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Nurturing Giftedness Among Highly Gifted Youth

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Abstract

Suggested modifications for a moderately gifted child may not be successful with children of exceptional or profound abilities. Some researchers have found that highly, exceptionally, and profoundly gifted children experience social and emotional conflicts that may be magnified in mixed-ability classrooms. These children could experience difficulties with asynchrony or overexcitabilities as well as a lack of support from their peers, teachers, and administrators. Some profoundly gifted students have their academic and affective needs addressed by radical acceleration or by attending a school specifically for exceptional learners. Various researchers have indicated that these accelerants have experienced positive outcomes of acceleration.

Introduction

Society admires extraordinary athletic and musical abilities. An athlete receives tremendous praise and recognition when he becomes the youngest NBA player, and a five year old child prodigy is honored for performing "Beethoven's Fifth". However, what happens when a student's IQ is more than two standard deviations above the mean and the only academic enrichment that student receives is his gifted and talented pull-out program that meets twice a week? Are educators praising this student and others like him for having extraordinary intellectual abilities? What changes to pace and curriculum are needed to challenge and support the academic and affective growth of highly, exceptionally, or profoundly gifted students?

Literature Review

Researchers support that different forms of acceleration should be utilized to address the academic and social needs of the profoundly gifted children (Gross, 1992; Tsai, 2007). I examined different levels of giftedness, various types of acceleration, and obstacles that profoundly gifted students sometimes experience.

Levels of Giftedness

Gross (2000) identified different levels of giftedness, which are defined by ranges in IQ scores. The different levels are mildly gifted (115-129 IQ), moderately gifted (130-144 IQ), highly gifted (145-159 IQ), exceptionally gifted (160-179 IQ), and profoundly gifted (180+). In addition, Gross reported that mildly and moderately gifted students are much more likely to be part of a classroom setting than exceptionally or profoundly gifted students. The probability of an exceptionally gifted student being part of a classroom setting ranges from one in 10,000 to one in 1,000,000. Profoundly gifted students occur even less frequently than one in a million. In

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addition, the mental processes and affective characteristics of a profoundly gifted child differ from those of a moderately or mildly gifted child. According to Hollingworth (1926), gifted students who have favorable social skills normally have IQ scores that range from 125-155. An eleven year old profoundly gifted student may have an IQ of 185, and a mental age of nineteen. This significant discrepancy could lead to problems with social skills or to social isolation (Gross, 2000).

Early Entry to Kindergarten

One form of acceleration is early entry, which allows children to enter Kindergarten at the age of four instead of five. Many teachers and administrators oppose early entry because they are concerned with the social and emotional well being of the child (Bragget, 1984). However, little empirical evidence exists indicating that a child who enters Kindergarten early will suffer disadvantages later in his educational career (Butterworth & Constable, 1982; Gross, 1993a, 2003). Vialle, Ashton, Carlon, & Rankin (2001) investigated principals' attitudes toward their schools' early entry program. Principals familiar with gifted education and the early entry policy admitted more students in their early entry program. The most common reason principals reported for refusing to enroll early entry applicants was their concern with the social and emotional development of the child.

Wichita Public Schools in Kansas also offers the Early Childhood Accelerated Program for high-ability children from ages three to five. The goals of this program include identifying gifted children at an early age, providing them with an accelerated program that meets their academic needs, and focusing on culturally diverse children, traditionally underrepresented in high ability programs (Gould, Thorpe, & Weeks, 2001). According to Gould et al., "During the two years of the pilot program, approximately 40 percent of the children in the program were

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from culturally diverse groups, a figure that is significantly higher than the percentages in most programs for gifted students" (p.50).

Early Entrance to College

Students with exceptional academic ability may have the opportunity to attend early college entrance programs, which would allow them to begin college before they complete high school. Various four-year and two-year universities offer residential programs for early entrants. However, every state does not offer this kind of specialized residential program, so highly gifted students sometimes move a great distance in order to attain the level of academic instruction they feel they need (Booth, Sethna, Stanley, & Colgate, 1999). Requirements for admission vary in each program, but each program uses a thorough evaluation of the candidates and admits students who are highly motivated, academically capable, and who are socially ready for the rigorous demand of university level work (Boothe, Sethna, Stanley, & Colgate, 1999).

The Halbert and Nancy Robinson Center for Young Scholars at the University of Washington directed their early entrance program (EEP) for the last 11 years. The directors modified the program in the early 1980's and introduced the Transition School into their program. Essentially, all students enrolled in the (EEP) are required to attend the Transition School during their first academic year, which helps them prepare for the rigorous demand of university work by providing them support in content, study skills, and time management (Noble, Vaughan, Chan, Childers, Chow, Federow, & Huges, 2007).

