

Acceleration/Enrichment Study

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Geneva Community Unit School District 304

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Acceleration/Enrichment Study

The Geneva School District conducted a two-year study (from fall 2007 to spring 2009) to examine our current Acceleration and Enrichment programming and delivery model and determine areas of success and areas for growth. As the last A/E survey was completed in 2000 (resulting in the implementation of the current reading and math daily-replacement model in grades 3-5), district growth and emergent research in the field of accelerated and gifted education warranted another study. Our focus for the 2007-2008 and 2008-2009 school year was to research the best identification process and educational programming for high-ability and gifted students in the areas of reading/language arts, mathematics, and the social-emotional arena. In addition, we focused on how best to support teachers in meeting the needs of these learners in grades K-8. A committee comprised of four elementary classroom teachers (two primary and two intermediate), three middle-school teachers, one high-school teacher, one resource teacher, five elementary A/E teachers, one elementary principal, the assistant superintendent for curriculum and instruction and the district's A/E coordinator completed the study.

A review of literature and research regarding best practices for meeting the needs of accelerated and gifted learners was completed. Committee members read articles focusing on the areas of the definition of giftedness, identification, academic and social effects of ability grouping, curriculum and staff development. In addition, quantitative and qualitative surveys about Geneva's accelerated program were administered to K-8 teachers, administrators, parents of current and former A/E students, and all students in grades 3-12 who was in (or had been in) an accelerated class at the elementary and/or

middle school level. In total, over 1,500 of these surveys were returned and the results studied by committee members. Finally, 26 school districts in the Chicago suburbs were surveyed regarding their accelerated/gifted programs. Committee recommendations were made based on analysis of the data gathered from the research and surveys.

Review of Literature

A variety of factors, both internal and external, influence how individuals experience life by shaping their attitudes and decisions. These factors can be perceived as positive or negative---as opportunities or barriers---and can influence a person in the social, emotional, and intellectual realms. This is true of gifted children, “an ill-served group of special-needs students...often subjected to a critical mismatch with their educational environments, with multiple consequences for their learning and attainment, their motivation, and their personal adjustment” (Robinson, 2002, p.1).

The population that receives instruction in Geneva’s accelerated math, reading and language arts program in grades 3-8 is comprised of both highly-gifted and moderately-gifted youngsters, as well as some students who are in the high-ability range. With the focus in the United States so often on those who struggle in school, these bright students are largely overlooked as a special-needs group. However, their degree of difference from the mean places them in the category of special needs, often with greater variations within their profiles.

As we study the accelerated program in Geneva to look at how it has been successful and ways in which it can improve at the elementary and middle-school levels, it is important to have a clearer understanding of the various definitions of giftedness, the diverse methods employed to identify this population, factors affecting these very bright children and adolescents, and the best pedagogical approach to meeting their intellectual needs.

Definitions of Giftedness

One of the reasons this special-needs group is poorly served is because of the wide variety of opinions on what it means to be gifted. “Experts continue to debate the best definition of giftedness, and to discuss definitions of other terms such as ‘genius,’ ‘talent,’ ‘intelligence’” (Webb, Meckstroth & Tolan, 1994, p. 45). While there is no perfect definition accepted by all experts in the field, some level of understanding can be reached by taking a closer look at the characteristics present in those who are identified as gifted.

Webb and Meckstroth co-founded the non-profit organization SENG (Supporting the Emotional Needs of the Gifted) and specialize in working with the gifted. In their book *Guiding the Gifted Child: A Practical Resource for Parents and Teachers*, winner of the American Psychological Association Media Award, they (and co-author Tolan) define typical characteristics of the intellectually gifted as:

Unusually large vocabularies for their age; ability to read earlier than most children, often before entering school; greater comprehension of the subtleties of language; longer attention span, persistence, and intense concentration; ability to learn basic skills more quickly and with less practice; wide range of interests; highly developed curiosity and a limitless supply of questions; interest in experimenting and doing things differently; tendency to put ideas or things together in ways that are unusual and not obvious (divergent thinking); ability to retain a great deal of information; unusual sense of humor (1994, p. 46).

Delisle and Galbraith (2002) state that gifted students are often independent, enjoy

complexity, are nonconformists, make unusual connections, are bored by everyday tasks, understand puns and irony at a sophisticated level, and are highly creative. They recommend that when assessing whether a child is gifted, the attributes identified by experts in the field of gifted education should be considered. They also suggest the child's behaviors, traits, and characteristics be compared with those of other children the same age, so that the existence of their giftedness will be more apparent.

Polish psychiatrist Kasimir Dabrowski's theory of overexcitability, or OE, has gained wide acceptance as an identifier of giftedness in the intellectual, physical, emotional, creative, and sensing realms. The word "overexcitability" helps to convey the idea that the sensitivities in certain individuals are way above average in duration and intensity (Sword, 2001). Dabrowski's research suggests these tendencies are innate and can be used to explain certain characteristics of the gifted in the areas of appearance, behavior and unusual intensities (Lind, 2001; Tillier, 2002). According to Piechowski, a protégé of Dabrowski's who has continued his work after his death, OE creates an abundance of energy and talent and can be viewed as positive for the gifted, as it results in increased creativity throughout life (Piechowski, as cited by Sword, 2001).

Some equate creativity and giftedness. Csikszentmihaly (1996), who interviewed over 90 creative people for his book *Creativity: Flow and the Psychology of Discovery and Invention*, finds that even though the disciplines of nuclear physics, poetry, musical composition, and microbiology have few rules and symbols in common, the calling for the varying domains are often amazingly similar. Clark (1988) makes a case for the presence

of accelerated or advanced brain function as a necessary component of giftedness and a high level of intelligence. She points to scientific research as a possible key to discovering the definitions of “giftedness” and “intelligence” and feels a wider definition of intelligence should include intuition, emotion, physical sensing and cognition. Jacobsen (1999) identifies five characteristics of the gifted as energy, sensitivity, complex thinking, perceptivity and drive.

According to Webb et al. (1994), the gifted are “likely to be intense in their feelings, their behavior and their views. Gifted and creative children particularly view the world through a quite different set of glasses than less gifted children” (p. 11). Streznewski (1999), who interviewed 100 gifted adults for her book *Gifted Grownups: The Mixed Blessing of Extraordinary Potential*, finds commonalities such as “a large capacity for seeing patterns” and “a restless drive to enlarge their world and to know, know, know” (pp. 4, 5). Renzulli’s triad model proposes above-average ability, creativity, and task commitment as characteristics of the gifted (as cited by Clark, 1988).

History of Identification of the Gifted

Since defining “giftedness” is so complicated and controversial, it follows that identification is problematic. There has always been a great deal of debate over the identification of giftedness. “Of all the issues in gifted education, identification is the most vexing, complex, and frustrating” (Delisle & Galbraith, 2002, p. 60). Many consider the “segment of the population that can be classified as gifted constitutes between 3% and 5%...depending on who is asked” (Streznewski, 1999, p.5). Jacobsen states:

Sometimes testing can be a more objective identification method than teacher or parent recommendations. Nevertheless, when probing for “giftedness” with intelligence, caution remains the byword. Most professionals agree that because intelligence tests a single aspect of giftedness—academic giftedness—they misrepresent the dynamic and intricate fundamentals of exceptional ability. And all test scores, even those from the most reliable and valid instruments, are never free from measurement error (1999, p. 51).

Intelligence tests resemble what was taught in the school setting, so the results likely predict success in school-related endeavors (Clark, 1988). Also, since group tests that measure achievement or intelligence usually rely heavily on the functions of the left side of the brain, they give an incomplete picture for program placement—they are biased against children who exhibit right-brain tendencies and who achieve in areas like creative problem solving (Webb et al., 1994).

The first major scientific study of gifted children and adults was carried out in Britain in the 1860’s by Galton, who hypothesized that genius was hereditary and looked at accomplished men to determine whether there were other eminent men in their families. Ruf (1998) believes that Galton’s work is notable because his research was the first attempt to quantify the characteristics of intelligence, looking for similarities and patterns. Galton’s work focused on heredity and not on environmental factors, helping to establish the concept of fixed intelligence—a view not shared by Binet. In 1905 Binet was asked by the French government to develop a method of separating a group of slow learners from the rest of the school population so the strugglers could receive appropriate curriculum and

instruction. Although he created the concepts of intelligence scales and mental age, Binet did not believe intelligence was fixed; rather, he thought it could be changed through education (Clark, 1988).

Terman revised Binet's work in the 1920s and created a measurement tool he called the Stanford-Binet Intelligence Scale (Jacobsen, 1999). In 1921, Terman began the largest study ever undertaken on the behaviors and characteristics of those identified as gifted—more than 1,500 students with an average age of eleven and an average IQ of 150. The prevailing view of the gifted at the time was that they were maladjusted individuals. While his research was flawed in that he looked at successful students from limited racial, economic, and cultural backgrounds, subsequent research reinforced many of his findings (Clark, 1988; Goertzel et al., 2004; Milgram, 1991). In fact, "Terman was probably the first to dispel, with hard facts, the notion that highly intelligent people are weak, sickly misanthropes of doubtful mental stability" (Streznewski, 1999, p. 5). Terman's findings significantly influenced others who had formulated extreme perceptions about the gifted, and allowed for more realistic and accepting views of the gifted. His longitudinal work over a thirty-year period, as well as subsequent studies by his colleagues, "added to the data disputing fixed intelligence as a viable concept" (Terman, 1925, as cited by Clark, 1988, p.17). During the 1930s and 1940s, the large numbers of men who were serving in the Armed Forces provided an opportunity for testing a variety of human traits (Streznewski, 1999). Researchers started to look beyond the traditional IQ measurement and investigated other methods of assessing ability. Csikszentmihalyi (1996) reports:

Creativity testing owes its existence to World War II, when the Air Force commissioned J. P. Guilford, a psychologist at the University of Southern California, to study the

subject. The Air Force wanted to select pilots who in an emergency—the unexpected failure of a gear or instrument—would respond with appropriately original behavior, saving themselves and the plane. The usual IQ tests were not designed to tap originality, and hence Guilford was funded to develop what later became known as the tests for divergent thinking (p. 93)

However, traditional IQ tests were still seen as “good predictors of school achievement. They gave a nice, definite number with which to work; even if there were doubts about the accuracy of the score, a second test could always be given” (Streznewski, 1999, p.19). Only a few programs for the gifted existed back then, and placement depended solely on IQ score (Delisle & Galbraith, 2002). Around this time parents and professionals began to form interest groups like the American Association for the Gifted (1947), the National Association for the Gifted (1953), and the Association for the Gifted (1959), which was formed under an umbrella organization called the Council for Exceptional Children (Karnes, 2002). The launch of Sputnik in 1957 is widely credited with motivating the United States to put more emphasis on the study of advanced math and science as well as leading to the formation of the 1958 National Defense Fund Act (Piiro, 1999). The subsequent United States Office of Education definition, still used years later by a number of school districts in many states, identifies gifted and talented children as those who are found by qualified professionals to have outstanding abilities and to be capable of high performance. The 1972 Marland Report issued to Congress warned of the deteriorating state of gifted and talented education and raised public awareness regarding the needs of the gifted and talented. It recommended that schools be required to provide gifted children:

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/or potential ability in any of the following areas: general intellectual ability; specific academic aptitude; creative or productive thinking; leadership ability; visual and performing arts; psychomotor ability (Marland, 1972, as quoted by Delisle & Galbraith, 2002, p. 15).

