Intellectual Giftedness

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Intellectual giftedness is an intellectual ability significantly higher than average. It is different from a skill, in that skills are learned or acquired behaviors. Like a talent, intellectual giftedness is usually believed to be an innate, personal aptitude for intellectual activities that cannot be acquired through personal effort. Various ideas about the definition, development, and best ways of identifying intellectual giftedness have been put forward. Intellectual giftedness may be general or specific. For example, an intellectually gifted person may have a striking talent for mathematics, but not have equally strong language skills.

Intellectual giftedness is not the only form of talent. Howard Gardner's theory of multiple intelligences proposes several kinds of non-intellectual "intelligences", such as bodily-kinesthetic intelligence and interpersonal intelligence. Emotional intelligence is a broad term for one type of non-intellectual intelligence. When combined with an adequately challenging curriculum and the diligence necessary to acquire and execute many learned skills, intellectual giftedness often produces academic success. There is also artistic or creative giftedness, which may or may not be combined with intellectual giftedness.

Developmental theory

Gifted children may develop asynchronously: their minds are often ahead of their physical growth, and specific cognitive and emotional functions are often developed differently (or to differing extents) at different stages of development. One frequently cited example of asynchronicity in early cognitive development is Albert Einstein, who did not speak until the age of four, but whose later fluency and accomplishments belied this initial delay. Psychologist and cognitive scientist Steven Pinker theorized that, rather than viewing Einstein's (and other famously gifted late-talking individuals) adult accomplishments as existing distinct from, or in spite of, his early language deficits, and rather than viewing Einstein's lingual delay itself as a "disorder", it may be that Einstein's genius and his delay in speaking were developmentally intrinsic to one another.

It has been said that gifted children may advance more quickly through stages established by post-Freudian developmentalists such as Jean Piaget. Gifted individuals also experience the world differently, resulting in certain social and emotional issues. The work of Kazimierz Dabrowski suggests that gifted children have greater psychomotor, sensual, imaginative, intellectual, and emotional "overexcitabilities".

Francoy Gagne's (2000) Differentiated Model of Giftedness and Talent (DMGT) is a developmental theory that distinguishes giftedness from talent, offering explanation on how outstanding natural abilities (gifts) develop into specific expert skills (talents). According to DMGT theory, "one cannot become talented without first being gifted, or almost so". There are six components that can interact in countless and unique ways that fosters the process of moving from having natural abilities (giftedness) to systematically developed skills.

These components consist of the gift (G) itself, chance (C), environmental catalyst (EC), intrapersonal catalyst (IC),learning/practice (LP) and the outcome of talent (T). It is important to know that (C), (IC), and (EC) can facilitate but, can also hinder the learning and training of becoming talented. The learning/practice is the moderator. It is through the interactions, both environmental and intrapersonal that influence the process of learning and practice along with/without chance that natural abilities are transformed into talents.

Giftedness from a multiple intelligences perspective

Multiple intelligences has been associated to giftedness or overachievement of some developmental areas (Colangelo, 2003). Multiple intelligences has been described as an attitude towards learning, instead of techniques or strategies (Cason, 2001).

There are eight Intelligences, or different areas in which people assimilate or learn about the world around them: interpersonal, intrapersonal, bodily-kinesthetic, linguistic, logical-mathematical, musical, naturalistic, and spatial-visual. If the Theory of Multiple Intelligences is applied to educational curriculum, by providing lesson plans, themes, and programs in a way that all students are encouraged to develop their stronger area, and at the same time educators provide opportunities to enhance the learning process in the less strong areas, academic success may be attainable for all children in a school system.

Gardner proposed in Frames of Mind (Gardner 1983/1994) that intellectual giftedness may be present in areas other than the typical intellectual realm. The concept of multiple intelligences (MI) makes the field aware of additional potential strengths and proposes a variety of curricular methods.

Gardner suggest MI in the following areas: Linguistic, logico-mathematical, musical, spatial, kinesthetic, interpersonal, intrapersonal, naturalistic and existential.

Identification of gifted students with MI is a challenge since there is no simple test to give to determine giftedness of MI. Assessing by observation is potentially most accurate, but potentially highly subjective. MI theory can be applied to not only gifted students, but it can be a lens through which all students can be assessed. This more global perspective may lead to more child-centered instruction and meet the needs of a greater number of children (Colangelo, 2003).

