

Proposal of a Pilot Program
For
Elementary Students
Identified as
Highly Gifted

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Overview

Creation of a pilot program for students identified as highly gifted. Students in grades 3-5 would participate in a 5 day/week program appropriate for their unique educational needs.

Rationale

A need is being demonstrated for more specialized instruction for students meeting the criteria as highly gifted. These students are often more than one grade level above their age peers. They are not socially nor emotionally equipped to be accelerated two full grade levels, nor does current educational research support that acceleration. Current research does support ability grouping of gifted students (addendum 1 & attachment: *Socialization*).

Current Programming

Please refer to attachment: *Gifted Education in the Warren County School District*

Identification of Students

It is projected that there will be a minimum of 194 students in the District in the 2014-2015 school year in need of gifted support services. (Attachment: *Projected Enrollment*). The mean GAI of elementary students currently identified as Gifted is 133. The proposed identification criteria for participation in the pilot program would be students in grades 3-5 having a General Ability Index at or above the 99.5th percentile of elementary students, nationally (Attachment: *Identification of Students*). Current enrollment figures indicate 10-12 students who meet these criteria.

Resource Allocation

Current staffing levels could support this pilot program. One case manager would be assigned to the students participating in the Pilot Program and would manage the current screening process of identification of students needing Gifted Support Services. The remaining four staff members would case manage the remainder of the students identified as needing services (Attachment: *Projected Enrollment*).

Programming

Students participating in the program would receive individualized, guided instruction in the core elementary subject areas by highly qualified, professional staff. The current elementary curriculum would be compacted and enriched to allow for faster paced, more in-depth instruction. Certified Elementary, Science, and Mathematics instructors would meet with students daily. Student would have advanced instruction in the Fine and Performing Arts by a certified specialist. Students would work twice weekly with staff certified in Technology. Students would continue to participate in current programming provided by the Gifted Support program. Please refer to attached *drafts of daily schedules*.

Supporting documentation: *Can you hear the flowers sing? Issues for the Gifted*.

Addendum 1

Effects of Ability Grouping on Student Achievement

Kulik, James A.; Kulik, Chen-Lin C.

Examines the effect of within-class and between-class ability groupings on the academic achievement of gifted elementary and secondary level students. Results showed that gifted students gained more academically than they would have if they had been taught in heterogeneous classes.

NAGC Position Statement: Ability Grouping

Strong research evidence supports the effectiveness of ability grouping for gifted students in accelerated classes, enrichment programs, advanced placement programs, etc. Ability and performance grouping has been used extensively in programs for musically and artistically gifted students, and for athletically talented students with little argument. Grouping is a necessary component of every graduate and professional preparation program, such as law, medicine, and the sciences. It is an accepted practice that is used extensively in the education programs in almost every country in the western world.

Ability Grouping: Answers to Common Questions

by Mary Ann Swiatek, Ph.D.

Reprinted from *CMITES News*, Spring 2001

Does ability grouping increase the academic achievement of gifted students?

Yes. Ability grouping clearly benefits gifted students. Such students have unique characteristics requiring specialized instruction, such as the ability to learn quickly and to deal with abstract concepts at younger-than-usual ages. Given these special needs, perhaps it is not surprising that students who are grouped with other gifted individuals in school learn more in a year than students who have classmates of more varied ability.

Ability Grouping and Acceleration in Gifted Education

Diverse opinions about gifted education and how to define giftedness.

By Carla Thomas McClure

August 2007

Academically, gifted and talented students suffer when placed in classes covering grade-level material only, but these students gain academic benefits when placed in advanced and enriched classes, according to researcher James Kulik (2004). Kulik reached this conclusion

Addendum 1

after conducting two meta-analyses. The first involved 23 studies that compared the achievement of students of the same age and intelligence in accelerated versus non-accelerated classes. In all 23 studies, the students in accelerated classes performed better than those in non-accelerated classes on subject-matter tests, usually "by about one year on a grade-equivalent scale." The second meta-analysis involved 25 studies of enriched classes for talented students. In 22 of these studies, the students in enriched classes outperformed those in regular, mixed-ability classes. On average, those in enriched classes gained 1.4 years on a grade-equivalent scale, while those in regular classes gained one year. Kulik concluded that "overall, the positive effects of accelerated and enriched classes on student learning are probably due to curricular differentiation."

Definitions of Giftedness National Association for Gifted Children A gifted person shows, or has the potential for showing, an exceptional level of performance in one or more areas of expression. U.S. Department of Education The term "gifted and talented," when used with respect to students, children, or youth, means students, children, or youth who give evidence of high achievement capability. These include areas such as intellectual, creative, artistic, or leadership capacity, or in specific academic fields, and students who need services or activities not ordinarily provided by the school, in order to fully develop those capabilities. Columbus Group Giftedness is asynchronous development in which advanced cognitive abilities and heightened intensity combine to create inner experiences and awareness that are qualitatively different from the norm. This asynchrony increases with higher intellectual capacity. The uniqueness of the gifted renders them particularly vulnerable and requires modifications in parenting, teaching and counseling in order for them to develop optimally.