Other historical events in the field of gifted education, following the Marland Report, include school reform, brain research, and legislation at the federal level. Also key are the growth and influence of technology and the media. A 1993 document called “National Excellence: A Case for Developing America's Talent,” published by the U.S. Department of Education, strongly advocates for the gifted (Karnes, 2002).

Kingore notes that academically-talented students—high achievers—differ from gifted learners and creative thinkers in their thought patterns and learning styles (2003). While high achievers are valuable assets in the classroom, the identification process also needs to take into account the different types of gifted learners. The National Association for Gifted Children asserts that a multi-faceted approach is needed when identifying gifted children in order to best serve the needs of all gifted students (Coleman, 2003).

Intellectual and Social-Emotional Factors Affecting Gifted Children

Parents or teachers notice some gifted children in early childhood because of their exceptional interest in a specific area or advanced abilities in reading, math, or music

(Olszewski-Kubilius, 2002). Certain intellectual, emotional, and social factors affect all gifted children, but those who are actually identified as gifted have a better understanding of why there are differences between themselves and other students, and they gain a level of confirmation that they are acceptable in their uniqueness (Delisle, 1992; Delisle & Galbraith, 2002; Silverman, 1993). Ruf (2000) interviewed 41 gifted adults, some who had been identified as gifted during childhood and some who had not. Those who had been identified learned they were gifted through verbal communication and/or by placement in ability-grouped classes or programs before high school (in many cases as early as elementary school). Awareness of their giftedness and capabilities often led them to enter intellectually challenging programs and careers when they were adults. Socially and emotionally, the result of early identification for Ruf's subjects was a better long-term understanding and tolerance of those not identified as gifted. This was particularly the case when influential adults helped them understand their abilities and the impact those abilities had on their relationships with, understanding of, and reaction to others. Many of the study subjects eventually learned tolerance as they matured and as they understood themselves better. "It is interesting to note that for a number of subjects who were in temporary programs that used ability grouping for only a short time, a few months to a couple years, they all report that the experience had significant positive affects" (p. 2). This did not mean, however, that there were no problems for the members of Ruf's study group:

My highly gifted adult subjects wrote about many of the changes they would make in their childhoods. They wanted more information and confirmation of their intellectual differences; they wanted to be loved for who they were and not what they could do; they wanted intelligent teachers who understood how to really teach and go at the

student's pace; they wanted to be surrounded by age-mates and adults who appreciated them the way they were, understood them, and cared about them. The majority of the adult subjects reported that they did not receive most of these things. The consensus seemed to be that an acceptance and love of who they are and what they are like is the most important and necessary (2000, p. 4).

Discussing and understanding how they are different helps gifted children to not focus so much on the label, but rather focus on the characteristics, such as their ability to learn quickly and their extra sensitivity to the problems of others. This knowledge also keeps gifted children from thinking they are superior people because of the rate at which they learn (Sword, 2001). Children who are identified as gifted usually have exceptional intellectual capabilities; in fact, this is often the first characteristic noticed by others. It is crucial that the academic potential of highly-able children be recognized and nurtured in the school setting, as their abundance of intellectual curiosity pushes them to pursue knowledge. Without rigor and challenge, bright children often regress or become underachievers. The pursuit of intellectual goals allows these children to have a measure of control over their circumstances, building independence and an appreciation of rigor (Ochse, 1993). The educators who work with them should also be trained in the affective realm, as these students:

need to make sense of the world, to understand the world, to create their own world. They also have a need to understand themselves, who they are, what makes them who they are, how they work. As analytical thinkers, gifted children excel at critical examination: they can take things apart in their minds and see all the intricate ways

that things could be improved. Acute self-awareness results when this critical examination is turned inward and focused on themselves and they will be inclined to worry a great deal and be very critical of themselves (Sword, 2001, pp. 1, 23).

Gifted children are highly creative, divergent thinkers, with interesting and unusual ideas. If they are passionate about something, whether it be reading, painting, a collection, or a social issue such as protecting endangered animals, they sometimes devote themselves to it and became “experts.” If their interest does not wane, they might follow their passion into adulthood and even build a career around it. When their creative pursuits are supported with energy, time, and finances, the children are more likely to become eminent in their area of interest (Olszewski-Kubilius, 2002; Walberg, Trai, Weinstein, Gabriel, Rasher, Rosecrans, et al., 2004).

According to Ochse, introversion is a common trait among very bright children. Parents and teachers need to understand that time spent alone promotes the development of a rich internal and external imagination, allowing creativity to flourish and giving the introspective individual a refuge from stressful circumstances (1993).

Gifted children are also emotionally intense and it is important they understand such depth of feelings is normal for them, even if it is not readily evident in others. Their sensitivity not only applies to themselves, the people surrounding them, and events taking place in their realm of immediate influence, but it is also often global in nature. They see injustice and hypocrisy in society, which can cause children who are emotionally intense to be cynical

and have feelings of despair (Sword, 2001). Gifted children need the adults who play important roles in their lives to validate these deep feelings as natural, and the adults need to interpret this wide range of emotions and intensity in a positive fashion, providing support (Davidson, Davidson, & Vanderkam, 2004; Hein, 2002; Sword, 2001). Wise parents and teachers help children who have intense emotions to accept those emotions and see them as strengths, and it is crucial that these bright and often-complicated students be taught by professionals who have a background in how to meet both their academic and social-emotional needs (Silverman, 1993; Sword, 2001).

Factors Affecting Gifted Adolescents

It is not uncommon for all children to feel they are “different,” and this is especially true in adolescence. For very bright children, this feeling of isolation can occur earlier and vary quantitatively and qualitatively from the experiences of others. Problems may arise such as attempting to try something they fear, then having to manipulate their way out of doing it (Mahoney, 2001). Gifted adolescents often seem to be driven—obsessed with their areas of specialization. If their pursuits are solitary ones that require isolation it can make them feel inadequate, but adolescents who develop a preference for solitude and learn how to use time alone productively have an advantage in terms of creative achievement (Ellsworth, 1999). A study by Kerr, Colangelo, and Gaeth indicates that many bright adolescents perceive their advanced ability as having a positive impact on self-awareness and academics. However, these youngsters may see giftedness as a negative trait when it comes to social relationships with others their age. Adolescence is a time when many bright youngsters decide it is better to hide their intelligence in order to be popular (1988).

Some gifted adolescents are passionate about contributing to a social or political cause. Ellsworth (1999) states that gifted adolescents, given the right guidance, can make great contributions. Adults or peers who facilitate this passion often determine the best way to offer guidance and assist the gifted adolescent in remaining introspective. Otherwise, “affinity of the self may lie unearthed from a lack of validation, affirmation or affiliation or some combination of all three. The person may have the awareness of their affinity but not know the validity of their feelings” (Mahoney, 1998, p. 224).

Like others their age, gifted adolescents are not always sure of their long-range life goals. Their intelligence does not always guarantee they are automatically good at planning things out, and the fact that they often have many choices available to them because of their multipotentiality only complicates things further (Rysiew, Shore, & Carson, 1994). Adolescence is a time of highly-charged hormones and fluctuating emotions, and astute adults are keyed in to any potential problems. Often, the deeply-sensitive gifted adolescent is most prone to difficulties. Researchers suggests that parents who understand the unique needs of gifted adolescents can provide them with support and empathy rather than frustration, and teachers trained in the intellectual, social and emotional needs of these youngsters can serve as mentors and advocates in the educational setting (Casey, 2000; Chance, 1998; Ellsworth, 1999; Tomlinson, 1994).

Addressing the Placement Needs of High-Ability and Gifted Students

Identification as a high-ability or gifted student, and subsequent placement in a modified or accelerated program, should be looked at from a historical and research perspective.

Rimm (1999), a leader in the field of gifted education, conducted a three-year study of over 1,400 successful women—using interviews and a 23-page detailed questionnaire—and reports the results in her book *See Jane Win*. Her goal was to discover the common characteristics and experiences in their upbringing that might have led to their success as adult females. The adjectives these women most frequently used to describe themselves in childhood were “smart,” “independent,” and “hardworking.” One quarter of the women had skipped a subject in school, and 15% had skipped a grade (Rimm, 1999).

According to Winner (1996), in the first half of the twentieth century only a few schools for the education of the gifted existed; gifted children from wealthy homes were often privately tutored; and acceleration (in the form of grade skipping) was the usual practice when children were recognized as gifted in the public schools. The push for formal gifted programs in public schools, i.e. self-contained classrooms rather than acceleration, began following the Soviets’ 1957 launch of Sputnik (Sternberg & Davidson, 1986; Winner, 1996).

Rowe (1991) conducted qualitative research with 34 gifted women who met the following criteria: they had to be college graduates born between 1940 and 1960 who lived in Seattle, who were identified by their school districts as gifted, and who had been placed in gifted programs or accelerated classes. Rowe’s goal was to determine, through a series of focus-group sessions, how the participants viewed their childhood “gifted” label and how their giftedness had affected their lives and achievement. The vast majority of the participants viewed their identification as gifted as a positive experience, and reported it made them feel confident, competent, and academically motivated (1991).

Ruf's research with 41 highly-gifted adults included written responses about what changes they would have made in childhood; the respondents "wanted more information and confirmation of their intellectual differences" (2000, p. 4). When children lack knowledge about their giftedness, it can be difficult for them to have a clear sense of self (Greenspon, 1998).

Rogers (2002) states that a gifted student is fortunate if they are in a "class of like-talented age mates in a setting that offers academic challenge in the company of peers" (p. 4). Rowe's participants' descriptions of their experiences in the accelerated classroom include such phrases as 'the core that you come back to' and 'personally affirming'" (1991, p. ii). Hertzog (2003), interviewing 50 college students to determine their perceptions of prior participation in gifted programs, reports overwhelmingly positive responses. Falk and Miller (1998) conclude: "Early interaction with significant others that provides an opportunity for the child to be active and receive appropriate responses leads the child to developing feelings of self-efficacy" (p. 151). Silverman (1989) observes that "when we place gifted boys and girls in programs with others like themselves, the problems, perceptions, and maladaptive patterns magically disappear" (p. 19). When looking specifically at females who have a safe environment for their giftedness, their adaptive abilities "work for them instead of against them when they can emulate other girls as bright as themselves. This is why gifted education is so essential" (Silverman, 1989, p. 19). Ability (cluster) grouping for instruction was found to be positive by other researchers in gifted education (Cross, 2005; Davidson et al., 2002; Feldhusen & Moon, 2004; Kulik, 2003; Mahoney, 1998; Mills & Durden, 2004; Rakow, 2005; Ruf, 2000, 2005; VanTassel-Baska, 2004).