Identifying giftedness

Overview

The formal identification of giftedness first emerged as an important issue for schools, as the instruction of gifted students often presents special challenges. During the 20th century, gifted

children were often classified via IQ tests; however, recent developments in theories of intelligence have raised serious questions regarding the appropriate uses and limits of such testing. Many schools in North America and Europe have attempted to identify students who are not challenged by standard school curricula and offer additional or specialized education for them in pursuit of nurturing their talents.

Because of the key role that gifted education plays in the identification of gifted individuals, both children and adults, it is worthwhile to examine how that institution uses the term "gifted".

Definitions of giftedness

For many years, psychometricians and psychologists, following in the footsteps of Lewis Terman in 1916, equated giftedness with high IQ. This "legacy" survives to the present day, in that giftedness and high IQ continue to be equated in some conceptions of giftedness. Since that early time, however, other researchers (e.g., Cattell, Guilford, and Thurstone) have argued that intellect cannot be expressed in such a unitary manner, and have suggested more multifaceted approaches to intelligence.

Research conducted in the 1980s and 1990s has provided data which support notions of multiple components to intelligence. This is particularly evident in the reexamination of "giftedness" by Sternberg and Davidson in their edited Conceptions of Giftedness". The many different conceptions of giftedness presented, although distinct, are interrelated in several ways. Most of the investigators define giftedness in terms of multiple qualities, not all of which are intellectual. IQ scores are often viewed as inadequate measures of giftedness. Motivation, high self-concept, and creativity are key qualities in many of these broadened conceptions of giftedness.

Joseph Renzulli's (1978) "three ring" definition of giftedness is one well-researched conceptualization of giftedness. Renzulli's definition, which defines gifted behaviors rather than gifted individuals, is composed of three components as follows: Gifted behavior consists of behaviors that reflect an interaction among three basic clusters of human traits--above average ability, high levels of task commitment, and high levels of creativity. Individuals capable of developing gifted behavior are those possessing or capable of developing this composite set of traits and applying them to any potentially valuable area of human performance. Persons who manifest or are capable of developing an interaction among the three clusters require a wide variety of educational opportunities and services that are not ordinarily provided through regular instructional programs.

In Identifying Gifted Children: A Practical Guide, Susan K. Johnsen explains that gifted children all exhibit the potential for high performance in the areas included in the United States' federal definition of gifted and talented students:

"The term "gifted and talented" when used in respect to students, children, or youth means students, children, or youth who give evidence of high performance capability in areas such as intellectual, creative, artistic, or leadership capacity, or in specific academic fields, and who require services or activities not ordinarily provided by the school in order to fully develop such capabilities." (P.L. 103-382, Title XIV, p. 388) "

This definition has been adopted partially or completely by the majority of the states in the United States. The majority of them have some definition similar to that used in the State of Texas, whose definition states:

" "gifted and talented student" means a child or youth who performs at or shows the potential for performing at a remarkably high level of accomplishment when compared to others of the same age, experience, or environment, and who

exhibits high performance capability in an intellectual, creative, or artistic area;
possesses an unusual capacity for leadership; or
excels in a specific academic field." (74th legislature of the State of Texas, Chapter 29, Subchapter D, Section 29.121) "

The major characteristics of these definitions are (a) the diversity of areas in which performance may be exhibited (e.g., intellectual, creativity, artistic, leadership, academically), (b) the comparison with other groups (e.g., those in general education classrooms or of the same age, experience, or environment), and (c) the use of terms that imply a need for development of the gift (e.g., capability and potential).

Identification methods

IQ scores can vary for the same person, so a person does not always belong to the same IQ score range each time the person is tested. (IQ score table data and pupil pseudonyms adapted from description of KABC-II norming study cited in Kaufman 2009.) Many schools use a variety of assessments of students' capability and potential when identifying gifted children. These may include portfolios of student work, classroom observations, achievement tests, and IQ test scores. Most educational professionals accept that no single criterion can be used in isolation to accurately identify a gifted child.