Socialization

Gross, M.

Talent Development, Volume II, pp. 473-476

Ohio Psychology Press

1994

This article by Miraca Gross discusses the lack of differentiation between the levels or degrees of gifted individuals by professionals in gifted education.

This presentation proposes that, as practitioners and researchers in gifted education, we differ significantly from our counterparts in other areas of special education, such as teachers of intellectually handicapped or hearing impaired students, in our failure to recognize and respond to the different levels or degrees of the condition we study.

We recognize, for example, that the intellectually handicapped student has learning needs which are different from those of his or her age-mates of average intellectual ability, and the further such a child is from the average the more we acknowledge that he or she needs a special educational setting. We may mainstream a child of IQ 70 or 60, but few educational systems would propose full time mainstreaming of children of IQ 40. Yet the majority of children 60 or more IQ points above the mean are in heterogeneous classrooms. What happens to them?

Terman, fewer than 10 years into his longitudinal study of 1528 gifted children of IQ 135+, was already discussing the special problems of loneliness and social isolation which had become apparent in the subgroup of children of IQ 170+. (Burks, Jensen, & Terman, 1930). Hollingworth (1926) defined the IQ range 125-155 as "socially optimal intelligence" and claimed that above the level of IQ 160 the difference between the exceptionally gifted child and his or her age-mates is so great that it leads to special problems of development which are correlated with social isolation. Hollingworth emphasized however that this isolation did not arise from emotional disturbance, but was caused by the absence of a suitable peer group with whom to relate. When extremely gifted students who had been rejected by age-peers were removed from the inappropriate grade-placement and were permitted to work and play with intellectual peers, the loneliness and social isolation disappeared and the child became accepted as a valued classmate and friend (Hollingworth, 1942).

The current presentation outlines the major findings of a longitudinal study, formally commenced in 1986, of the intellectual, academic, social and emotional development of 40 Australian children of IQ 160 and above. Very few studies of exceptionally gifted (IQ 160-179) or profoundly gifted (IQ 180+) children have been conducted anywhere in the world and there has been no previous study of this population in Australia.

The study follows a multiple-case replication logic, and employs a wide range of observation techniques. The data gathering procedures include tests of general ability, off-level standardized testing of achievement in several academic subject areas; the Coopersmith Self-Esteem Inventory; the Defining Issues Test of moral reasoning; audio-taped interviews conducted with children and parents at regular intervals; several written questionnaires completed by the subjects' parents; official school records; health records; family diaries; and much other documentation. The combination of quantitative and qualitative measures has allowed for a considerable degree of triangulation, increasing both the validity and reliability of the study. Findings of the first few years of the study are reported in Gross (1993).

The study has amassed a great deal of data on the children's academic, social, emotional and physical development. This presentation, however, centers on the social adjustment of the students and particularly on the extreme difficulties they experience in forming congenial relationships with age-peers of average ability.

Of the 40 subjects, currently aged between 6 and 17, 31 have been retained, by their schools, with age-peers of average ability or have been permitted a token grade-skip of a single year. The curriculum with which these children are presented requires them to underachieve by a margin of several years; a discrepancy of 5 years between a student's tested achievement in math or reading, and the level at which he or she is permitted to work in class, is not uncommon, and the study has recorded discrepancies of up to 9 years. An added complication, however, is that the majority of the 31 "non-accelerants" (so termed because this study has shown that acceleration by only one year makes little or no difference to extremely gifted students either academically or socially) also choose to underachieve deliberately in an attempt to gain social acceptance by their classmates. In general these attempts meet with limited success, as the

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moral development, reading interests, leisure pursuits and play preferences of the subject children are too different to permit effective camouflage and the majority of these children are socially rejected, isolated and deeply unhappy. Children of IQ 180+ who are retained in the regular classroom are even more seriously at risk and experience severe emotional distress.

By contrast, the minority of students (9) who have been radically accelerated by three or more years through a graded series of grade-skips, report that they have stopped, or significantly moderated, their under achievement as they feel that this is no longer necessary. They are now able to work and socialize with students who are three or more years their senior in age but who are their peers in social-emotional and academic development (Gross, 1992).

The study has found striking differences between the self-esteem of the radical accelerants and non-accelerants. In general the radical accelerants obtained positive but modest scores on the academic sub-scale of the Coopersmith Self-Esteem Inventory, they were comparing their achievements with those of their older classmates. The subjects who scored more than one standard deviation beyond the mean for their age were, in general, non-accelerants who compared themselves with age-peers of average ability. By contrast, the radical accelerants had positive and healthy levels of social self-esteem whereas the majority of the non-accelerants had scores of more than one standard deviation below the mean, with a number of children obtaining scores that were disturbingly low. The social self-peers sub-scale of the SEI assesses students' perceptions of their social acceptability; not surprisingly the children's scores reflected the degree to which they were accepted or rejected by their classmates.

