approximately 6% of the population of school-age children should be identified as gifted. However, the percentage varies from school district to school district and from state to state; yet, it is most typically between 5-7%. This translates to about three million students in the public school system who need supplemental materials to learn at their high ability level in school. A larger percentage of males are identified as gifted and talented in the United States with many programs being 3:1 or 5:1 males to females (Prado & Wieczerkowski, 1990). This manuscript will discuss issues related to this specific population of children and adolescents and focus on gender equity issues among the public school system in the United States.

Myths about giftedness in the United States

It is often believed that children who are gifted and talented are bored by school. However, most individuals who are gifted are well adjusted to school and to the community around them. In addition, it is commonly believed that 3.5% of the population in the United States should be identified as gifted, but it actually depends on the definitions

used. In some school districts, just 1% of the population is identified as gifted whereas up to 6% can be identified in other school districts.

Another myth is that giftedness is a stable trait that is always consistent throughout life. However, some children who are gifted are not recognized as gifted until much later in life. Different factors can affect this such as the gender of the child, teacher knowledge of giftedness, resources available to identify and support those who gifted, and the personality of the child.

One final myth of giftedness in the United States is the belief that people who are gifted do everything well. While it is definitely true that people who are gifted have superior talents and abilities, it is evident that there are areas of strength and areas of weakness similar to someone who is not identified as gifted.

Defining giftedness

There are many words used to define someone who is gifted including precocious, insightful, genius, creative, and talented. Yet there has been debate on whether one is born gifted or whether giftedness is developed within a child. Many definitions in the United States focus only on a specific intelligence quotient as a result of performance on tests. For example, a student might need to achieve a score of at least 130 on an intelligence test such as the Wechsler Intelligence Scale – Revised (Vaughn, Bos & Schumm, 2013) for a school district to identify him/her as gifted. Although IQ tests have been proven to be culturally and linguistically unfair, many districts still use them to determine eligibility for gifted programs.

There is not one uniform definition for giftedness in the United States across the 50 states (Stephens & Karnes, 2000). However, it is important to determine which children need supplemental materials so that gifted programs and services can be developed and implemented. It is also interesting to determine the definition of giftedness and whether the definition is gender specific or if it can benefit one gender over the other.

The task force that created the Marland report in the early 1970s was the first committee to study the effectiveness of gifted programs in the United States. Besides citing many inadequacies of the current educational programming available for children who had already been identified as gifted and talented, the report's most instrumental contribution

was the first federal definition of giftedness. The following definition has been criticized for its inability to be easily applied to the school system and its lack of clarity in identifying who is truly gifted (Vaughn, Bos, & Schumm, 2013).

Gifted and talented children are those identified by professionally qualified persons who by virtue of outstanding abilities, are capable of high performance. These are children who require differentiated educational programs and/or services beyond those normally provided by the regular school program in order to realize their contribution to self and society. Children capable of high performance include those with demonstrated achievement and potential ability in the following areas:

- General intellectual ability,
- Specific academic aptitude,
- Creative or productive thinking,
- Leadership ability,
- Visual or performing arts,
- Psychomotor ability (Marland, 1972).

In 1978 the definition was altered with the removal of psychomotor ability. In 1988, the definition was adjusted as follows:

The term "gifted and talented students" means children and youth who give evidence of high-performance capability in areas such as intellectual, creative, artistic, or leadership capacity, or in specific academic fields, and who require services or activities not ordinarily provided by the school in order to fully develop such capabilities (Public Law 100-297, Title IV, Section 4103. Definitions).

In 1994 the definition was again amended and differed from previously used definitions in the United States by removing the term "gifted" and instead focusing on talents which would be more inclusive of both genders and children from diverse socio-economic backgrounds. The belief was that more children from underrepresented cultures and ethnicities would qualify for gifted and talented programs in the school districts.

Characteristics of students who are gifted and talented

Although children identified as gifted and talented possess different characteristics, there are some commonalities that educators can use to determine eligibility for special programming. These characteristics include intellectually gifted and creatively gifted or talented.