One of the criteria used in identification may be an IQ test score. Until the late 1960s, when "giftedness" was defined by an IQ score, a school district simply set an arbitrary score (usually in the 130 range) and a student either did or did not "make the cut". It is no longer accepted today in academic circles; however, it's still used by many school districts because it is simple and not entirely without merit. Although a high IQ may have fallen out of favor as a measure to define giftedness, the fact remains that, if a student has a very high IQ, it is significant indicator, indeed

the single most important one, of a student's academic potential (Gross, 2004). Correspondingly, if a student scores highly on an IQ test, but performs at an average or below average level academically, this warrants further investigation.

IQ test classifications vary from one publisher to another. IQ tests do not have validity for determining test-takers' rank order at higher IQ levels, and are perhaps only effective at determining whether a student is gifted rather than distinguishing among levels of giftedness. The Wechsler tests have a standard score ceiling of about 160. This has prompted some authors on identification of gifted children to promote the Stanford-Binet form L-M, which has long been obsolete, as the only test with a sufficient ceiling to identify the exceptionally and profoundly gifted, despite the Stanford-Binet L-M never having been normed on a representative national sample. Because the instrument is outdated, current results derived from the Stanford-Binet L-M generate inflated and inaccurate scores.

The IQ assessment of younger children remains debated. Also, those who are more gifted in areas such as the arts and literature tend to do poorly on IQ tests, which are generally verbal- and mathematical-skills related. While many people believe giftedness is a strictly quantitative difference, measurable by IQ tests, a number of people have described giftedness as a fundamentally different way of perceiving the world, which in turn affects every experience had by the gifted individual. This view is doubted by some scholars who have closely studied gifted children longitudinally.

Savantism

Savants are individuals who perform exceptionally in a single field of learning. More often savant and savantism describes people with a single field of learning well beyond what is considered normal, even among the gifted community. Autistic savantism refers to the exceptional abilities occasionally exhibited by people with autism or other pervasive developmental disorders. The term was introduced in a 1978 article in Psychology Today describing this condition.

Characteristics of giftedness

Generally, gifted individuals learn more quickly, deeply, and broadly than their peers. Gifted children may learn to read early and operate at the same level as normal children who are significantly older. The gifted tend to demonstrate high reasoning ability, creativity, curiosity, a large vocabulary, and an excellent memory. They can often master concepts with few repetitions. They may also be physically and emotionally sensitive, perfectionistic, and may frequently question authority. Some have trouble relating to or communicating with their peers because of disparities in vocabulary size (especially in the early years), personality, interests and motivation. As children, they may prefer the company of older children or adults.

Giftedness is frequently not evenly distributed throughout all intellectual spheres; an individual may excel in solving logic problems and yet be a poor speller; another gifted individual may be able to read and write at a far above average level and yet have trouble with mathematics. It is possible there are different types of giftedness with their own unique features, just as there are different types of developmental delay.

Giftedness may become noticeable in individuals at different points of development. While early development (i.e. speaking or reading at a very young age) usually comes with giftedness, it is not a determinant of giftedness. The preschool years are when most gifted children begin to show the distinctive characteristics mentioned above. As the child becomes older, classes that are 'too easy' and emotional issues may slow or obstruct the rate of intellectual development.

Many gifted individuals experience various types of heightened awareness and may seem overly sensitive. These sensitivities may be to physical senses such as sight, sound, smell, movement and touch. For example, they may be extremely uncomfortable when they have a wrinkle in their sock, or unable to concentrate because of the sound of a clock ticking on the other side of the room. Sensitivities of the gifted are often to mental and emotional over-awareness. For example, picking up on the feelings of someone close to them, having extreme sensitivity to their own internal emotions, and taking in external information at a significantly higher rate than those around them. These various kinds of sensitivities often mean that the more gifted an individual is, the more input and awareness they experience, leading to the contradiction of them needing more time to process than others who are not gifted.

Hypersensitivity to external or internal stimuli can resemble a proneness to "sensory overload", which can cause such persons to avoid highly stimulating, chaotic or crowded environments. This kind of highly sensitive nature has also been called "overexcitability" by Kazimierz Dabrowski. Some are able to tune out such unwanted stimulation as they focus on their chosen task or on their own thoughts. In many cases, awareness may fluctuate between conditions of hyperstimulation and of withdrawal. (An individual's tendencies to feel overwhelmed is also affected by their extraversion and introversion.)