High-ability and gifted adolescents hide their intellectual aptitude for a variety of reasons, including the desire to fit in socially with their age-level peers (Assouline & Colangelo, 2006; Cohen & Frydenberg, 1996; Falk & Miller, 1998; Patrick, Gentry & Owen, 2006; Rowe, 2001; Streznewski, 1999). Gross (1998) believes that in gifted adolescents, “the drives for identity, autonomy and achievement may conflict with the need for intimacy.” Family and school experiences have the largest impact on adolescent self-esteem (Assouline & Colangelo, 2006; Reis, 1998). Many studies show the existence of this phenomenon among gifted adolescent females (Arnold, Noble & Subotnik, 1996; Clark, 1988; Kerr, 1994; Moon & Ray, 2006; Reis, 1998, 2006; Rimm, 1999; Thompson, Grace & Cohen, 2001). Some gifted girls, in order to attract boys, use their intellect to figure out how to hide their abilities (Rowe, 2001). Falk and Miller (1998) determine:

Gifted girls are especially vulnerable to the effects of competing self images brought about by any change in self-esteem. For example, by junior high school, many gifted girls reject the notion of being exceptionally bright in favor of popularity. In an effort to disassociate themselves from their gifted self-image, they abandon gifted friends and consciously try *not* to do well in school (p. 152).

According to Streznewski, “By the time a gifted teen reaches senior high, modes of conduct have been chosen, survival skills have been carefully honed, and some substantial dues have been paid” (1999, p. 83). Although the issue of adolescent conformity is common among bright youngsters, not all of those studied in the research conform in order to fit in. Those who embrace their giftedness have often received appropriate information and advice to help them understand their unique intellectual, social, and emotional needs. They are optimistic, empowered and able to make the right

decisions when faced with criticism and pressure (Hoekman, McCormick & Barnett, 2005; Reis, 2005).

Challenges for Schools in Meeting the Needs of High-Ability and Gifted Learners

Research indicates that few instructional adaptations are actually implemented to accommodate the needs of high-ability and gifted learners (Archambault, Westber, Brown, Hallmark, Emmons, & Zhang, 1993; Mills & Durden, 2004;). Enrichment activities are often not enough to provide sufficient challenges when students have already mastered the content and concepts of the curriculum. For many high-ability and gifted students, acceleration is needed based on their abilities and achievements. Clark (1997) suggests that the optimal environment for each student would be one where the level and pace of instruction matches the level and pace of the student. In reality, individual instruction is rarely possible in public school classrooms, where teachers usually work with large groups of students (Renzulli & Purcell, 1996). In addition, identifying twice-exceptional (gifted and learning-disabled) and gifted ELL students is an ongoing challenge (Skollingsberg, 2003; Winebrenner, 2003; Yong, 1994). Trained teachers of gifted learners more successfully adapt their teaching strategies to accommodate the students' needs and thinking.

Reading, Writing, Math and the High-Ability and Gifted Learner

Because Geneva currently offers accelerated reading and math in grades 3-5 and accelerated language arts and math in grades 6-8, the committee examined what the research says about high-ability and gifted learners in these content areas. The research focused on how to challenge these students in their areas of strength (whether in reading,

writing and/or mathematics), the unique characteristics of these students, and the role of districts and teachers in meeting their needs.

Challenging High-Ability and Gifted Readers in Elementary School

Current research shows that gifted elementary school children who participate in special reading programs do better academically than their gifted peers receiving no special services (Collins & Aiex, 1995; Feldhusen & Moon, 2004; Reis, Westberg, Kulikowich & Purcell, 1998.) Research also demonstrates that holding an advanced reader to grade-level reading curriculum can negatively impact their continued above-average reading development (Gentry, 1999; Kulik & Kulik, 1996; Robinson, 2002; Rogers, 2002). Educators have to provide challenging learning activities along with advanced materials to truly meet the needs of these young readers. Studies show that increasing reading interest in elementary school is one of the strongest ways to encourage literacy, and if students do not find reading enjoyable by the time they reach the intermediate grades they will likely not continue reading independently (Burns, Snow & Griffin, 1999; Fogarty & Reis, 2007).

Characteristics of Gifted Readers

In order to compile a complete picture of talented young readers, it is crucial to delve into the research. According to Reis, Gubbins, Briggs, Schreiber, Richards, Jacobs, et al. (2004), early reading ability does not necessarily translate to giftedness in reading or high-level verbal processing—but the more talented the reader the more likely they are to enjoy reading and demonstrate advanced language and processing skills (2004). Jackson reports that while “precocious reading ability is moderately associated with general

intelligence, some highly intelligent children do not read early and some precocious readers are of average or sub-average intelligence” (1988, p. 200).

Generally speaking, however, the majority of studies and anecdotal reports on the topic of gifted readers identify them as reading approximately (at the minimum) two grade levels above their peers (Catron & Wingenbach, 1986; Reis et al., 2004). Research also indicates these students are talented in the areas of vocabulary, making connections and finding relationships through what they are reading, expression, verbal skills, descriptive phrasing and character analysis (Catron & Wingenbach, 1986; Dooley, 1993; Levande, 1999; Reis et al., 2004; Renzulli & Reis, 1989). They are able to effortlessly integrate prior experiences and knowledge into their reading, access higher-order thinking skills (synthesis, evaluation and analysis), and clearly express ideas (Catron & Wingenbach, 1986). Juel, Biancarosa, Coker & Deffes (2003) find that average readers need four to fourteen exposures before they can automatically recognize a word and students who struggle needed forty or more exposures for automatic word recognition. Talented readers, who often recognize a word after one to three exposures, need additional challenge in their reading curriculum.

Reading Challenges for School Districts

High-ability and gifted readers are a reality in school districts, requiring those in decision-making positions to address their right to be taught at an appropriate instructional level. A flexible continuum of services, supported by the district, is seen in the research as a positive step—as children are as varied as their needs (Renzulli & Reis, 1997). Differentiated plans for talented readers are best when organized to fit those needs, using

strategies such as cross-class grouping, compacting, cluster grouping, independent work, acceleration to a higher grade level for instruction, or the use of advanced reading strategies and content, depending upon the learner's ability level (as well as the make-up of the district--demographics, class sizes and pedagogical philosophy) (Gentry, 1999; Renzulli & Reis, 1997). A crucial component for districts is ensuring that qualified teachers are available to provide accelerated instruction, with additional training in how to meet the unique social-emotional needs of these bright youngsters (Feldhusen & Moon, 2004; Langenberg, 2000; Levande, 1999).

Reading Challenges for Teachers

Precocious, talented readers pose many challenges for classroom teachers, who are kept busy trying to differentiate to meet the needs of children with varying ability levels. The importance of having trained teachers for high-ability and gifted learners is clear in the research (Connecticut State Department of Education, 2000; Lamb & Feldhusen, 1992; Reis, et al., 2004). What might be considered appropriately-challenging curriculum for on-grade-level learners is often woefully inadequate in meeting the needs of the advanced reader, but it can be difficult for teachers of young children to find the balance between an academic match and an appropriate social-emotional environment (Reis et al., 2004). Paris (2004) recommends that high-level reading instruction, once a student has moved from "learning to read" to "reading to learn," promote the following: making connections; determining the importance of what was read; questioning; visualizing; making inferences; summarizing; and meta-cognition. According to Fogarty & Reis (2007):

Teaching certain reading skills, like word-level decoding, can be a pretty straightforward task for reading teachers because the skills can be taught using rules that can be followed. However, teaching students how to be strategic readers can be much more difficult because the strategies are contextually dependent and lack a distinct pattern for their use. Reading strategies are also more difficult to assess because unlike giving a vocabulary test to measure reading skills, teachers must determine the extent to which students are able to use reading strategies in context (p. 31).

Challenging High-Ability and Gifted Writers in Elementary School

There are a variety of ways suggested in the literature to challenge high-ability and gifted writers in school. One is repeated exposure to expository, narrative, poetic and dramatic texts, with a specific focus on those that offer multiple interpretations; another is making personal connections to increase comprehension; yet a third is students being allowed a variety of modes for responding (writing, drawing and discussion) through prompts and questions. Making predictions and drawing conclusions constitute the base of comprehension for gifted writers, along with visual structures, effective through their memorable and concrete representations of the abstract (Alber, Martin & Gammill, 2005; Barton & Sawyer, 2003/2004; Corden, 2000; DeFord, 1981; Fasko 2000/2001).

Characteristics of Gifted Writers

According to Halsted (1994), talent in the area of written work often goes hand in hand with high-ability reading, as gifted readers are masterful in their use of language: they write

words—and even sentences—early; they utilize language and humor together; they understand the subtleties of language; and they are able to write creatively.

Alber et al. reported: “Gifted students possess cognitive and linguistic abilities that make them good candidates for advanced writing instruction” (2005, p. 51). Their capacity for language expression and manipulation is highly developed and their perceptive ability is advanced (Renzulli, Smith, White, Callahan, Hartman & Westberg, 2002). They are adept at creating unusual responses (Fraser, 2003), and enjoy wordplay, inferences, hidden meanings and a sense of humor beyond their years (Renzulli et al., 2002; VanTassel-Baska, 2003).

Writing Challenges for School Districts

With the amount of focus placed on reading instruction, many school districts decrease the time devoted to the teaching of writing. “Unfortunately, little emphasis is placed on writing instruction in both general and gifted education. In fact, the National Commission on Writing in America’s Schools and Colleges (2003) reported that only 1 in 4 students scored proficient on federal writing tests” (Alber et al., 2005, p. 51). Sadly, this slip in student writing skills could be avoided if school districts heed researchers, who have long reported the effectiveness of teaching reading in conjunction with writing (Corden, 2000; DeFord, 1981; Flower, 1990; Lee, 2000; Stotsky, 1983).

Writing Challenges for Teachers

According to the National Reading Panel, effective classroom teachers maximize the learning that occurs in their classrooms during the language arts block through excellent

classroom management; a positive feeling tone; explicit instruction of multiple writing and comprehension strategies; excellent literature experiences with highly-accessible reading sources; academic engagement with the students doing a great deal of actual reading and writing; student tasks matched to their competency level; teacher support and scaffolding of student learning; teacher encouragement of student self-regulation and independence; and strong cross-curricular connections of embedded reading and writing (Langenberg, 2000). When high-ability or gifted readers and writers are exposed to important literature, their natural inclination to manipulate linguistics and explore new ideas often leads them to the natural extension of becoming talented writers (Fraser, 2003; Kauffman & Gentile, 2002; Renzulli et al., 2002).