Children who are intellectually gifted tend to score high on standardized tests, yet think "outside of the box." They may hold a plethora of ideas and knowledge that can be expressed both orally and in written form in a fashion that far exceeds similar aged peers. Males tend to especially score high on math achievement assessments and have consistently scored higher than females in this area.

Children who are considered to be creatively gifted and talented will express their thoughts and ideas through the visual or performing arts. These children usually have an extraordinary amount of enthusiasm for the arts and must have an outlet to express this creativity. Thus, teachers who have children who are gifted creatively in their classes must give them many opportunities for interaction with others and supplemental resources to keep them from getting bored in the general education class.

Under-identification by group

Three groups of children are under-identified for gifted programs. The first group includes the children from minority groups. This underrepresentation is attributed to assessment tools and procedures that are normed on groups that do not include children from diverse cultural backgrounds. Schools and districts should make sure to identify other assessment tools rather than norm-referenced assessments so that students from diverse backgrounds who demonstrate high academic aptitude can also be included in gifted and talented programs in the United States. This issue of equity for educational opportunity will greatly enhance the lives of children from minority groups.

The second group of children who are under-identified for gifted programs are those with disabilities. Children in this group are often overlooked because they are receiving special education services so are not frequently considered to be intellectually or creatively gifted. However, in the United States, a small percentage of students may be considered to be "twice exceptional" which means that they are gifted as well as demonstrate a learning disability. Children and adolescents in this category can be artistically superior and demonstrate other types of talents.

The final group of children who are still under-identified are females. In the United States, the gap between the genders has narrowed in re-

cent years, yet there is still a smaller percentage of girls in gifted programs. One interesting finding is that girls who are early high achievers do tend to have diminishing giftedness as they enter adolescence and beyond (Vaughn, Bos, & Schumm, 2013). This will be discussed in subsequent sections as this must be addressed to level the playing field for girls who are identified as gifted and talented at an early age in the United States.

Influences of teachers' diagnoses of giftedness – impact on girls

Teachers have been proven to have more difficulty in identifying giftedness in girls rather than boys (Endepohis-Ulpe, 2008). Teacher nomination to gifted programs is an important factor in determining class placement for children in gifted programs. Unfortunately, evidence has been shown that the validity of teachers' judgments must be questioned (Rost & Hanses, 1997). In addition, parents judgments of their daughters' cognitive capabilities are also underestimated when compared to their sons' (Endepohis-Ulpe, 2008). If the perceptions of both teachers and parents toward girls who are gifted and talented can be adjusted, girls will have many more opportunities for success.

The critical feature in identifying a child as gifted and talented is demonstrating and submitting exemplary work in school. Children may be overlooked if they are not achieving to their full potential and are not submitting outstanding work, yet they may have and extraordinarily high intellect. Boys have tended to be high achievers in the mathematical arena (although girls are quickly catching up); thus, teachers may refer them to gifted and talented programs earlier.

Gender stereotypes by teachers in general may be partially to blame for more males than females in gifted and talented programs. These gender expectations tend to negatively influence females in the mathematics and science areas (Rustemeyer, Wilde, & Fischer, 2006). Thus, teachers may notice males more for their abilities in these areas. Teachers may also be more aware of boys who are gifted and talented because they are more likely to display behaviors that are less adaptive than girls when they are bored or unchallenged. Therefore, teachers may realize that a boy has already mastered the curriculum being taught if they are demonstrating behaviors that are not conducive to classroom learning.

These disruptions as well as possible increased aptitude in the areas of math and science may be two factors which explain why teachers refer males to gifted and talented programs more readily than females.

Models of gifted curriculum

Acceleration and enrichment

In the Unites States, models of curriculum for students who are gifted and talented vary widely. Individual states and schools have programs that are not aligned across the public school system. This freedom to address individual needs is beneficial for teachers and for students. Teachers can then address the differing needs of male and female students who may each have different levels of gifts and talents. Most programs use both acceleration of content as well as enrichment of the required content to address the needs of the students. Both of these programs benefit boys and girls equally if they are being identified and referred to gifted and talented programs equally.