Olszewski-Kubilius (1998) presented essays from eleven students who participated in early entrance programs. Before their acceptance into the programs, they all experienced similar frustrations with school: lack of challenge, slow paced curriculum, and boredom. Some students also felt a lack of support from their peers, teachers, and administrators when they introduced the

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idea of early entry to college. However, each student believed that they made the right choice to enter college, two, three, or even four years early. Some students did face obstacles and challenges like underdeveloped study skills or some academic failures because of their maturity levels, similar to challenges faced by many first-year college students. Olszewski-Kubilius reported that all eleven students succeeded in their programs and reported few regrets.

Effectiveness of Acceleration

Rimm and Lovance (1992) investigated the effectiveness of acceleration by interviewing the parents of 14 children who experienced entry entrance, grade skipping, or subject acceleration. All of the students, except the Kindergarten and first graders, also participated in interviews. Parents and students stated that some teachers and administrators displayed negative attitudes towards early entrance and grade skipping. Participants also mentioned that some teachers portrayed positive attitudes about subject acceleration in the child's early elementary years. In addition, if a child had already grade skipped and needed further subject acceleration, teachers were less likely to support this acceleration. Another difficulty most teachers and parents experienced was the adjustment period. It took about a school quarter or semester for the parents and teachers to be comfortable with the transition. However, the researchers indicated that the students did not seem negatively affected by the adjustment period. Participants and their parents stated that they felt like they made the correct decision to accelerate. Some students even wished they experienced acceleration earlier. Most students displayed academic improvement after acceleration. Although they reported positive outcomes, Rimm and Lovance (1992) acknowledged that their sample was biased, "The 14 children whose parents were interviewed and described are a biased sample because the children all came to the Clinic based on a parent or teacher concern that the children were already underachieving" (p. 103).

Underachievement and Grade Skipping

One of the major factors causing underachievement in gifted students is unchallenging curriculum (Rimm & Lovance, 1992). According to Rimm and Lovance, bright youngsters find everything they encounter in their first years of school so easy that they never really learn how to work. They do not work hard because hard work does not make a difference to enhance scores. Instead, they gradually form sloppy work and lazy learning habits, and their achievement falls behind their abilities as they become underachievers. They underachieve because schools do not provide educational challenges that match their academic needs.

Tsai (2007) investigated the effectiveness of various acceleration methods using qualitative and quantitative approaches in his study. He collected data using the Acceleration Effectiveness Questionnaires of 198 students and their parents, together with in-depth interviews. The gifted students who received acceleration services skipped one or more grade levels or accelerated in one or more subjects, and they continued to perform well at the top of their class. Tsai concluded that acceleration positively affected the students' performance. According to Tsai (2007), "Without adjusting the pace, one year later, gifted students' achievements would fall one year behind and they would become underachievers" (p. 94). However, some participants experienced difficulty adjusting once they were accelerated.

Radical Acceleration

Another technique used to address the needs of exceptionally gifted students is radical acceleration. Gross (1992) investigated the school experiences of five exceptionally and profoundly gifted students with IQs in the range of 160-200. According to Gross, "They suffered severe intellectual frustration, boredom, lack of motivation, and social rejection by age-peers and displayed significantly lowered levels of social self-esteem" (p. 98). This example portrayed the

social and emotional difficulties exceptionally and profoundly gifted students sometimes encounter.

Gross (1992) measured the participants' affective needs using the Coopersmith Self-Esteem Inventory (Coopersmith, 1981) to evaluate the students' self-esteem in various parts of their lives and in their academic work. The participants commonly experienced underachievement before they were radically accelerated. They admitted that they would conceal their true intellectual ability to reduce the resentment of their classmates and teachers. However, once the participants were accelerated, no evidence of social and emotional problems existed, and they all reported that they experienced the intellectual satisfaction of challenging academic work.

Since 1969, researchers from The Study of Mathematically Precocious Youth (SMPY), and since 1979, researchers from the Center for Talented Youth (CTY) have evaluated thousands of students whose intellectual ability is in the top 3% of the population as measured by the Scholastic Aptitude Test. Charlton, Marolf, & Stanley (2002) completed a follow-up study on twelve of Stanley's former math prodigies from CTY, who all experienced radical acceleration. Eleven of the prodigies received their bachelor's degree, and ten earned a master's degree or doctorate.