Challenging High-Ability and Gifted Math Students

Meeting the diverse needs of students is an immense undertaking. Add mathematically-talented students into the mix and it becomes even more daunting. Adelson, Casa, & Gavin (2006) explain that one reason this challenge exists is due to inadequate training of teachers to meet the needs of their mathematically-talented students. The challenge then intensifies when the lack of trained teachers is coupled with a lack of curricular resources. Unfortunately, many programs for use in the classroom are poorly designed or have few options for extension, leaving classroom teachers to struggle to meet the needs of gifted/accelerated math students (Howley, 2002). While meeting the needs of these advanced students is difficult, it is a crucial pedagogical undertaking for educators and administrators—as all students have a right to learn and be challenged.

Adelson et al., point out that research shows “mathematics is not generally a strength

area” for elementary teachers (2006, p.3). Rotigel & Fello (2004) note: “since gifted students can often interpret, predict, and analyze mathematical situations and problems faster than their teachers, a significantly different instructional approach may be necessary” (p. 51). In other words, without proper training, teachers struggle with providing gifted/accelerated learners with challenging instruction, and they struggle with providing a significantly different approach. When teachers struggle, their ability to meet the challenge of teaching gifted/accelerated students is compromised, ultimately compromising the students’ experience in the classroom.

Generally, an elementary mathematics curriculum provides almost no options for advanced students. In an attempt to differentiate, curriculum publishers tout materials labeled ‘enrichment,’ but many of these enrichment worksheets are, unfortunately, simply extra practice sheets that fail to interest, engage or challenge students (Adelson et al., 2006). With limited curricular resources, and with teachers lacking crucial training, it is no wonder that educating gifted math students is so challenging.

Characteristics of High-Ability and Gifted Math Students

Mathematically-talented students have an intuitive understanding of mathematical functions and processes. Heid (1983) notes that these students have the ability to see relationships among topics, concepts and ideas, often without formal instruction geared toward specific content. Because of their intuitive understanding, they can skip over steps in a process and be unable to explain how they arrived at an answer. Simply put, they just get it. Whether the math problems demand computation skills, inferential thinking,

deductive reasoning or problem-solving strategies, mathematically-gifted students can discern the answers with unusual speed and accuracy (Greenes, 1981).

Gifted math students often want to know more about the “hows” and “whys” of mathematical ideas instead of the computational “how-to” processes, which come to them intuitively (Sheffield, 1994). Unfortunately, most of the classroom instruction and much of the curricula found in textbook series is geared toward the “how-to” process. Mathematically-talented students benefit by taking an exhaustive approach to a concept and learning everything they can before moving on to the next concept. A linear, comprehensive approach to mathematics is often a better match for gifted math students than a spiraling curriculum with its predetermined concepts and time frames (Pletan, Robinson, Berninger & Abbot, 1995). Children with mathematical talent need the opportunity to delve much more deeply into a concept. Given this opportunity, gifted mathematics students discover practical applications and connections to other math concepts (Rotigel & Fello, 2004). Without this opportunity, many simply sit through the “how-to” processes they already know without engaging or employing higher level thinking skills. Clearly, this does not meet the needs of this special population.

By the time these young, emergent mathematically-talented youngsters enter kindergarten, many have an already-established understanding of patterns, problem solving, and computational strategies. They are hungry and eager for more; ready to take the next steps. But, all too frequently, teachers are bound by the curriculum and merely touch on

math concepts that these students have already mastered. This is why it is easy for teachers to fail to recognize and nurture these young mathematicians (Pletan, et al., 1995).

Sheffield (1994) concludes that students who are talented in mathematical thinking and problem solving need more than what is offered in a regular classroom. These learners need open-ended opportunities to test their mathematical wings. They need a greater depth and breadth of topic exploration than what is offered in regular classrooms. Additionally, they need the opportunity to solve complex problems. According to Pletan et al. (1995), "Formal instruction in elementary school often lacks challenge for the gifted learner since courses in regular classrooms have a relatively narrow range of topics, minimal investigation of concepts, repeated drill and practice, and yearly repetition" (p.38).

Math Challenges for School Districts

The research shows there are many misunderstandings regarding the nature of giftedness and how to best meet the needs of students who exhibit a talent in mathematics. Teachers, their hands already full with RTI, IEPs, behavior plans, differentiated instruction, and ELL students, are "often at a loss to know how to nurture and challenge children whose abilities belie their age-based grade-level placement" (Rotigel & Fello, 2004, p. 48). According to the Principles and Standards for School Mathematics (National Council of Teachers of Mathematics, 2000, p. 13), it is imperative that these students have proper support. Without that support, talented students often fail to reach their mathematical potential. Many times, the regular curriculum is simply insufficient in terms of depth, breadth and pace to meet the needs of mathematically-accelerated learners (Wolfe, 1986).

Additionally, in this era of high-stakes testing, more emphasis has been placed on basic skill instruction in an attempt to ensure all students will be successful on the tests (Moon, Brighton, & Callahan, 2002).

Planning mathematic instruction for grades K-12 is a daunting task. With Annual Yearly Progress (AYP) lurking in the background, administrators are left scrambling for the latest research on best practices in mathematical instruction (Rotigel & Fello, 2004). Adding to the complexity of the task is trying to meet the needs of mathematically-advanced students. As noted by Moon et al. (2002), parents, superintendents, curriculum specialists, and math coordinators are plagued with the dilemma of whether to accelerate a student in an advanced math class or provide enrichment activities in the regular classroom. However, research shows that most teachers make only minor adjustments to the curriculum when trying to differentiate and enrich in the regular classroom (Archambault et al., 1993). The Principles and Standards for School Mathematics (National Council of Teachers of Mathematics, 2000, p. 13) states that regular curriculum is “insufficient in depth, breadth, and pace to meet the needs of the gifted child.” Current research supports the conclusion that “mathematically talented students need to use advanced materials and curricula if they are to reach their potential” (Rotigel & Fello, p. 48).

Math Challenges for Teachers

Classroom teachers face many challenges, among them the responsibility of implementing individualized plans for gifted/accelerated students in addition to their other duties. Research suggests that a combination of approaches make for a stronger plan for divergent math thinkers (Stanley & Barlow, 1986). These approaches include a

compacted curriculum, flexible cluster grouping, grade skipping, mentoring and an intensified use of technology (Archambault et al., 1993). Differentiation of instruction is critical to providing these enrichment activities. But what does differentiation really mean? Defined by Tomlinson (1995), differentiated instruction is “the consistent use of a variety of instructional approaches to modify content, process, and/or products in response to the learning readiness and interest of academically diverse students” (p.77). This means teachers need to add components to each lesson to modify for both mathematically-talented students and those who need remediation. Truly differentiating lessons require access to additional resources, planning for small group interaction and modifying the processes and products of the lesson (Tomlinson, 1995). Archambault et al. (1993) found that although there is a lot of discussion about the need to differentiate lessons, the reality is that teachers only made minor modifications to the curriculum in an attempt to differentiate. In addition, pretesting and compacting are often necessary for students to receive instruction based upon their instructional level (Howley, 2002). This is a daunting task for already-overwhelmed teachers.

As part of differentiated instruction, teachers are expected to provide enrichment activities and modify the existing mathematics curriculum as a way to meet the needs of gifted students. At its best, enrichment activities expose students to “a variety of topics related to those of the regular education program and allow for further investigation of them” (Rotigel & Fello, 2004, p.50). At its worst, enrichment becomes ‘more of the same piled higher,’ meaning students get the same assignment, only more of it. This is inappropriate and does not address the need for increased complexity of material requiring higher-order thinking

skills (Rotigel & Fello, 2004). Unfortunately, this is what enrichment means in many classrooms. Children often conceal their abilities to avoid getting extra work, which is contrary to the idea of enrichment.

Many mathematically-talented students working in the highest math level in their grade still do not have their instructional needs met, even when the lessons have been differentiated (Lewis, 2002). Accelerating the student to a math class that teaches at a higher grade level is sometimes the best option for gifted students. Research shows that even younger children who are talented in mathematics learn quicker and with fewer repetitions when using the regular curriculum (Sowell, 1993). Sowell further notes that a spiral curriculum is prosaic and redundant to a gifted student. Conversely, students in accelerated classes can work with advanced concepts, complex problems and extensive topic investigations.

Meeting the needs of each student is the goal of all teachers. Working with mathematically-talented students has its own unique challenges. Teachers have to adapt their teaching strategies to accommodate their students' unusual thinking strategies. Content has to be adjusted and compacted when applicable, the pace has to be altered, and teachers need to access all available resources and assessment tools as a means of meeting the needs of their students. To truly meet the needs of the gifted student, teachers must commit to providing a myriad of opportunities for growth in mathematical thinking, reasoning and problem solving (Rotigel & Fello, 2004).

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Geneva District-Wide Surveys

The Acceleration and Enrichment Study Committee determined it would be beneficial to assess the current A/E program to help them target what areas were working well and what areas needed improvement. All of the stakeholders—administrators, teachers, parents, and students—were given the opportunity to complete surveys in order to get feedback on the existing program. In order to reach the largest number of respondents, the A/E study committee members decided that on-line surveys would be the most effective. Committee members formulated questions specifically designed for each sub-group of respondents (administrators, primary teachers, intermediate teachers, middle school language arts teachers, middle school math teachers, parents of students currently and/or formerly in accelerated classes, current elementary A/E students, current middle school A/E students, middle school students formerly in A/E, and high school students formerly in A/E in elementary and/or middle school). With the help of Geneva’s technology department, surveys containing opportunities for both quantitative and qualitative (open-ended) responses were imbedded in the district’s web site and safeguards were put into place to ensure the integrity of the responses and participant anonymity. For example, accelerated teachers did not administer the surveys to their students at any grade level. The following list shows the number of stakeholders who actually filled out a survey (out of a possible total who could have responded):

Administrators Surveyed (Spring 2008):

- Elementary and Middle School Principals – 5 out of 7

Teachers Surveyed (Fall 2008):

- K-2 Classroom Teachers – 47 out of 52
- 3-5 Classroom Teachers – 58 out of 58
- A/E Teachers – 5 out of 5
- Middle School Language Arts Teachers – 22 out of 24
- Middle School Math Teachers – 11 out of 13

Parents Surveyed (Winter 2008):

- Accelerated Language Arts/Reading – 164 parents out of 609
- Accelerated Math – 151 parents out of 578

Students Surveyed (Fall 2008):

- 3-5 Accelerated Reading Students – 145 out of 157
- 3-5 Accelerated Math Students – 115 out of 127
- Middle School Accelerated Language Arts/Reading Students – 248 out of 255
- Middle School Accelerated Math Students – 289 out of 295
- High School (Former) Accelerated Language Arts/Reading Students – 368 out of 380
- High School (Former) Accelerated Math Students – 397 students out of 410

The data collected from these surveys were analyzed in three ways: areas of success; areas for growth; and emergent themes. The survey results were interpreted to determine the implications of the data collected.

Administrator Survey Results

In the spring of 2008, the principals of Geneva’s five elementary schools and two middle schools were anonymously surveyed to gain their feedback about current elementary and middle school accelerated programming. Five out of a possible seven surveys were returned.