These conditions may appear to be very similar to symptoms of hyperactivity, bipolar disorder, ADHD, autism-spectrum conditions, and other psychological disorders, but are often explained by gifted education professionals by reference to Kazimierz Dabrowski's theory of Positive Disintegration. Some researchers focus on the study of overexcitabilities. Overexcitabilities refer to ways people, both children and adults, understand and experience the world around them (Gross 2008). The more channels of overexcitabilities that are open to receive the information or stimulus, the stronger or more intense the experience is.

According to Gross (2008), an individual response to a stimulus is determined by his/her dominant overexcitability. Overexcitabilities are expressed in five dimensions: psychomotor, sensual,

intellectual, imaginational, and emotional. These dominant channels of acquiring information differ by quantity in some individuals.

Minority students who are gifted in America

While white students represent the majority of students enrolled in gifted programs, Black and Hispanic students constitute a percentage less than their enrollment in school. For example, statistics from 1993 indicate that in the U.S., Black students represented 16.2% of public school students, but only constituted 8.4% of students enrolled in gifted education programs. Similarly, while Hispanic students represented 9% of public school students, these students only represented 4.7% of those identified as gifted. However, Asian students make up only 3.6% of the student body, yet constitute 14% in the gifted programs.

In their 2004 study, "Addressing the Achievement Gap Between Minority and Nonminority Children by Increasing Access to Gifted Programs" Olszewski-Kubilius et al. write that minority students are "less likely to be nominated by teachers as potential candidates for gifted programs and, if nominated, are less likely to be selected for the program, particularly when such traditional measures as I.Q. and achievement tests are used for identification."

This underrepresentation of such students gifted programs is attributed to a multiplicity of factors including cultural bias of testing procedures, selective referrals and educator bias, and a reliance on deficit-based paradigms. To address the inequities in assessment procedures, researchers suggest the use of multiple tests and alternative methods of testing, such as performance-based assessment measures (based on Gardner's theory of multiple intelligences) oral-expressiveness measures as well as non-verbal ability assessments (such as Naglieri Nonverbal Abilities Tests (NNAT) or Raven's Matrix Analogies Tests.)

Gifted students of colour experience success when multicultural content is incorporated in the curriculum and furthermore when the curriculum itself is designed to be culturally and linguistically compatible. A culturally diverse curriculum and instruction encourages gifted minority students to experience a sense of belonging and validation as scholars. Furthermore, the educator's role in this process is significant as Lee et al. argue that "eacher awareness and understanding of students' racial and cultural differences and their ability to incorporate multicultural perspectives into curricular content and instructional techniques may counter gifted minority students' discomfort in being one of the few minority students in gifted programs."

Twice-exceptional

The term twice exceptional was coined by James J. Gallagher to denote students who are both gifted and have disabilities. People have known about twice exceptional students for thirty years;

however, identification and program strategies remain ambiguous. These students need remediation for their learning deficits and enhancement for their strengths to achieve. Twice exceptional students are considered at risk because they are hidden within the general population of their educational environment, and usually viewed as either under-achievers or average learners.

"Early identification and intervention is critical; however, giftedness in the twice-exceptional often is identified later than in the average population and is masked by the disability. The disabilities may include auditory processing weaknesses, sensory motor integration issues, visual perceptual difficulties, spatial disorientation, dyslexia, and attention deficits. Recognition of learning difficulties among the gifted is made extremely difficult by virtue of their ability to compensate. Some guidelines that help in identifying these students are as follows:

Extensive vocabulary
Difficulty with written expression
Ability to understand complex ideas
Easily frustrated
Wide area of interest
Highly sensitive
Creative
Stubborn and opinionated
Specific areas of strength
Highly developed sense of humor
Curious and inquisitive

Social and emotional issues

Isolation

Isolation is one of the main challenges faced by gifted individuals, especially those with no social network of gifted peers. In order to gain popularity, gifted children will often try to hide their abilities to win social approval. Strategies include underachievement (discussed below) and the use of less sophisticated vocabulary when among same-age peers than when among family members or other trusted individuals.

The isolation experienced by gifted individuals may not be caused by giftedness itself, but by society's response to giftedness. Plucker and Levy have noted that, "in this culture, there appears to be a great pressure for people to be 'normal' with a considerable stigma associated with giftedness or talent." To counteract this problem, gifted education professionals recommend creating a peer group based on common interests and abilities. The earlier this occurs, the more effective it is likely to be in preventing isolation.