Social acceptability was also found to be related to the students' level of moral development. In almost all cases, the subjects' scores on the Defining Issues Test were several years beyond the mean for their ages. Those students whose moral reasoning was unusually accelerated, and who were retained in the regular classroom, had the most severe difficulties with social acceptance. Children of similar ages, with similar DIT scores, who had been radically accelerated, were much more likely to be accepted and valued by their classmates.

The results of this study suggest that whereas ability grouping with age-peers, or a moderate degree of acceleration, or a combination of these and other intervention procedures, may be an appropriate response to the academic and social needs of moderately gifted students, they are not adequate to the needs of the exceptionally and profoundly gifted. Extremely gifted students require a carefully designed and monitored program of radical acceleration, linked to ability grouping and individualized instruction. Keeping them with age peers is not the way to "socialize" these children. If we isolate them from true peers in the heterogeneous classroom we place them in the position of being the one-eyed man in the country of the blind who, far from being king, is feared and ostracized because he has vision or, perhaps, because of what he can see.

References

- Burks, B.S., Jensen, D.W., & Terman, L.M. (1930). *Genetic studies of genius: The promise of youth* (vol. 3). Stanford, California: Stanford University Press.
- Gross, M.U.M. (1992). The use of radical acceleration in cases of extreme intellectual precocity. *Gifted Child Quarterly*, 36(2), 90-98.
- Gross, M.U.M. (1993). *Exceptionally gifted children*. London: Routledge.
- Hollingworth, L.S. (1926). *Gifted children. Their nature and nurture*. New York: Macmillan.
- Hollingworth, L.S. (1942). *Children above IQ 180*. New York: World Books.

Permission Statement

Socialization

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Gifted Education in the Warren County School District

The National Association for Gifted Children provides the following guidelines:

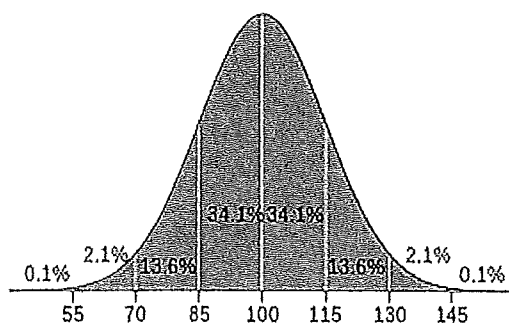
Gifted individuals are those who demonstrate outstanding levels of aptitude (defined as an exceptional ability to reason and learn) or competence (documented performance or achievement in top 10% or rarer) in one or more domains. Domains include any structured area of activity with its own symbol system (e.g., mathematics, music, language) and/or set of sensorimotor skills (e.g., painting, dance, sports).

The federal definition, according to the Javits Act is:

"The term gifted and talented student means children and youths who give evidence of higher performance capability in such areas as intellectual, creative, artistic, or leadership capacity, or in specific academic fields, and who require services or activities not ordinarily provided by the schools in order to develop such capabilities fully."

Pennsylvania defines Gifted and Talented as:

Gifted students" (i) A student who is exceptional under section 1371 of the School Code (24P. S. § 13-1371) because the student meets the definition of "mentally gifted" in this section, and needs specially designed instruction beyond that required in Chapter 4 (relating to academic standards and assessment); (ii) The term applies only to students who are of "school age" as defined under § 11.12 (relating to school age). "Mentally gifted" Outstanding intellectual and creative ability the development of which requires specially designed programs or support services, or both, not ordinarily provided in the regular education program. (Pennsylvania Code § 16.1)



Normalized IQ distribution with mean 100 and standard deviation 15

Approximately 95% of the population has scores within two standard deviations (SD) of the mean. If one SD is 15 points, as is common in almost all modern tests, then 95% of the population are within a range of 70 to 130, and 98% are below 131. Alternatively, two-thirds of the population has IQ scores within one SD of the mean; i.e. within the range 85-115.

Warren County School District currently has 205 students identified as requiring Gifted Support. This is approximately 4.48% of the 4,574 student currently enrolled in the district.

Gifted Education in the Warren County School District

Identification of Gifted Students

Students in the Warren County School District may be referred for screening for Gifted Support Services by parents, teachers, or administration.

- A screening is requested by parent, teacher, or administration
- Gifted Support staff sends a request for Permission to Screen
- Permission to Screen is granted
- Gifted Support staff reviews student records and uses the Kauffman Brief Intelligence Test (K-BIT) to identify students who may need to have a full evaluation by a School Psychologist.
 - Students scoring 120 on K-BIT are recommended for full evaluation.
 - 120 allows for the 90% confidence interval of the K-BIT
- Gifted Support staff informs parent, teacher, and administrator of results of screening
- Gifted Support staff requests Permission to Evaluate from parents
- Permission to Evaluate is granted
- Records are sent to Central Office and a School Psychologist is assigned to complete the Evaluation within 60 days
- A Gifted Multi-Disciplinary Evaluation (GMDE) Team meets to review the results of the Evaluation and makes a recommendation for the need for Gifted Support Services.
 - The GMDE Team consists of:
 - Parents
 - Regular Education Teacher
 - Gifted Support Teacher
 - School Psychologist
 - Administrator
 - The determination is based on guidelines provided by the Pennsylvania Department of Education's Gifted Guidelines, as noted above.