Qualitative Responses from Administrators

	Emergent Themes	Areas of Success	Areas for Growth
3-5	<ul style="list-style-type: none"> • Needed to look at language arts, not just reading at elementary level • Needed support for students and teachers at primary grades in reading and math 	<ul style="list-style-type: none"> • A/E teachers passionate about meeting needs of their students, excellent role models and advocates • Very successful program • Challenging, motivating curriculum • Helped all teachers see importance of differentiation • Coordinator went above and beyond to help staff 	<ul style="list-style-type: none"> • Current identification process needed to be reviewed • Impact of program on building reading and specials schedules (90 minute blocks) • Needed to revisit whether we are meeting social/emotional needs of these students • Needed to revisit whether current structure of A/E is most effective

Quantitative Responses from Administrators

In response to the following statements, 100% (5 out of 5) of the administrators surveyed responded in the affirmative: 1) I feel the A/E coordinator provides adequate resources and support to the administrators in the Geneva School District; 2) I feel confident when discussing the social/emotional needs of accelerated students with their parents; 3) I feel confident when discussing the academic needs of accelerated students with their parents; 4) I feel the academic needs of accelerated students are being met through the A/E program; 5) I feel the presence of an on-site [A/E] replacement teacher reduces the amount of time I need to devote to A/E issues (elementary only); and 6) Ongoing staff

development is needed to support teachers as they differentiate curriculum and instruction to meet the entire spectrum of abilities in their classrooms.

Four out of the five administrators who responded to the survey (80%) agreed with the following: 1) My educational experiences have provided me with a solid understanding of gifted education; 2) I feel the social/emotional needs of accelerated students are being met through the A/E program; 3) I feel the structure of the current A/E program is the most effective way to meet the needs of students at the elementary and middle school levels; and 4) Middle school teachers who teach accelerated language arts or math should have “highly qualified (formal training) status in gifted education.

Sixty percent of the administrators (3 out of 5) agreed that: 1) The current identification process is appropriate for placing students in accelerated reading, language arts and math classes; 2) Elementary classroom teachers with A/E students in their classrooms should have “highly qualified” (formal training) status in gifted education. Finally, half of the administrators stated that they had completed the State of Illinois gifted verification requirements (with one non-response).

Primary (K-2) Teacher Survey Results

Out of the 52 primary-level classroom teachers employed by the Geneva School District in October 2008, 47 responded to the A/E Study Committee's on-line survey.

Qualitative Responses from Primary (K-2) Teachers

Emergent Themes	Areas of Success	Areas for Growth
<ul style="list-style-type: none"> • District uniformity needed in math regarding whether teachers accelerate or enrich, as right now it varies from class to class and school to school • Materials, staff development and whole class enrichment opportunities are needed • A primary support person is needed for reading and math 	<ul style="list-style-type: none"> • Guided Reading/Levels helpful 	<ul style="list-style-type: none"> • For both math and reading, a replacement program would be beneficial • Want cluster grouping by ability • Teachers overwhelmingly expressed the need for help in math (curriculum for acceleration/extension and staff development)

Quantitative Responses from Primary (K-2) Teachers

In the quantitative portion of the survey, the vast majority of primary teachers, 95%, felt there was a need for staff development in differentiation at their grade levels, in order to help them meet the needs of high-ability students. Furthermore, 34 % of the primary teachers were interested in obtaining certification through Gifted Level 1 & 2 training. Currently, only 2 % of the primary teachers have this certification. In addition, 89% of the K-2 teachers believed their students would benefit from an accelerated replacement program similar to the one currently in place in grades 3-5. These survey results indicate a need for training and staff development at the primary level, and support the findings from the qualitative portion of the survey.

Primary teachers also felt they need support in the classroom. Forty-three percent of the district's primary teachers did not feel curriculum materials are available and easily accessible to meet the needs of higher-ability students in math and reading. A striking 79% of the primary teachers agreed that students would benefit from whole-class enrichment lessons delivered by a teacher trained in gifted education. These survey results indicate the teachers need more training on working with high-ability students, and more support in the classroom to meet the needs of these students.

Elementary (3-5) Teacher Survey Results

A full 100% of Geneva’s intermediate-level teaches (58 out of 58) answered the on-line surveys at their schools, providing both qualitative and quantitative feedback.

Qualitative Responses from Intermediate (3-5) Teachers

Emergent Themes	Areas of Success	Areas for Growth
<ul style="list-style-type: none"> • Expressed great interest in developing a writing component for A/E through an accelerated language arts block • Wanted the length of the A/E math class period extended to one hour • Loved the challenge and quickened pace of accelerated classes • Found real benefit to students working with peers of same ability 	<ul style="list-style-type: none"> • In both math and reading, the current programs felt to be effective in meeting the needs of identified students. • Majority of the teachers thought that A/E provided challenges for students to develop critical thinking skills. 	<ul style="list-style-type: none"> • Staff development needed for differentiation. • Majority felt there should be a writing component woven into the reading program. • Some teachers surveyed did not understand cluster grouping • Concerned with identification process of twice-exceptional students (gifted and learning disabled), as a large number of teachers do not feel our current ID is working

Quantitative Responses from Intermediate (3-5) Teachers

Overall, the intermediate teachers believed the A/E classes were beneficial for students. A full 100% agreed that the A/E classes provided challenges for students to develop critical and creative thinking skills. The current program seemed to be hitting the mark in the area of developing thinking skills according to the 3-5 teachers. However, an overwhelming 93% also believed that one major area for improvement would be the expansion of the accelerated reading program to include a writing component. This would make it a

replacement language arts program instead of just a reading program. These results were mirrored in the middle school teachers' survey.

Clustering students, according to the 3-5 teachers, was beneficial across the board. (Clustering referred to the practice of the grouping of like-ability students for instruction.) When asked if grouping the accelerated students together was beneficial to the classroom teacher, 83% of the teachers agreed that it was. When students were clustered, teachers no longer had to deal with the strain of trying to meet the needs of just one or two accelerated students in a class. Along those lines, 71% of the teachers believed that this method of grouping was beneficial to all students in a classroom.

In regards to the identification process for placing students, 90% of the teachers surveyed agreed that students were placed appropriately. One identification challenge revolved around the identification of twice-exceptional students (students who are accelerated and who have special needs, such as a learning disability or an attention disorder). Seventy-one percent of the teachers believed the identification process accurately identified twice-exceptional students, but 29% did not.

Differentiating curriculum was believed necessary to meet the needs of diverse learners, and 87% of the intermediate teachers concurred that on-going staff development was needed in the area of differentiating curriculum and instruction to meet the needs of all students.

Middle School (6-8) Teacher Survey Results

Qualitative Responses Middle School (6-8) Teachers

Emergent Themes	Areas of Success	Areas for Growth
<ul style="list-style-type: none"> • Writing skills of incoming accelerated students were lacking (compared to reading skills) • Needed gifted training • Felt a middle school accelerated resource person would be highly beneficial 	<ul style="list-style-type: none"> • Math seemed to be working, as was reading (outside of the writing component) 	<ul style="list-style-type: none"> • A writing component was needed for the identification of students • A writing curriculum was desired to meet the needs of advanced students. • Teachers needed gifted certification (training) to work with accelerated students both academically and socially-emotionally • Writing skill development was missing in incoming sixth grade students—maybe because they were only pulled out for reading in elementary school and were missing the reading/writing integration.

Quantitative Responses from Middle School (6-8) Teachers – Language Arts

The reading curriculum of the accelerated language arts program met the needs of our advanced students, according to 77% of the middle school teachers surveyed. However, a full 100% of the teachers believed that a writing component was needed for language arts identification of students entering middle school. This was in line with the elementary teachers' survey that highlighted the need for a writing component at the elementary level. The majority of the sixth through eighth grade teachers, 73%, felt that the writing curriculum component of the accelerated language arts program did meet the needs of our advanced students.

Recognizing twice-exceptional students could be a challenge, but 73% of the middle

school teachers perceived that accelerated language arts placement was appropriate for the twice-exceptional student. Similar to the math survey results, 95% of the teachers believed that a student who earned a “C” or below in the accelerated language arts program should be required to requalify. This illustrated the desire of teachers to maintain the high standards of the program. Additionally, 86% of the teachers felt on-going staff development was necessary to support language arts teachers as they differentiated curriculum and instruction. Finally, 64% of the teachers maintained that teachers of accelerated students in language arts should have “highly qualified” status (special training in meeting the intellectual and social-emotional needs of the high-ability/gifted learner).

Quantitative Responses from Middle School (6-8) Teachers – Math

An outstanding 100% of middle school teachers surveyed believed the accelerated math program with meeting the needs of our advanced math students. Out of those teachers, only 18% currently have Gifted Certification, however, an additional 36% were interested in being certified through the Gifted Level 1 & 2 training. All teachers surveyed, both gifted-certified and non-gifted-certified, felt that on-going staff development in math was a necessity in assisting middle school math teachers with differentiation of curriculum and instruction.

The elementary A/E program appeared to be very effective, as 100% of the middle school teachers believed students were prepared for 6th grade accelerated mathematics. In addition, 100% of the teachers also agreed that a student should be required to re-qualify for the accelerated mathematics class in middle school if the student earned a grade of “C”

or below and did not pass the yearly competency exam. Regarding placement, 100% of the teachers surveyed felt that accelerated math placement was appropriate for the twice-exceptional students. Overall, the middle school teachers felt very positive about the accelerated math program.

Parent Survey Results

Over three hundred parents responded to the on-line surveys regarding the accelerated math, reading and language arts classes at both the middle school and elementary levels. For security purposes, the on-line surveys were imbedded deep within the district's web-site and parents could only access the site through the use of a special web address that was mailed to the home of each applicable family.

Qualitative Responses from Parents - Elementary Reading

Emergent Themes	Areas of Success	Areas for Growth
<ul style="list-style-type: none"> • Pleased with program and instruction • Parents were more satisfied overall with elementary accelerated program than middle school accelerated program • Literature/broader reading curriculum • Wanted writing, grammar and spelling in the program (LA not just reading) • More time in the A/E class than 45 minutes • Identification process needed changing- Standardized testing (CogAT) should not keep kids out • Start accelerated reading/LA program earlier • Cluster grouping was seen as important • Liked the challenge • Liked the three years of services (looping) • Liked having the same teacher (continuity) • Small classes • Re-qualification - should not be required for continuance into middle school 	<ul style="list-style-type: none"> • Reading program was looked at positively • Great A/E teachers • Students were challenged • Developed confidence and social skills • Encouraged reflection • Higher level thinking in discussions • Developed deep thinkers • Excellent foundation • Students were grouped with like peers. • Small classes • Advanced, appropriate materials • Developed deeper thinkers 	<ul style="list-style-type: none"> • Writing/grammar (language arts program, not just reading) • Staff development needed for classroom teachers (differentiation for high-ability/gifted students intellectually and socially-emotionally) • Transition smoother from elementary to middle school (big difference); wanted programs aligned • Dissatisfied with matrix ID criteria point system – change process (CogAT) • Wanted acceleration and differentiation started at the lower grades • Desired more emphasis on teacher or parent recommendation rather than test scores • No re-identification going into middle school unless student unsuccessful • Transitioning from regular classroom to accelerated especially in 5th grade for first-timers • Longer time spent in accelerated classes

Quantitative Responses from Parents - Elementary Reading

Just as they expressed in their responses to the elementary accelerated math survey, parents felt overwhelmingly positive about the A/E reading program at the elementary level. Of the parents surveyed, 93% felt that their child's intellectual needs were being met through the A/E reading program. Additionally, 94% of the parents viewed the A/E reading program as being important to their child's academic growth. Parents believed their children felt positively about the A/E reading program, as 94% reported that their child viewed the program as being important to his/her own growth.