Acceleration of the content enables students to demonstrate mastery on specific topics or units and more quickly complete grade level expectations than the students placed in general education. This can be done in a regular classroom or a classroom designated for students who are gifted and talented. There are two types of acceleration: student acceleration and content acceleration. Student acceleration is the practice of moving students through years of schooling quickly. There are examples of students who have been admitted to a university when still a young teen or even to medical school years prior to the average age of admittance. Meanwhile, content acceleration allows students to rapidly move through the curriculum. They are able to learn the content in greater depth or to deal with more complex and higher levels of subject matter (Feldhusen, Van Tassel-Baska, & Seeley, 1989). Content acceleration also allows students to focus on specific subjects for which they have greater interest so teachers can allow male and female students to choose different topics as their interests dictate. Students are allowed to have advanced curriculum beyond what their grade level requires; thus, they move more quickly through the grade levels.

Enrichment is another way to meet the needs of males and females who are gifted and talented in the classroom. Students are provided with

supplementary curriculum opportunities to greater challenge and motivate them to reach their full potential. They are allowed to move beyond the basic grade level curriculum and complete activities such as the following:

- Extended reading on additional related topics of interest,
- Creative research on a specific topic,
- Art projects demonstrating the learning,
- Community service projects,
- Field trips,
- Internet activities.

Typically, a combination of several types of instruction are used in schools and districts to educate students in gifted and talented programs throughout the United States.

Classroom design

Students who are gifted and talented may be educated in many different administrative arrangements depending on the classroom or school. Typically, programs are either resource rooms, self-contained programs or inclusion programs. They type of program varies greatly throughout the United States.

Students are grouped with other students who are identified as gifted and talented in resource programs where just part of the day is focused on their special needs. In elementary schools, these programs are typically pull-out programs where the students who are gifted and talented are removed from the general education program for a few hours per day to gain additional acceleration through the content and enrichment to enhance their learning interests and content level. Although it is different in each school, a teacher from that school who is trained in gifted and talented curriculum may be the one to lead the group or an itinerant teacher may travel from school to school. The advantage to a pull-out program is that students are able to receive individual instruction rather than possibly becoming bored by content they have already mastered.

Self-contained programs are also common and this is where students at the elementary school level who are gifted and talented receive all of their instruction in one classroom throughout the day. Students at the secondary level are placed in honors courses for each subject for which

they test at a higher level so they are in more challenging courses overall. Larger schools and districts are able to have self-contained programs because they have more students that they serve. Some larger school districts target one school as the magnet school for students who are gifted and talented. There are even some states within the United States that have residential school sites for students who are gifted and talented.

Students identified as gifted and talented are also commonly educated in heterogeneous classrooms where children of different achievement levels are taught by one teacher. This is most typical in smaller school systems where the administrator does not have enough students in the gifted and talented program to create separate programming. This can be problematic as students may not receive the education that they need due to too many levels of students within the same classroom. A systematic plan is needed to educate students high academic achievement levels; thus, if students are educated in an inclusive classroom, teachers must be diligent about their planning and organization for these students. Ideas for supporting gifted and talented students in inclusive classrooms include the following strategies:

- Communicating high expectations,
- Creating a positive classroom environment,
- Building strong classroom management,
- Developing appropriate supplemental materials for enrichment,
- Organizing ability level groups.

Overall, students in gifted and talented programs may be taught in different models, but the key is that individual needs are addressed and interest levels are encouraged by gender so that motivation is enhanced. The more that male and female students in gifted and talented programs are supported, the more they will be able to give back to the classroom and school. Continuing high expectations for all achievers will benefit the community as a whole.