Approximately 100 students are referred for screening each year. Permission is granted for approximately 90% of these students. 20-30% of these screenings are recommended for full evaluations. Approximately 10-15% of these students are identified as requiring Gifted Support services.

The "Bright Child" vs. the "Gifted Learner": What's the Difference?

Published on January 29, 2012 by Christopher Taibbi, M.A.T. in Gifted-Ed Guru

- A bright child knows the answer; the gifted learner asks the questions.
- A bright child works hard to achieve; the gifted learner knows without working hard.
- A bright child enjoys school; the gifted learner enjoys self-directed learning.
- A bright child has a fine imagination; the gifted learner uses that imagination to experiment with ideas and hunches.

Gifted Education in the Warren County School District

Gifted Support Services in the Warren County School District

Gifted Support services include any one or combination of the following: Enrichment, Acceleration, Compaction, Blended Learning Opportunities, and Academic Competitions.

Enrichment programming most often occurs at the Learning Enrichment Center (LEC). Students from across the district attend programming with like-ability peers approximately 20% of their in-class time. Students spend one full day at the LEC, weekly. Chapter 16 guidelines, as well as current peer-reviewed research, indicate that gifted students achieve at the highest rates when grouped with like-ability peers for some part of their educational placement.

Current enrollment figures for Warren County School District:

- Kindergarten - 1
- Grade 1 - 10
- Grade 2 - 6
- Grade 3 - 16
- Grade 4 - 14
- Grade 5 - 17
- Grade 6 - 24
- Grade 7 - 30
- Grade 8 - 19
- Grade 9 - 20
- Grade 10 - 16
- Grade 11 - 25
- Grade 12 - 13

Students in K - 8 = 137; Students in 9 - 12 = 74; Total Gifted Support Students = 211

Gifted Support Facilities

Program specific facilities include:

- Two Computer Labs with specialty software: Rosetta Stone, Adobe Suite, Weather Tracker, CAD.
- Dedicated Science Lab: students maintain multiple fish tanks, raise trout, have a number of turtles, snakes, small mammals. Bird banding equipment and other science related equipment.
- Fiber Arts Studio: Equipment sharing agreements and loans allow for the use of five floor looms and six table looms for student use. Students also have access to 25 Inkle looms and a number of other pieces of weaving equipment.
- (Proposed) Music Studio: Equipment sharing agreements and loans allow for the use a 10 piano lab, six harps, 4 sets of hand chimes, some Orff Instruments, music stands, and a standard studio piano.
- Art Classroom: Classes in General Art, Ceramics, and Calligraphy. Students also use this space during Fiber Arts classes.
- Culinary Arts facility: Students have access to a full kitchen.
- Common Areas: The HUB and the Solarium are common areas used for classes, lunch, and large group activities.

Gifted Education in the Warren County School District

Secondary School Programming

Gifted Support high school students this year were offered the following on-line learning opportunities, backed by Gifted Support staff.

0.5 Credit Courses:

- Anthropology
- Criminology
- Human Geography
- Personal Psychology
- World Religions
- Sport and Entertainment Marketing
- Personal and Family Finance
- Hospitality and Tourism: Traveling the Globe
- International Business: Global Commerce in the 21st Century
- Introduction to Finance
- Web Design I
- Web Design II
- Digital Photography I: Creating Images with Impact
- Digital Photography II: Discovering Your Creative Potential
- Music Appreciation: The Enjoyment of Listening
- Marine Science
- Great Minds in Science
- Forensic Science II
- Veterinary Science

1 Credit Courses:

- Biology
- Advanced Algebra with Financial Applications
- Algebra II
- Geometry
- Liberal Arts Mathematics
- AP Art History
- Art History and Criticism

Workshops:

- Bird Watching 101
- Chain Reaction Contraption
- Math Competition Team
- The First Friday Club (College Club)

Gifted Education in the Warren County School District

Elementary and Middle Level Programming

Mondays – Students in Kindergarten through Grade 2 attend Gifted Support enrichment programming at the LEC. Students work with each of the five staff members currently assigned at the LEC. They receive programming in: Language Arts, Mathematics, Social Studies, Science, and the Fine and Performing Arts.

Tuesdays – Students in Grades 3 and 4 attend Gifted Support enrichment programming at the LEC. Students work with each of the five staff members currently assigned at the LEC. They receive programming in: Language Arts, Mathematics, Social Studies, Science, and the Fine and Performing Arts.

Wednesdays – Students in Grades 5 and 6 attend Gifted Support enrichment programming at the LEC. Students select from a menu of semester length courses. Current course offerings include: Can You Count in Greek?; Scholastic Math; Math Competition Team; Bird Identification; Science Investigations; Genetics and Evolution; Ceramics; Fiber Arts, Rosetta Stone Foreign Language software; Culinary Arts; Creative Writing; Journalism; Technology Projects; Warren County History; The Stock Market Game; and Personal Psychology.