Ninety-six percent of parents believed the A/E reading program differentiated by giving different work to the students, not more work. The vast majority of the parents, 95%, also perceived that the accelerated reading classes provided challenges for their child to develop critical and creative thinking skills. As a result of the accelerated reading classes, 92% of parents answered affirmatively when asked if their child became more of an independent thinker. Parents believed that cluster grouping was beneficial in reading instruction, as 97% believed their child benefited from being grouped with students of similar academic abilities.

Qualitative Responses from Parents - Elementary Math

Emergent Themes	Areas of Success	Areas for Growth
<ul style="list-style-type: none"> • Very pleased with program and instruction • Longer class periods desired • Identified sooner than third grade • Standardized testing (CogAT) should not keep kids out • Better transition needed between elementary and middle school math • A few wanted better transition for “new” accelerated math students not starting in third grade • Identification process needed changing (look at whole child) • Student should not be required to re-qualify for continuance into middle school if successful in elementary 	<ul style="list-style-type: none"> • Current elementary accelerated math program was looked at very positively • Terrific teachers • Challenging • Emphasis on problem solving • Independent thinking encouraged • Faster pace • Higher level thinking • Variety of methods • Emphasis on critical thinking skills • Class size 	<ul style="list-style-type: none"> • Staff development needed for regular education teachers so they will differentiate and accelerate curriculum • Less standardized test score emphasis for placement and more emphasis on parent/teacher recommendation • Suggested change in ID process matrix (CogAT) • No need for middle school re-identification/re-qualification if successful in elementary accelerated math program

Quantitative Responses from Parents - Elementary Math

Parents were overwhelmingly very positive about the elementary school accelerated math program. Of the parents surveyed, 95% felt that their child’s intellectual needs were being met through the A/E math program. In addition, 95% of the parents viewed the A/E math program as being important to their child’s academic growth. Along those lines, 92% of the parents felt their child viewed the program as being important to his/her own growth.

Differentiation was seen as crucial to meeting the needs of students, and 93% of parents felt the elementary accelerated math program did this successfully by giving different work to the students, not just additional (more) work. The majority of the parents, 94%, also believed that the accelerated math classes provided challenges for their child to develop critical and creative thinking skills. As a result of the accelerated math classes, 92% of parents felt their child became more of an independent thinker.

Research showed that cluster grouping was beneficial, and the parents surveyed agreed. The vast majority, 98%, felt their child benefited from being grouped with students of similar academic abilities. The data was overwhelmingly positive, as the parents clearly felt the elementary accelerated math program was beneficial to their children.

Qualitative Responses from Parents – Middle School Language Arts

Emergent Themes	Areas of Success	Areas for Growth
<ul style="list-style-type: none"> • Quality/benefits of class often dependent upon the individual teacher • Dissatisfied with the CogAT cut score • Parents wanted <u>different</u> work not <u>more</u> work • Not enough writing assigned 	<ul style="list-style-type: none"> • Grouped students with similar abilities • Development of critical thinking skills 	<ul style="list-style-type: none"> • More teacher training for those working with accelerated students • More coordination and consistency between the accelerated elementary, middle school, and high school programs • Not enough rigor • Not enough homework

Quantitative Responses from Parents – Middle School Language Arts

Both middle school parents and their children viewed the accelerated language arts program as being important. Of the parents surveyed, a solid 96% of them believed the middle school accelerated language arts program was important to their child’s growth, and 90% of the parents thought their children would agree. Although the vast majority of parents, 83%, believed their children were getting different work (as opposed to just more work), this percentage was lower than that for math. Therefore, an opportunity might exist for teachers’ continued work at differentiating the curriculum (and these results were backed up by a number of qualitative comments addressing this issue).

A full 100% of the parents felt that grouping their children by ability was beneficial. Clustering students helped to foster critical and creative thinking among the students. Ninety percent of the parents felt that the current accelerated language arts program effectively challenged their children to develop critical and creative thinking skills. As gifted students often have special social and emotional challenges, it was key that 90% of the middle school parents reported their child’s social and emotional needs were being met.

Qualitative Responses from Parents – Middle School Math

Emergent Themes	Areas of Success	Areas for Growth
<ul style="list-style-type: none"> • Needed more problem solving opportunities in classroom • Wanted additional teacher training in working with accelerated/gifted students • Confused about the definition of the program • Desired more communication from teachers 	<ul style="list-style-type: none"> • Students were challenged • Liked ability grouping • Liked the pace/ability to focus on abstract concepts • Were pleased it afforded access to higher levels of math in high school • Students with like-ability peers 	<ul style="list-style-type: none"> • Problem solving • Teacher training • Clarity of program • Communication about the program

Quantitative Responses from Parents – Middle School Math

Continuing the trend from the elementary parents’ survey, the middle school parents also felt very positive about the middle school accelerated math program. Of the parents surveyed, 88% acknowledged that their child’s intellectual needs were being met through the accelerated math program. An impressive 94% of the parents viewed the accelerated math program as being important to their child’s academic growth. Parents believed their children felt positively about the A/E reading program too, as evidenced by the fact 90% of the parents believed their child viewed the program as being important to his/her own growth.

Effective differentiation was important, and 95% of the parents surveyed believed that the accelerated program did this by assigning different work for the students instead of just additional work. In accordance with the elementary parents, 95% of middle school parents believed that the accelerated math classes provided challenges for their children to

develop critical and creative thinking skills. Due to placement in the accelerated math classes, 92% of parents felt their child became more of an independent thinker.

Parents believed the social and emotional well being of a child was important to their success in the classroom. Eighty-nine percent of the parents reported that their child's social and emotional needs were being met in the accelerated math classroom. Parents overwhelmingly supported cluster grouping, as 97% of them felt that their child benefited from being grouped with students of similar abilities. Overall, the middle school parents felt the accelerated math program was meeting the needs of their children.

Current 3rd-12th Grade Student Results

Nearly 1,600 students (1,562) in grades 3-12, from Geneva High School, Geneva Middle School South, Geneva Middle School North, and the five elementary schools (Harrison, Heartland, Mill Creek, Western Avenue and Williamsburg) completed on-line surveys for language arts, reading, and/or math, depending on their former or current degree of participation in accelerated classes in grades 3-8. The qualitative and quantitative responses were divided by level, read, analyzed and summarized by members of the A/E study group.

Elementary School Results

Qualitative Responses from Current 3rd-5th Grade Accelerated Students

	Emergent Themes	Areas of Success	Areas for Growth
3-5	<ul style="list-style-type: none"> • Wanted more time in accelerated classes • Loved the challenge and quickened pace • Enjoyed being with peers with similar intellectual ability 	<p>Reading</p> <ul style="list-style-type: none"> • Thrived on the challenge • Loved novels they read • Many mentioned they really liked accelerated teachers and the feeling of comfort in their A/E classroom • Enjoyed being with peers with similar intellectual ability <p>Math</p> <ul style="list-style-type: none"> • Enjoyed Math Olympiad • Thrived on the challenge • Enjoyed smaller class size • Liked being with peers with similar intellectual ability 	<ul style="list-style-type: none"> • Want more time in accelerated classes • Many suggested offering accelerated science or social studies

Quantitative Results from Current 3rd-5th Grade Accelerated Reading Students

A total of 145 current elementary-school accelerated reading students answered the quantitative portion of the survey, with their response choices being strongly agree, agree, disagree or strongly disagree (as was the case on all student, teacher and parent surveys).

Twenty two of these students were in third grade, 55 were in fourth grade, and 68 were in fifth grade. It was the first year of participation for 28.97% of the respondents, the second year for 45.52%, and the third year for 25.53%.

Out of the total, 97.93% felt the accelerated program made them a better thinker, and 90.34% found themselves consistently challenged. While 99.31% felt comfortable being in the accelerated classroom, 100% felt comfortable leaving the regular classroom to attend A/E reading. When asked if the accelerated reading instruction that they received made them feel good about school, 95.86% said yes. Additionally, 95.17% stated that they had many opportunities in the accelerated reading class to work with other students who had similar academic abilities, and 95.18% reported being encouraged to think in different ways in A/E reading.

Quantitative Results from Current 3rd-5th Grade Accelerated Math Students

Out of the 115 elementary respondents currently in accelerated math, only 14 were third graders, 45 were fourth graders, and 56 were fifth graders. The amount of time they had been in accelerated math was pretty evenly split between it being their first year (30.43%), second year (32.17%) and third year (37.39%).

When asked three different questions—whether the accelerated math program made them a better thinker, whether they felt comfortable in the accelerated math classroom, and whether the accelerated math instruction they received made them feel good about school—the percentages in the affirmative were identical at 99.13% (with, in fact, only one

student out of 115 disagreeing). All of the students felt comfortable leaving their regular classrooms to come to A/E math.

The opportunity to work with other students who have similar academic capabilities in math was seen as a positive by 93.04% of the respondents, while 93.91% felt intellectually challenged. Finally, 96.65% stated that they were encouraged to think in different ways in the accelerated math classroom.

Quantitative Results from Current 6th-8th Grade Accelerated Language Arts Students (regarding their experiences in the elementary school accelerated reading program)

Out of the 248 middle school accelerated language arts students who took the on-line survey in October 2008, 193 of them had participated in accelerated reading at the elementary level. The majority (122) had been in accelerated reading for three years during elementary school, with 25 participating two years and 46 taking part for one year.

More than 96% of the middle school students reported that they had many opportunities in the elementary school accelerated reading classes to work with students who had similar academic abilities; that they were encouraged to think in different ways while in these classes; and that they felt comfortable leaving their regular classrooms to take part in the accelerated program. In addition, 95.84% believed the A/E reading program in elementary school made them a better thinker, and 94% felt both challenged and comfortable in that setting. The A/E reading instruction they received at the younger level made 92.21% of the middle school students feel good about elementary school.

***Quantitative Results from Current 6th – 8th Grade Accelerated Math Students
(regarding their experiences in the elementary school accelerated math program)***

There were 289 students who answered the middle school math survey, with 198 of them responding to the elementary-level questions because they had participated in the A/E math program in third, fourth or fifth grade. The vast majority (124) had been in accelerated math in elementary school all three years, 31 had taken A/E math for two years, and 43 had been in the program for one year.