Perfectionism

Perfectionism is another issue for gifted individuals. It is encouraged by the fact that gifted individuals tend to be easily successful in much of what they do. Healthy perfectionism refers to having high standards, a desire to achieve, conscientiousness, or high levels of responsibility. It is likely to be a virtue rather than a problem, even if gifted children may have difficulty with healthy perfectionism because they set standards that would be appropriate to their mental age (the level at which they think), but they cannot always meet them because they are trapped in a younger body, or the social environment is restrictive. In such cases, outsiders may call some behavior perfectionism, while for the gifted this may be their standard.

"Perfectionism becomes desirable when it stimulates the healthy pursuit of excellence."

Unhealthy perfectionism stems from equating one's worth as a human being to one's achievements, and the simultaneous belief that any work less than perfect is unacceptable and will lead to criticism. Because perfection in the majority of human activities is neither desirable, nor possible, this cognitive distortion creates self doubt, performance anxiety and ultimately procrastination.

The unhealthy perfectionism can be triggered or further exaggerated by parents, siblings, school comrades with good or ill intentions. Parents are usually proud and will praise extensively the gifted child, on the other hand siblings, comrades and school bullies will generally become jealous of the intellectual ease of the gifted child and tease him or her about any minor imperfection in his work, strength, clothes, appearance, or behavior. Either approach--positive reinforcement from parents, or negative reactions from siblings and comrades for minor flaws--will push these kids into considering their worth to their peers as equal to their abilities and consider any imperfection as a serious defect in themselves. The unhealthy perfectionism can be further exaggerated when the child counter-attacks those who mocked him with their own weapons, i.e. their lower abilities, thus creating disdain in himself for low or even average performance. There are many theories that try to explain the correlation between perfectionism and giftedness. Perfectionism becomes a problem as it frustrates and inhibits achievements.

D. E. Hamachek identified six specific, overlapping types of behavior associated with perfectionism. They include:

Depression
A nagging "I should" feeling
Shame and guilt feelings
Face-saving behavior
Shyness and procrastination
Self-deprecation.

Underachievement

There is often a stark gap between the abilities of the gifted individual and his or her actual accomplishments. Many gifted students will perform extremely well on standardized or reasoning tests, only to fail a class exam. This disparity can result from various factors, such as loss of interest in too-easy classes or negative social consequences of being perceived as smart. Underachievement can also result from emotional or psychological factors, including depression, anxiety, perfectionism, or self-sabotage.

An often overlooked contributor to underachievement is undiagnosed learning differences. A gifted individual is less likely to be diagnosed with a learning disorder than a non gifted classmate, as the gifted child can more readily compensate for his/her paucities. This masking effect is dealt with by understanding that a difference of one standard deviation between scores constitutes a learning disability even if all of the scores are above average. In addition, many gifted children may underachieve because they have grown to believe that because of their intelligence, things should always come easily to them, and thus may lag behind their non-gifted peers in the work ethic required to learn things that don't come immediately to them. One apparently effective way to attempt to reverse underachievement in gifted children includes educating teachers to provide enrichment projects based on students' strengths and interests without attracting negative attention from peers.

Depression

It has been thought in the past that there is a correlation between giftedness and depression or suicide. This has generally not been proven. As Reis and Renzulli mention,

With the exception of creatively gifted adolescents who are talented in writing or the visual arts, studies do not confirm that gifted individuals manifest significantly higher or lower rates or severity of depression than those for the general population...Gifted children's advanced cognitive abilities, social isolation, sensitivity, and uneven development may cause them to face some challenging social and emotional issues, but their problem-solving abilities, advanced social skills, moral reasoning, out-of-school interests, and satisfaction in achievement may help them to be more resilient."

Also, no research points to suicide rates being higher in gifted adolescents than other adolescents. However, a number of people have noted a higher incidence of existential depression, which is depression due to seemingly highly abstract concerns such as the finality of death, the ultimate unimportance of individual people, and the meaning (or lack thereof) of life. Gifted individuals are also more likely to feel existential anxiety. However, numerous studies have shown that an active depressive state impairs cognition because it retards neurogenesis in the hippocampus.