Thursdays – Students in Grades 7 and 8 attend Gifted Support enrichment programming at the LEC. Students select from a menu of semester length courses. Current course offerings include: Math Competition Team; 10 Things Every Mathematician Should Know; Shapes, Angles, and Rene Descartes; Bird Identification; Dendrology; Rosetta Stone Foreign Language software; Calligraphy; Ceramics; Fiber Arts; Culinary Arts; Journalism; Creative Writing; Technology Projects; Personal Psychology; and The Stock Market Game.

Other Programming Options:

- Grade level acceleration
- Subject specific acceleration
- Blended learning opportunities
- Curriculum Compaction
- Participation in Academic Competitions



Can you hear the flowers sing? Issues for gifted adults.

Deirdre V. Lovecky

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Abstract

There has been comparatively little focus in the literature on the characteristics and social and emotional needs of gifted adults. Using observational data, the author attempts to delineate some of the positive and negative social effects of traits displayed by gifted adults. Five traits (divergency, excitability, sensitivity, perceptivity, and entelechy) seem to produce potential interpersonal and intrapersonal conflict. Unless gifted adults learn to value themselves and find support, identity conflicts and depression may result. Emphasis on self-growth through knowing and accepting self leads to the discovery of sources of personal power. Nurturing relationships through realistic expectations and learning to share oneself provides a supportive environment in which gifted adults can grow and flourish.

Although the personality traits and social and emotional needs of gifted children have been widely described (Erlich, 1982; Terman, 1925; Torrance, 1962; Webb, Meckstroth, & Tolan, 1982), there has been comparatively little focus on gifted adults. Numerous longitudinal studies have indicated that the early advantage experienced by gifted children continues into adulthood and that gifted children become adults of superior vocational achievement, generally satisfied with themselves and their lives (Oden, 1968; Terman & Oden, 1947, 1959). Nevertheless, by age 62, most gifted men have experienced the same dissatisfactions with family life as have most people (R.R. Sears, 1977). The gifted women reported to be happiest have been those with the best coping skills, which are dependent on early experience (P.S. Sears & Barbee, 1977). In fact, the effects of early experience, particularly in terms of early educational advantage, seem to be one of the most important contributory factors in later adult achievement (Bloom, 1964; Oden, 1968; Terman, 1925).

In studies of male scientists (Roe, 1952), creative artists and writers (Cattell, 1971), female mathematicians (Helson, 1971), and architects (MacKinnon, 1962), among others, the predominant characteristics found included impulsivity, curiosity, high need for independence, high energy level, introversion, intuitiveness, emotional sensitivity, and nonconformity.

For the most part, the literature on gifted adults does not address the social impact of the various traits described. Piechowski and Colangelo (1984) indicated that certain modes of mental functioning are not socially valued because their expression causes discomfort in others. These traits were termed overexcitabilities, that is, wider and more intense experiences in psychomotor, sensual, intellectual, imaginal, and emotional areas. Gifted adults seem to be characterized by imaginal, intellectual, and emotional overexcitabilities.

In this article I attempt to delineate some of the social aspects (both positive and negative) of traits displayed by gifted adults. I selected gifted adults from among my colleagues, acquaintances, friends, and psychotherapy clients. Of the 15 gifted adults included, 6 were therapy clients. There were 8 women and 7 men ranging in age from 20 to 79. Of these, 6 were doctoral-level professionals, 4 were master's-level professionals, and 3 were students. Fields of endeavor included the social sciences, education, medicine, the biological sciences, business and computers, art, literature, and history. Identification of giftedness was based on a variety of criteria, including identification of giftedness in childhood, memory of scores on achievement or IQ tests, SAT scores, current professional achievement, or attainment of national recognition for achievement.

Using anecdotal and observational material as a basis, I describe five traits that seem to be present in gifted adults and that seem to be central features of their giftedness. The goal is to generate a group of hypotheses about gifted adults and their interactions with others. Further explorations of these preliminary ideas, using more refined research methodology, will undoubtedly provide a more elaborate explanation of the impact of giftedness on the lives of those concerned.

Characteristics of Gifted Adults

There seem to be five traits that produce potential interpersonal and intrapersonal conflict: divergency, excitability, sensitivity, perceptivity, and entelechy. The first three traits have been derived from Torrance's (1961, 1962, 1965) descriptions of creatively gifted children. The last two traits were developed from discussions with gifted adults. These traits seem to be an integral part of giftedness; however, the behavioral manifestations of these traits may vary depending on other physiological and personality factors, such as tolerance for ambiguity, degree of introversion or extroversion, and preference for particular types of sensory input. Gifted adults may exhibit several of the traits. The gifted adults who served as a basis for this article all exhibited at least three (divergency, excitability, and sensitivity).



Although the traits in themselves are neutral, their behavioral manifestations make them socially and emotionally significant. For example, the trait of sensitivity can be manifested as empathy, commitment, touchiness, intensity, or vulnerability. Thus, in any individual, the sum of the behavioral manifestations may be viewed as positive or negative.