The highest number of affirmative replies, 98%, came in response to the statement “I was encouraged to think in different ways in my A/E math class in elementary school.” Ninety-seven percent of the middle school students felt the accelerated program in elementary school made them better thinkers, 92% said it made them feel good about school, 90% felt challenged, and 95% appreciated the opportunities it gave them to work with others who had similar academic abilities. An equal percentage (96%) felt comfortable both leaving their regular classroom to attend A/E and being in the accelerated setting.

Current High School Students: Qualitative Responses Regarding Accelerated Reading and Math Classes in Elementary School

Over 750 current Geneva High School students (97% of those who were eligible) completed the A/E Study Committee’s on-line survey in a GHS computer lab for language arts, reading, and/or math, depending on their degree of participation in grades 3-8. Out of this total, 283 were in accelerated reading in elementary school, and 281 participated in accelerated math. Geneva’s Acceleration/Enrichment Coordinator, Dr. Ann Ramsey, supervised all of these students with the help of high school teacher (and GHS A/E

sponsor) Julie Hepker, head guidance counselor Mary Jane Johnson, and technology specialist Julie Williams. Students were checked in to make sure there was no duplication of reporting. With so many responses, there was a large variety of qualitative comments that the A/E Study Committee read, analyzed and summarized.

	Emergent Themes	Areas of Success	Areas for Growth
3-5 Reading	<ul style="list-style-type: none"> • Very positive elementary school experience • Found it important to be challenged • Found it important to be with similar-ability peers • Would have liked longer class periods for accelerated • Wished it had included writing component 	<ul style="list-style-type: none"> • Positive classroom environment • Liked being with students of similar abilities • Were challenged at their own ability level • Liked WordMasters activities • Classes promoted deeper thinking and “thinking outside the box” • Literature read was interesting and challenging • Accelerated classes in elementary school prepared them for middle school. 	<ul style="list-style-type: none"> • Would have liked longer class periods with students of similar abilities • Would have been helpful to have had writing as a part of the program, not just reading • Would have been beneficial to have been taught in other content areas with their academic peers (science, social studies) • Teachers should have had more freedom in picking the novels that were read
3-5 Math	<ul style="list-style-type: none"> • It was beneficial to be with academic peers • Felt challenged • Found it a positive experience 	<ul style="list-style-type: none"> • Felt challenged • Liked the positive, comfortable setting • Liked hands-on activities • Liked the way concepts were presented • Enjoyed their relationships with other students and the A/E teachers • Felt it gave them a good foundation for middle and high school. 	<ul style="list-style-type: none"> • Would have increased the time in the math classes • Would have started the accelerated math program at an earlier age.

Quantitative Results from Current High School Students (regarding their experiences in the elementary school accelerated reading program)

The results of the quantitative survey that current Geneva High School students took regarding their time in the elementary school accelerated reading classes were overwhelmingly positive. The following statements were made and the students noted their

opinions as indicated: 1) The A/E reading program in elementary school made me a better thinker (96% agreed); 2) I had many opportunities in my A/E reading class in elementary school to work with other students who had similar academic abilities (96% agreed); 3) I was encouraged to think in different ways in my A/E reading class in elementary school (97% agreed); 4) I was challenged in the A/E reading classroom in elementary school (94% agreed); 5) The A/E reading instruction that I received in elementary school made me feel good about school (92% agreed).

In addition, the current high school students reported feeling comfortable while in the accelerated reading classroom (96%), and also felt comfortable leaving their regular classrooms to attend the daily replacement classes (97%). Finally, the high school students felt the accelerated reading program in elementary school prepared them for the academic rigor of language arts in the middle school (96%).

Quantitative Results from Current High School Students (regarding their experiences in the elementary school accelerated math program)

The current high school students rated their elementary accelerated math experiences highly. Ninety-eight percent stated the classes encouraged them to think in different ways, while 96% reported that the classes made them better thinkers and gave them many opportunities to work with other students who had similar academic abilities. As with the elementary reading survey, student comfort levels were high in math, both in leaving the regular classroom to come to accelerated (97%) and in the A/E class itself (95%). When it came to rigor, 94% stated they felt challenged in the elementary-level accelerated math classroom. Ninety-three percent said being in the class made them feel positive about

school, and 97% felt prepared for the rigor of middle-school mathematics because of their participation at the elementary level.

Middle School Results

Qualitative Responses from Current 6th–8th Grade Accelerated Students

	Emergent Themes	Areas of Success	Areas for Growth
6-8		LA: <ul style="list-style-type: none"> • Great discussions • Challenging • Being with other students that think like they do • Two teachers Math: <ul style="list-style-type: none"> • Being with students that think alike • Challenging • Real world connections 	LA: <ul style="list-style-type: none"> • Expectations are too high • Not enough emphasis on writing • Too much homework Math: <ul style="list-style-type: none"> • Less homework • Some would like the class to be more challenging • Would like to learn more through using games

Quantitative Results from Current 6th-8th Grade Accelerated Reading Students

All 248 middle school respondents agreed with the statement: “In my accelerated language arts class, I am encouraged to use higher-order thinking skills, such as making inferences, drawing conclusions, analyzing arguments, etc.” Eighty-seven percent stated they enjoyed the academic challenge that accelerated language arts instruction provided, while 89% felt they had significantly improved as a reader as a result of their participation in accelerated language arts. A slightly higher number, 92%, believed they had significantly improved as a writer through accelerated LA. The same percentage of middle school students (93%) thought their LA instruction reflected their academic abilities and prepared them for future educational opportunities. Ninety-five percent enjoyed being in class with students who

had similar academic abilities and learning styles, and nearly 92% felt a sense of pride in their accomplishments in accelerated language arts. As far as seeing a connection between what they were learning in accelerated LA and the real world, 79% agreed.

Quantitative Results from Current 6th-8th Grade Accelerated Math Students

Ninety-four percent of accelerated math students at the middle school level stated that the instruction and assignments in the classroom reflected their academic abilities, prepared them for future educational opportunities, and helped them improve their problem-solving skills. The same percentage enjoyed being in class with students who have similar mathematical strengths, while 85% liked the academic challenge that accelerated math instruction provided. Nearly 98% of the middle school math students surveyed said that in their accelerated classrooms they are encouraged to use higher order thinking skills, such as problem solving, patterning and making connections to everyday life, and 79% reported seeing a connection between what they are learning in accelerated math and the real world. A sense of pride about their accomplishments in accelerated math was confirmed by 92% of the middle school students.

Current High School Students: Qualitative Responses Regarding Middle School A/E

	Emergent Themes	Areas of Success	Areas for Growth
6-8 Language Arts	<ul style="list-style-type: none"> • Wanted to have read more novels • Having one teacher instead of two • Needed the challenges presented in the accelerated classroom • Thought it helped them to think at a higher level. 	<ul style="list-style-type: none"> • Very positive being with students of similar abilities during middle school • Challenged in middle school • Accelerated classes increased their thinking skills • WordMasters, vocabulary studies, debating, and the help they received in developing a writing style prepared them for high school 	<ul style="list-style-type: none"> • Increasing the number of novels read would have improved the transition from middle school to high school • More formal instruction in writing similar to the high school expectations • Would have preferred one teacher for all of language arts instead of having two • Work load overwhelming for some
6-8 Math	<ul style="list-style-type: none"> • Created a positive attitude about the rigor, pace, and challenge of accelerated math • Prepared students for higher level math in high school. 	<ul style="list-style-type: none"> • Beneficial to be placed with students of the same ability • Fast pace and problem solving activities were a positive of the program • Felt challenged • Majority of students felt prepared for high school and higher level math • Majority of teachers were knowledgeable about their subject matter. 	<ul style="list-style-type: none"> • Instruction using problems that were more applicable to real life situations • Helpful for teachers to be more available for study sessions prior to tests • Helpful to accommodate different learning styles with more varied activities • Some students felt there was too much homework

Quantitative Results from Current High School Students (regarding their experiences in the middle school accelerated language arts program)

Being in accelerated classes with other students who had similar abilities was seen as a plus by 96% of the 303 high school students who completed the portion of the survey applying to middle school language arts. Ninety percent felt a sense of pride about their accomplishments in accelerated LA, 91% thought the instruction and assignments in middle school LA reflected their academic abilities, and 92% enjoyed the academic challenge that the instruction provided. A strong majority, 97%, felt encouraged to use

higher-order thinking skills such as making inferences, drawing conclusions and analyzing arguments in accelerated language arts at the middle school.

Eighty percent of the current high school students saw a connection between what they learned in the accelerated classroom and the real world, and the same percentage felt the middle school prepared them for the academic rigor of GHS language arts. As far as academic improvement, 88% of current high school students believed they became significantly better writers and 82% thought they became significantly better readers as a result of participation in middle school accelerated language arts. Lastly, 85% felt their LA instruction in middle school prepared them for future educational opportunities.

Quantitative Results from Current High School Students (regarding their experiences in the middle school accelerated math program)

As was mirrored in other student responses, 97% of the 361 current high school students who took the on-line middle-school accelerated math survey reported feeling affirmed by being around their academic peers during those years. Ninety-five percent stated they were encouraged to use higher-order thinking skills in accelerated MS math, such as problem solving, patterning and making connections to everyday life. A total of 94% of current high school students believed the instruction and assignments in the middle school accelerated math classroom reflected their academic abilities, and 89% enjoyed the academic challenge provided.

As far as preparing them for future educational opportunities and the academic rigors of high school math, 88% and 84%, respectively, felt middle school teachers and instruction

had done so. Eighty-six percent of high school students felt a sense of pride about their accomplishments in accelerated middle school math, 83% thought their problem-solving skills had improved as a result of their participation in the program, and 74% could see a connection between what they learned in MS math and the real world.

Other Districts' Surveys

For the purpose of comparing them to Geneva, the A/E Study Committee researched 26 different school districts in the Chicago-land suburbs, primarily through one-on-one (face-to-face) interviews with gifted coordinators, assistant superintendents for curriculum and instruction, and curriculum directors, to determine the type of accelerated/gifted programming and services these districts offered to advanced and gifted learners in kindergarten through eighth grade. (Several site visits, some e-mail communication, and a number of telephone interviews were also conducted.)

The districts we surveyed included Aurora-East, Aurora-West, Barrington, Batavia, Bensenville, Bloomingdale, Burlington, Center Case, Dundee, Elgin, Elmhurst, Elmwood Park, Genoa-Kingston, Glen Ellyn, Indian Prairie, Kaneland, Lake Forest, Lombard, Naperville, Oswego, St. Charles, Sunset Ridge, Villa Park/Lombard, Wheaton-Warrenville, Wilmette and Woodridge. Each of these 26 districts had some type of high-ability or gifted program in place.

Initial inquiries included the number of schools in the district, the student population, the number of high-ability students served, and the number of personnel in the program. Other questions we asked covered the type of programming offered (acceleration, enrichment, gifted, or a combination), at which grade level identification and/or services began, what grades were served, and whether identification was open to all students. We also inquired as to the criteria utilized for identification (including the use of standardized test such as the CoGAT and Iowa or other measures—as well as what the minimum (cut) scores were; teacher recommendations; portfolios of student work; parent input; in-class observations; and an appeals process), and the criteria for exiting if the program was an academic

mismatch for the student. The committee also asked about the standardized testing schedule and whether there were opportunities for retesting (as well as what the guidelines for those retests were).