Professional attitudes toward giftedness

Grobman discusses how some exceptionally and profoundly gifted individuals may unconsciously create deficits as a way of closing the asynchrony gap. Certain researchers, such as Stephanie Tolan, postulate that the attribution of controversial disorders such as "ADHD" -- which other authors have argued has not been proven to exist by any means other than subjective behavioral analysis -- to gifted individuals arises from a misguided tendency to pathologize that which we don't understand. Tolan also discusses that identifying as attention deficient has become fashionable in young adults. Although the diagnosis of ADHD is controversial, it is considered legitimate by organizations such as the American Academy of Pediatrics and the American Medical Association. Diagnostic criteria for ADHD have been established by the World Health Organization (in the ICD-10) and the American Psychiatric Association (in the DSM-IV).

Genetics and intelligence

Intelligence, which is a major component of giftedness, is influenced through a complex interaction of combinations of many genes and many different environmental contexts. Intelligence is a general cognitive ability that supports the fact that most reliable measures of cognitive abilities intercorrelate in some way. It is generally agreed that giftedness may have a genetic component.

Research on families has typically shown a correlation of about .45 in scores of g for parents, children, and siblings. Adoption and twin studies have also provided many valuable insights into the genetic component of intelligence. Studies of first degree relatives adopted apart show a correlation of .22, which is about half that of relatives who live together. Adopted children who are not related but reared together show a correlation of about .23 to genetically unrelated parents and siblings.

Heritability from adoption data is 44% for families, 52% for fraternal twins in a shared environment, and 72% for identical twins reared apart. The existing data for identical twins reared apart has been collected from studies conducted in adulthood and because heritability studies show that adults have higher heritability results than children, this number may be inflated. The question of whether intelligence has a genetic component has been confirmed through numerous studies. More research is necessary to determine the exact processes by which genetic dispositions interact with the environment.

Some children are born with innately higher intelligence levels than others. These children are often labeled as gifted or talented. Many researchers have investigated the early characteristics of gifted children. Hollingworth (1942) reported that 78 percent of the teachers agree that early detection of giftedness can be possible during early development. Children as young as preschool age tend to seek out highly stimulating environments. According to Raine, Reynolds, Venables, &

Mednick (2002) increased stimulation seeking at age 3 years is associated with an increase in cognitive and scholastic test performance later in development. The advantages of identifying intellectual abilities of gifted children at an earlier age will allow educators to place them in the developmental classes that encourage and promote exploration in the domain of their giftedness.

Tannenbaum claims that the environment plays a major role in the nurturance of giftedness or higher intelligence. Giftedness and talent require a special environment just as special education would. The environment must be enriching and encouraging which will allow the child to mature through experience and exploration. The environment must facilitate creative activity in a developmentally appropriate manner which would call for classrooms to be designed for developmental levels as opposed to age or grade levelling. This type of environment with differentiated learning could result from acceleration, lateral enrichment, and special grouping. Also, a developmentally appropriate environment for the gifted child will reduce behavior problems among preschoolers due to an increased engagement and internal motivation for learning.

Furthermore, it is behavioral exploration of the environment that is indicative of the child's intellectual ability later in life. The child's innate motivation to engage in physical activity (hands-on learning) marks a curiosity which motivates task persistence. The increased physical exploration in a social play environment and goal-directed behavior in the stimulating environment facilitate superior cognitive functioning. In addition, gifted children will become high achievers when their interests are piqued by doing what they are innately motivated to do, empowering them to continue trying new skills. Furthermore, when gifted or talented children are supported by educational staff, their community, peers and families, they have higher possibilities to develop their cognitive abilities.

Talented students at the secondary level

What types of changes and support are needed to better enhance the development of talented adolescent students? Feldhusen (2003) addresses two major shifts in thinking needed to further the advancement of adolescents. Feldhusen proposes abandoning the program concept and the labeling of students as gifted. Programs are usually limited in time and are pull-outs that offer non-researched projects. The education of youth demands a wide diversity of experiences in accelerated courses plus extracurricular activities. Students may be served better when labeled talented instead of gifted. The term talent shows potential and suggests a developing ability.

Changes and support are embedded in Feldhusen's Purdue Pyramid Model of Talented Development which facilitates learners in developing a personal strong foundation based on talented learners accepting themselves as legitimate human beings to the ultimate potential of realizing their commitment to the full development of one's ability and talent. Parent support is also critical in the development throughout the teenage years. Feldhusen stresses the importance of

parental support. Parents provide financial and emotional support, guidance and motivation, and are a sounding board.