Trait Descriptions

Divergency. A preference for unusual, original, and creative responses is characteristic of divergent thinkers. The positive side of the trait includes people who are often high achievers, innovative in a number of fields, task committed, self-starters, and highly independent. Many theoretical scientists, writers, artists, composers, and philosophers are divergent thinkers. Einstein, Freud, and the French impressionists are examples of gifted adults successful in using their divergent thinking ability.

Divergent thinking has positive social and emotional value. Gifted adults possessing this trait are able to find creative solutions to a wide variety of problems, including interpersonal problems, and are able to see several aspects of any situation. In an organization, they are often the "idea" people who bring challenge and enthusiasm to others. They find deep personal satisfaction in the development of new ideas. Divergent thinkers challenge stereotypes. Socially, they bring color to the lives of others, who may use their example to find the courage to break the bonds of conformity and decrease the effects of prejudice.

On the negative side, divergent thinkers encounter difficulty in situations in which group consensus is important. They are often dedicated to their own ideas and find it difficult to support ideas they find foolish. The usual rewards may not motivate divergent thinkers. In fact, they may ignore a reward system imposed by others to work on their own. In social situations, divergent thinkers may not fit in. Common social rules, such as not criticizing others publicly or not disagreeing with one perceived by the majority to be influential, may be disregarded. The dilemma of the divergent thinker is one of maintaining identity in the face of pressure to conform. A highly divergent thinker is often a minority of one. If no one else hears the flowers singing, the divergent thinker may experience alienation and eventually an existential depression.

Excitability. High energy level, emotional reactivity, and high nervous system arousal characterize the trait of excitability. Although excitability and hyperactivity may seem to be similar, they are fundamentally different in that gifted adults with the trait of excitability are able to focus their attention and concentration for long periods of time, to use their energy productively in a wide variety of interests, and to do many things well. These gifted adults enjoy the excitement of taking risks and meeting challenges. This risk taking is dissimilar to that found in mania or impulsivity in that the gifted adult (a) is aware of the consequences of the risk, (b) takes risks in the form of challenges rather than reckless activities, and (c) knows when to stop.

The high energy level of these gifted adults allows them to produce prodigiously in whatever most captures their interest. They often pave the way for others to follow with refinements of their innovative ideas. Many inventors and entrepreneurs have the trait of excitability. Thomas Edison and Leonardo da Vinci are examples of people who possessed this trait.

The trait of excitability has positive social and emotional value. Productivity and risk taking create new ideas and innovations. There is energy to spend on a variety of projects and personal concerns without the necessity of choosing whether to expend energy on work or self. Finally, these gifted adults know their feelings, act on the basis of these feelings, and are unafraid of the appropriate expression of feelings.

On the negative side, gifted adults with this trait may find it difficult to self-regulate. Boredom and the need for stimulation can produce a habit of constant activity. Some gifted adults may be unable to follow through on projects because they crave novelty. A cycle of high interest and activity for a new venture, followed by loss of interest when the novelty decreases and details must be addressed, can leave others feeling frustrated and angry. In addition, some gifted adults may feel little satisfaction with what has been achieved. Their dilemma is one of always doing but feeling little gratification because others often reap the rewards accruing from the long-term development of their initial ideas. A chronic depression that triggers more activity may be the result. These gifted adults may know that the flowers sing but may never have a chance to enjoy them.

Sensitivity. A depth of feeling that results in a sense of identification with others characterizes the trait of sensitivity. Gifted people form deep attachments and react to the feeling tone of situations; they think with their feelings. People who are highly sensitive make commitments to other people and to social causes. They can be enthusiastic and intensely single-minded about their dedication. Poets, investigative reporters, Peace Corps workers, and political and religious leaders are often gifted in sensitivity. Examples of such people include St. Francis of Assisi, Elizabeth Blackwell, Emily Dickinson, Ghandi, Martin Luther King, and Virginia Woolf.



People gifted with the trait of sensitivity find positive social and emotional benefit in their deep concern for the needs and rights of others, their empathy for the feelings of others, and their desire to help even at significant cost to themselves. These gifted adults may be unusually aware of the feeling tone of situations and of the more sensual aspects of the environment, such as color and shading. They are often aware of their own shortcomings. Some gifted adults feel a sense of unity with the cosmos, an experience of a universal sharing of self. Adults gifted with sensitivity tend to be highly moral people concerned with giving and with doing what is right for others.

On the negative side, these gifted adults may not understand that others do not feel so deeply or intensely or that others may have different priorities. They may be very intolerant of the needs of others when they perceive those needs to be superficial.

Adults gifted in sensitivity may be so sensitive that others may hesitate to share problems with them. In fact, other people may believe that the gifted adult experiences their pain more intensely than they do, and they may feel robbed of their own feelings. These gifted adults must learn to guard their vulnerability while still remaining sensitive to others, to continue caring in the face of rejection, and to moderate emotional responsiveness so that they feel "with" rather than "for." The risk is that they will become isolates who avoid relationships that could nurture them. They hear the flowers singing, feel a unity with the universe, and want everyone else to hear the song as well.