Other topics of discussion included whether other districts' program delivery models were replacement (like Geneva's), self-contained, push-in, or pull-out with small groups of identified students, and how much time was devoted to meeting the needs of high-ability or gifted learners in the course of a day or a week. In addition, we asked how often the districts' gifted programs underwent program evaluations, who conducted them, and what means was used for assessment.

As far as curriculum, we asked each district what they used to instruct their high-ability, accelerated, and/or gifted learners at the various grade levels (generally broken down into primary, intermediate and middle school). In most cases, separate curriculum was used at the primary and intermediate grades at elementary school, with intermediate instruction often dovetailing into middle school.

Finally, due to our interest in identifying the chronically-underrepresented populations of students who fall under the categories of twice exceptional (gifted with a learning disability) and ELL (English Language Learner), we inquired as to how these districts were attempting to find these youngsters.

With so much data, it was important that we further narrow our focus and look more closely at districts with demographics similar to those of Geneva for further study: Lombard #44, St. Charles #303, Batavia, #101, Elmhurst #205, Wheaton-Warrenville #200, Bloomingdale #13, Glen Ellyn, #89, Indian Prairie #204, and Lake Forest #67. We selected seven

different descriptors to research and compare from the above nine districts. Our main focus was to see the types of services that were provided for children with higher level learning needs in grades K-8. The descriptors used to make comparisons included grades serviced, primary curriculum, intermediate curriculum, staffing devoted to accelerated or gifted education, percent of student population identified for accelerated programming, and the delivery method of accelerated curriculum at all levels.

About half of the districts surveyed began specialized services for the high-ability learner at kindergarten or first grade, with the majority of the districts officially identifying specific students for accelerated programming at the end of second grade or the beginning of third grade. After the identification process, the schools serviced, on average, about 6.5 percent of their student population in accelerated/gifted programs.

Out of the nine districts, seven provided a separate curriculum for their primary students in elementary school. PETS, math enrichment, reading comprehension, logic and problem solving were among the programs that were offered at K-2. At the intermediate grades there was math and language arts acceleration, using out-of-level texts and above-grade-level novels. Accelerated math and language arts were also offered at the middle school level. In the nine districts more closely examined, districts with staff specifically trained and devoted to direct instruction of accelerated students used field-tested programs with their students, while districts with fewer teachers devoted solely to accelerated programming depended largely on materials developed independently.

The delivery methods primarily included a push-in model for grades K-2, and pull-out or replacement for grades 4-8. Most districts offered a combination of push-in and pull-out programs. In the surveyed districts, pull-out programs were more common when there was at least one teacher per school dedicated to accelerated programming.

The number of teachers dedicated solely to teaching accelerated/gifted students varied from district to district. Indian Prairie, with a K-8 program and the most personnel, offered daily academic replacement in addition to a 150-minute-per-week push-in at second grade and a 200-minute-per-week push-in in grades 3-5. Lake Forest reported having two specialists per building. Wheaton Warrenville District 200 devoted at least 18 of their staff members to accelerated programming in the district. The other six districts had approximately one staff member dedicated to providing accelerated services at each elementary school.

At the middle school level, it was more difficult to determine accelerated staff in each district due to the fact that these services were often provided during content classes in language arts and math. Specifically, Glen Ellyn District 89 provided one full-time middle school specialist along with six teachers of advanced classes at the middle school level. Lake Forest focused the efforts of two full-time teachers at each middle school on the education of identified gifted students. These Lake Forest teachers were supplemented by a part-time middle school A/E coordinator, a full-time coordinator for Quest (accelerated) students, and a full-time counselor who specialized in meeting the unique social-emotional needs of the gifted learner. St. Charles stated they were opening a gifted magnet “school

within a school” next year at Wredling Middle School, with the goal of reaching the top three percent of St. Charles’ students in an all-day self-contained setting covering every subject area.

We found many similarities within the districts for grades 3-8. At the primary level (grade K-2), five of the seven comparable districts provided a service of some nature for students in these grades, with replacement programming in math and language arts preponderant at grades 3-5. Middle school programs focus on accelerated or fast-paced programming taught by advanced teachers with, in several districts, additional staff at this level for teacher support and coordination of programming.

Recommendations

Upon completion of all components of the study, a number of overarching themes emerged as being important to Geneva, its students, staff and parents. The study committee addressed the areas of identification, program delivery, personnel, curriculum and staff development.

Committee Recommendations: Identification

- Adjust the matrix so the CogAT entry point is a 120 instead of a 125, but balance that by requiring those with CogAT scores of 120-124 to have higher Iowa scores.
- Give the Cognitive Abilities Test and the Iowa Test of Basic Skills to all students at the beginning of third grade (which will be used for initial identification for elementary school accelerated classes) and fifth grade (for middle school accelerated identification). Under this recommendation, the third grade accelerated language arts and math replacement programs would start the second semester. The A/E teachers would spend that open time during the first semester in the third grade classrooms, allowing these specialists to work with teachers and a variety of students and help with their potential identification.
- Provide an opportunity in the spring of each school year, on a weekday and a Saturday morning, for interested students at any grade level to take the CogAT and the Iowas. The resulting scores would then be plugged into the matrix to determine if students qualify for accelerated placement the following year.

- Implement an appeals process, as is recommended by the research, when students do not qualify through test scores (“cut” scores). While those scores may be used as a point of entry into a matrix, other factors that could obviate the test results must be taken into consideration when placement decisions are made. Components of an appeal could include student work samples (portfolios), student anecdotal information, observations, and parent and teacher recommendations. A committee will work on the appeals process in the 2009-2010 school year, for likely implementation in the spring of 2010.
- Create and utilize a new teacher recommendation form. The current one, the EBY, emerged from the 1981 Purdue checklist. One concern with the EBY assessment was that it favored academically-talented students over creative and abstract thinkers. For example, teachers were primarily asked to rate students in areas of class performance, such as productivity, goal orientation and independence, all of which benefited high-achieving students who might or might not have needed accelerated programming. The new form is based on criteria that reflect the most current research on gifted and high-ability students, has a wider range of evaluation points, and gives teachers an opportunity to share qualitative comments and observations. The A/E staff will train teachers on how to fill out the new form in the 2009-2010 school year.
- Identify and serve often-overlooked high-ability students. Certain populations of high-ability and gifted students are regularly misrepresented or underrepresented, including the twice-exceptional (gifted with a learning disability), the English

Language Learner, and the bright but underachieving student who may have become frustrated by the regular classroom curriculum and therefore possess poor work habits or a weak school record.. Staff development will be ongoing to help teachers identify and meet the needs of these students, who may need alternative testing to determine their ability level, as well as subsequent accommodations and intentional support that personalizes their accelerated educational experiences. For the twice-exceptional student, for example, modifications might take the form of access to a computer, extended time on assignments, working or testing in a quiet place, being given copies of notes, preferential seating, and having tests graded higher than daily work.

- Streamline the exit process when there is a misfit between the accelerated program and a particular student. The committee created an easy-to-use form that includes collaboration from teachers, administrators, parents and students. A/E personnel will train staff on how to use the new form in the 2009-2010 school year.
- Maintain a running record on each accelerated student's progress throughout their school years in Geneva, including entry point, test scores, and class choices.

. Committee Recommendations: Program Delivery and Personnel

Given the current economic situation, the A/E Study Committee's recommendations on changes in program delivery and personnel are not feasible at this time. However, as these recommendations are based on both outside research (best practices) and feedback

from Geneva teachers, parents and students, committee members would like to present them to the board for consideration at a future date when financial conditions improve.

- Add a full time A/E person at each building (for a total of two). One A/E teacher would provide daily accelerated language arts instruction in three ninety minute blocks at third, fourth and fifth grade. This would create greater articulation between the elementary and middle school levels, as both would be teaching language arts. The other A/E teacher would provide daily accelerated math instruction (in three 45 minute segments) to students in grades 3-5, and would also provide ongoing differentiation support for the teachers (and high-ability students) at the primary level (K-2).
- Add a full-time A/E specialist to the middle school staff to assist teachers at both North and South as they work to meet the needs of their high-ability, accelerated and gifted learners. This is in keeping with the findings of the literature review, quantitative and qualitative studies, emergent themes and other-district surveys that highlight the importance of meeting the unique academic and social/emotional needs of these learners as they enter the middle school years. In addition, this person could offer training in differentiation for students at all ability levels at the middle schools.
- Continue to support “Expanding Your Horizons” at the high school level by providing a staff member who will work with the students identified for this program, which is affective in nature.

Committee Recommendations: Curriculum

- Create math and language arts extensions for all grade levels, K-8, for classroom teachers to use with students who already know the material presented to them (or who learn the material rapidly and are ready to move on to more challenging work). The process of creating this expanded curriculum began this summer, as a team of teachers worked on extend concepts from the K-2 math curriculum.
- Provide training in the teaching of math problem solving strategies to K-5 classroom teachers and 6-8 math teachers, in order to increase this skill in Geneva students.
- Continue to make revisions to the elementary A/E reading curriculum so that there is consistency across the district as to the literary concepts being taught to accelerated students (this began in the 2008-2009 school year and is ongoing).

Committee Recommendations: Staff Development

- Provide ongoing staff-development on the intellectual and social/emotional needs of gifted and high-ability learners to teachers, administrators and counselors in grades K-12. This spring and summer, the district offered staff members the opportunity to receive Gifted Institute Level 1 and 2 Training from Dr. Sally Walker, the Executive Director of the Illinois Association for Gifted Children. Dr. Walker came to Geneva in April, May and June to present two fifty-hour workshops, and she will hold her third Geneva workshop August 12, 13, 14, 17, 18, 19. Among the topics presented were: identification, characteristics, and social/emotional needs of the gifted child;

elements of curriculum design, models of curriculum for the gifted, and instructional strategies for implementation; and differentiation strategies to be used with all students (content, process and product differentiation, curriculum compacting, higher-level thinking skills, independent study and assessment). The teachers receiving this training included 17 primary teachers (K-2), 20 intermediate teachers (3-5), three elementary A/E teachers, 15 middle school teachers (6-8), and five high school teachers (9-12), for a total of 60 participants. (It should be noted that a number of other teachers in the district have already taken this training).

- Hold articulation meetings between teachers at the various transition grades (fifth to sixth and eighth to ninth), to promote communication about expectations from one grade level to the next. This would provide an opportunity for teachers to share, collaborate, and form common goals.
- Provide mini staff-development opportunities to staff members to help them address the affective needs of the gifted (such as heightened sensitivity, perfectionism, procrastination, underachievement and disorganization).
- Provide mini staff-development opportunities to K-12 teachers to provide them with ideas on differentiating the curriculum for their students.