Other countries including Australia, China, Taiwan, and Poland have also incorporated radical acceleration to address the academic needs of exceptionally and profoundly gifted students. Gross & van Vliet (2005) completed a review of the literature on radical acceleration and found various positive outcomes including satisfaction with their academic and affective experiences in Australia, early career successes in China, significant academic gains in Taiwan, and a large number of radical accelerants in Poland. Robinson (1992) described two acceleration

programs in China and indicated that the government places a strong emphasis in math, science, and technology, and parents and educators pay close attention to each child's individual needs.

Asynchronous Development

Gifted children sometimes experience asynchrony, which Silverman (2007) defined as a discrepancy between intellectual ability and physical ability. A gifted child may portray the intellectual ability of a 14-year old, but then display the physical maturity of an 8-year old, which could lead to various social and emotional difficulties (Gross, 1993b). Silverman (1997) warned that a child's beliefs about herself and her self-efficacy can be influenced by how her classmates view her. The effects can be negative when her classmates do not like her because she is viewed "too different" by her classmates. It is difficult for a profoundly gifted child to find same aged classmates with similar mental interests (Hollingworth, 1930). For example, a child with an IQ of 180 may like to play bridge, but may not be able to find any classmates who know how to play or who are even interested in learning.

Overexcitabilities

Dabrowski (1972) believed that gifted children, especially highly gifted children, may experience one or more psychic overexcibilities. He defined this as "higher than average responsiveness to stimuli, manifested by psychomotor, sensual, emotional (affective), imaginational, or intellectual excitability, or the combination thereof" (p.303). Piechowski (1979) further described each area of overexcitability. For instance, someone who experiences the psychomotor overexcitability may have an excess of energy expressed in the form of a love for movement, rapid speech, impulsiveness, or restlessness. Sensual overexcitability occurs when someone has heightened sensory awareness, which could be portrayed as a constant desire for comfort. Emotional overexcitability is represented through a person's deep concern for others,

deep relationships, or feelings of compassion and security. Imaginational overexcitability is expressed through vivid imagery, inventiveness, or a love of fantasy. Intellectual overexcitability is present through a person's extreme love of knowledge, discovery, or independence of thought. Social and Emotional Effects

Various researchers have reported that accelerants experience positive self-esteem, satisfying social relationships, advanced social maturity, and no significant negative effects of acceleration (Gross, 1993; Noble, et al., 2007; Tsai, 2007). In Gross's (1993a) longitudinal study of 17 students who radically accelerated, many students experienced positive outcomes. There is also no empirical evidence indicating that accelerated gifted students undergo difficulty making friends, getting along with others, or becoming overly stressed, depressed, or suicidal.

Throughout the previously discussed studies, many accelerated students endured negative attitudes from their administrators and teachers. However, the principals with background in gifted education did not have negative attitudes (Hoogeveen, van Hell, & Verhoeven, 2005). Hoogeveen et al. investigated teacher attitudes toward acceleration and accelerated students in the Netherlands. They focused on the Netherlands' common form of acceleration, grade skipping. The researcher used questionnaires to evaluate teachers' experiences with acceleration and their attitudes toward acceleration and accelerated students. If teachers had more positive experiences with accelerated students, their attitudes were more positive. If they had more negative experiences, their attitudes were more negative. The researchers also included an intervention in which some teachers attended an informational meeting on acceleration and some teachers received only written information on acceleration. Hoogeveen et al. reported that providing teachers with information or training on acceleration may positively influence their opinions.

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IOWA Acceleration Scale (IAS)

Each school district has its own procedure for making an acceleration decision, and Iowa Acceleration Scale (IAS) (Assouline, Colangelo, Lupkowski-Shoplik, Lipscomb, & Forstadt, 2009) is a useful tool that can be used to help determine whether acceleration is appropriate. The IAS can help guide whole-grade acceleration for kindergarten through eighth grade students. The manual provides directions for each IAS form, explains issues regarding acceleration using sample case studies to address each issue, and supplies sample IAS forms. The sample IAS forms are completed using examples of students who should be accelerated an entire grade level and examples of students who should not be accelerated. It also provides a description of the various achievement tests needed to complete the IAS.

There are several advantages using the Iowa Acceleration Scale. First, the scale allows an objective look at the student using facts about the student's school history and information concerning their aptitude, ability, and achievement. Second, an analysis of this information can be used to guide decisions about whole grade acceleration, because each type of information is weighted. In the end, all weights are added to determine the final decision. Also, the scale documents the student's strengths and areas of concern. Finally, this scale allows a student to be compared to other students who have already been successfully accelerated.

Based on the research, administrators and teachers should provide the resources needed in order to meet the academic and affective needs of highly gifted students. Not all gifted students portray the same characteristics, so educators should review each student holistically in order to ensure that the best academic and affective modifications are made for each student.

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