Perceptivity. An ability to view several aspects of a situation simultaneously, to understand several layers of self within another, and to see quickly to the core of an issue are characteristic of the trait of perceptivity. These gifted adults are able to understand the meaning of personal symbols and to see beyond the superficiality of a situation to the person beneath. Skilled at understanding motivations, they may be able to help others to understand themselves. Adults gifted with perceptivity are those who can hear the flowers singing within others not yet aware of their own gifts. Their intuition and ability to understand several layers of feeling simultaneously help them to assess people and situations rapidly. In fact, they are often skilled at sensing the incongruity between exhibited social facades and real thoughts and feelings. Another aspect of perceptivity concerns the recognition of and need for truth. Social facades displayed by others may seem to this gifted adult to be a sort of lie. Adults gifted in this way detect and dislike falsehood and hypocrisy.

People who are gifted at "seeing" often seem to have a touch of magic about them. Religious and political leaders, philosophers, creative therapists, writers, and poets may be especially gifted with perceptivity. Jane Austen, Langston Hughes, Anne Hutchinson, William Shakespeare, and Henry David Thoreau are all examples.

Positive social and emotional correlates of the trait of perceptivity include the ability of these gifted adults to view their own behavior somewhat objectively, to assess their own as well as others' motivations, and to base their responses on perceptions of underlying dynamics. They are aware not only of what their own needs are but also of the necessity of avoiding internal stress by learning to use their perceptions to know what they truly want. Often, they will decide to do what is best for themselves despite the disapproval of others.

On the negative side, this trait can present difficulties in interpersonal relationships because others, unaware of what the gifted adult sees so clearly, feel both vulnerable and threatened. For the gifted adult, seeing several layers of a person may be confusing. It may be difficult to pair the response obtained with what the situation seemed to indicate was required. The more discrepancy between the inner self and outer face, the more uncomfortable the gifted adult may feel.

The dilemma of this gifted adult is whether to hide the insights and respond superficially to the social facade or to use the gift and risk rejection. Either course may produce constraint and difficulty with spontaneity. Finding interpersonal support is a major priority for these gifted adults; the risk is fear of closeness and intimacy.

Entelechy. From the Greek word for having a goal, entelechy bespeaks a particular type of motivation, inner strength, and vital force directing life and growth to become all the self is capable of being. Adults gifted in entelechy are highly attractive to others who feel drawn to openness, warmth, and closeness. Being near someone with this trait gives others hope and motivation to achieve their own self-actualization. Teachers, therapists, physicians, and social reformers may be among those so gifted. Examples include Helen Keller, Carl Rogers, and Eleanor Roosevelt.

People gifted in entelechy bring deep feelings to a relationship. By spontaneously expressing feelings, they encourage others to do so as well. Their example of overcoming obstacles and their continuing support and interest encourage others to grow. They not only hear the flowers singing but invite others to hear them too.

People gifted in entelechy are capable of creating "golden moments" of friendship, those special times when two people are truly their best selves and able to share on a deep level (N. Jenckes, personal communication, December 26, 1984). Gifted adults may find sources of rare intimacy; however, they may also find an overwhelming number of people who want contact but have little



to offer in return. They may feel vulnerable to and intruded on by the demands of others who may feel cheated that the promise implied in the initial sharing cannot continue. The dilemma of these gifted adults is to find ways to nurture the self through others while avoiding the expenditure of vital personal resources on others' needs. The risk is anxiety about requests from others and avoidance of closeness in interpersonal relationships.

Options For Self Growth

The five traits described may lead to crises; gifted adults continuously face choices that seem to lead either to denial of gifts or rejection by others. Unless they learn to value self and find support from others, these adults will experience identity crises whenever the conflict resurfaces. This process entraps creative energy, which is then lost to creative production.

Gifted adults can learn to deal creatively with their conflicts. Although many use the resources of psychotherapy, one of the primary traits of adult giftedness is a need for independence. Thus, they may wish to find their own unique ways to nurture themselves and to develop supportive relationships. Some options to be considered might include the following.

Nurturing the Self.

Knowing and loving all aspects of oneself enables one to find and use sources of personal power.

Knowing oneself. Discovering personal symbols can help gifted people understand and value their insights and intuitions. Personal symbols can be explored in a variety of ways, including daydreaming, analysis of dreams, poetry writing, sketching, and the use of imagery and visualization techniques. Lazarus (1977) described visualization techniques and Moffat and Painter (1974) described the use of journal writing to define and maintain self in a sometimes hostile world.

Accepting oneself. Valuing their uniqueness is necessary for gifted adults in accepting themselves. Valuing and accepting negative traits can be a means of freeing energy to deal creatively with life. If the gifted adult is able to accept faults and vulnerabilities, then the positive sides of these traits can come to light. Energy will not be focused on feeling unhappy about self or on denying faults and failings. Most creativity develops from the energy found in discontent; using discomfort as a sign that creative energy is available allows for the taking charge of self rather than for feeling fated to misfortune.

Finding sources of personal power. Freeing self the constraints that inhibit use of creativity by listening to inner messages is one means of finding personal power. Learning to use loneliness rather than avoiding or fearing it can be an important means of increasing personal power (C.A. Martin, personal communication, June 12, 1984). Many gifted adults are lonely because of a lack of true peers. Feeling comfortable with oneself, having a wide variety of interests, knowing that there are some people who value at least parts of themselves, and viewing lonely times as a chance of further self-care and self-exploration are ways of growing in personal power.