Gendered practices

Research has found that in early childhood and throughout the elementary school years, there is a only small gap between boys and girls who are identified as gifted and talented (Davis & Rimm, 1989) and some research has found no gap at all (Gurian, 2013). However, at around age twelve, gifted boys tend to begin to outnumber gifted girls

and this trend continues into adulthood. There are several possible reasons for this that will be discussed later in subsequent sections of this paper.

Children are typically identified as gifted at around the age of 8. Girls enter school with better academic skills than boys. They can read, talk and count earlier than boys. In the preschool years, girls score higher than boys on IQ tests. They tend to be ready for formal schooling much earlier and have been documented to earn higher grades than boys in elementary school.

When children hit the adolescent years, many girls tend to become embarrassed if they are labeled as gifted. Being popular is much more important than being academically gifted to the adolescent female. Girls in general are more socially adept and choose to adapt to the ability level of their age-mates (Silverman, 1993). Gurian (2013) highlighted reasons why it is "not smart to look smart" which forces girls to deny, camouflage, or abandon their superior gifts and talents. Girls in adolescence can see their uniqueness as a disadvantage and downplay their cognitive and artistic abilities.

Boys and girls who are identified as gifted and talented also may have different attitudes and perceptions about life in general. One study (Reis, Callahan, & Goldsmith, 1994) analyzed the attitudes of 144 gifted girls and 140 gifted boys in grades six through eight. They looked at different aspects of the students' lives including expectations about their future education, career and family, attitudes about school and school achievement, and their concept of gender differences. All three areas found differences between the genders. Boys who were gifted had strong opinions about their futures and their career and life goals. However, they felt that their wives should stay home to raise the family and not pursue a career. They also believed that girls in general should spend more time at home taking care of the family in contrast to the boys.

Attitudes of gifted males and females

As described before, many gifted females are underachievers. For instance, only 6% of patents in the United States are issued to women (Reis, Callahan, & Goldsmith, 1994). Only 36% of National Merit semifinalists are female (Ordovensky, 1998). In addition, there are few women on the United States Supreme Court and in the United States Senate

when compared to males. There has never been a female president in the United States. All of these examples clearly demonstrate that females who are gifted are under-achievers.

One reason for this underachievement of females in the United States may be sex-role stereotyping from infancy to adulthood, lack of inclusion in women's accomplishments as compared to men in literature or school textbooks, lower teacher and parental expectations for gifted females compared to gifted males, and the absence of adult female role models in both non-traditional and traditional professional roles (Reis, Callahan, & Goldsmith, 1994). Historically in the United States, males and females have chosen different career goals with girls focusing on homemaking and parenting while chosing teaching or nursing as their profession. But early on in life, boys and girls are similar in their confidence about their intelligence and their ability to work hard in college and in careers. This should be channeled so that girls continue to feel this confident throughout their schooling experiences.

Implications for future research

Girls who have been identified as gifted and talented should continue to be encouraged and nurtured to reach their career and life goals. Future empirical studies should focus on determining effective programs to develop instructional programs in all subject areas to further support the interests and strengths of girls. While single gender schools are still commonly chosen by parents in the United States (Gurian, 2013), schools where both genders are educated should focus on developing the full range of abilities by all children. As more gifted girls become gifted adults, society in the United States will change and support these unlimited aspirations of gifted females. Support studies should follow to determine effective practices within communities to continue this tradition of reaching the fullest potential for every child in the United States.

Conclusion

Overall, gifted programs in the United States have many different models and vary depending on the school, district, and state. Although males are represented more heavily throughout these programs, efforts

are being made to strengthen the interests of females and to more equally support both genders in reaching their highest potential in school programs in the United States. While sex discrimination is well documented in the United States, women are proud of their work and are reaching new heights in career positions. The possibility of a United States president may even be on the horizon.

While research has demonstrated that more boys are given guidance on career choice in higher level professions, this is slowly changing throughout the United States where girls are being given more opportunities than ever before. It may be a few short years away when boys and girls who are gifted and talented will experience equity in school programs, career guidance, and future endeavors to reach their full potential.

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