Nurturing Interpersonal Relationships

Having realistic and sensitive expectations for oneself and others and being able to share oneself with others are vital to the development of supportive interpersonal relationships. Gifted adults often have high expectations for themselves and others. Sometimes they forget that other people are not gifted in the ways they are. In fact, gifted adults may need to develop an appreciation for the talents of others. Recognition of others' talents can lead to warm friendships in which different talents can complement each other. The lives of Salieri and Mozart might have been completely different had each been able to value the other.

Understanding the effects of one's giftedness on others entails a realization that the same behaviors may elicit different responses from different people and from the same people at different times. For example, emotional intensity can be energizing at one time but exhausting at another. Different limits may have to be negotiated with individuals (D.K. Baker, personal communication, December 22, 1984). Just as sensitive gifted adults may cause others to feel robbed of deep feelings, the anxiety expressed by others may cause the gifted person to feel robbed of the chance to make decisions about the relationship. Learning to set clear boundaries and to negotiate particular limits on giving, expenditure of time and energy, and individual needs for distance and expression of uniqueness can help gifted adults feel some sense of choice in a relationship.

Because of their inner depth and complexity, gifted adults may need to find a large number of friends, each of whom can meet some needs and reflect some aspects of self. Gifted adults sometimes expect to share everything with one person and overlook the special relationships that can develop around one interest or one facet of self.

Sharing one's particular gifts with another can be a source of both self-sustenance and connectedness to others. Some gifts are easier to share with individual friends; others may require a larger audience. A special kind of sharing occurs in the writing of



poetry, as described by Harrower (1972). She discussed the need to communicate as an integral part of the experience of writing a poem. Writing poetry is a self-enhancing process that occurs by connecting the writer in some new way to other people, it is from this sort of sharing that emotional growth is fostered.

Gifted adults can use their special talents to help others find their own creativity and their own sources of inner power. Finding ways of sharing self can enhance both people in a relationship and bring depth to that relationship as it grows and changes over time.

Conclusion

Gifted adults, perhaps more than any other group, have the potential to achieve a high degree of self-actualization. Despite the problems that being gifted can bring, the positive social and emotional aspects of giftedness can more than compensate for the problems. To continue to hear the flowers singing and to turn visions and dreams to reality throughout an entire lifetime is a goal to be desired by every gifted adult.

References

- Bloom, B.S. (1964). *Stability and change in human characteristics*. New York: Wiley.
- Cattell, R.B. (1971). *Abilities: Their structure, growth and action*. Boston: Houghton Mifflin.
- Erich, V.Z. (1982). *Gifted children*. Englewood Cliffs, NJ: Prentice-Hall.
- Harrower, M. (1972). *The therapy of poetry*. Springfield, IL: Charles C. Thomas.
- Helson, R. (1971). Women mathematicians and the creative personality. *Journal of Consulting and Clinical Psychology*, 36, 210-219.
- Lazarus, A. (1977). *In the mind's eye*. New York: Guilford Press.
- MacKinnon, D.W. (1962). The nature and nurture of creative talent. *American Psychologist*, 17, 484-495.
- Moffat, M.J., & Painter, C. (1974). *Diaries of Woman*. New York: Random House.
- Oden, M.H. (1968). The fulfillment of promise: Forty-year follow-up of the Terman gifted group. *Genetic Psychology Monographs*, 77, 3-93.
- Piechowski, M.M., & Colangelo, N. (1984). Developmental potential of the gifted. *Gifted Child Quarterly*, 28, 80-88.
- Roe, A. (1952). *The making of a scientist*. New York: Dodd, Mead.
- Sears, P.S., & Barbee, A.H. (1977). Career and life satisfaction among Terman's gifted women. In J.C. Stanley, W.C. George, & C.H. Solano (Eds.). *The gifted and the creative: A fifty-year perspective*. Baltimore: Johns Hopkins University Press.
- Sears, R.R. (1977). Sources of life satisfaction of the Terman gifted men. *American Psychologist*, 32, 119-128.
- Terman, L.M. (1925). *Mental and physical traits of a thousand gifted children*. Stanford, CA: Stanford University Press.
- Terman, L.M., & Oden, M.H. (1947). *The gifted child grows up*. Stanford, CA: Stanford University Press.
- Terman, L.M., & Oden, M.H. (1959). *The gifted group at midlife*. Stanford, CA: Stanford University Press.
- Torrance, E.P. (1961). Problems of highly creative children. *Gifted Child Quarterly*, 5, 31-34.
- Torrance, E.P. (1962). *Guiding creative talent*. Englewood Cliffs, NJ: Prentice-Hall.
- Torrance, E.P. (1965). *Gifted children in the classroom*. New York: Macmillan.
- Webb, J.T., Meckstroth, E.A., & Tolan, S.S. (1982). *Guiding the gifted child*. Columbus: Ohio Psychology Publishing Company.