Student Perspectives on Education
What Works & What Hurts
Compiled by
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In January 2003, a request for student comments on education was e-mailed to over 1000 Texas students who had graduated from high school in the 1990s. Within two weeks, 93 students responded.

The respondents were not asked to specify whether they had attended Texas schools. However, 79 of the 93 mentioned Texas schools where they attended. From school to school and from year to year, there was a difference in the honors/GT/API/IB courses offered. In high school, 90 respondents took multiple honors and AP courses.

Of the 93 respondents, 81 worked during university years. Most worked part time during the school year and full time summers. The vast majority of the respondents graduated from college in four years. A few graduated in two or three years. Predictably, the small minority of students who worked full time through their college years took longer than four years to graduate.

Of the 93 respondents, 54 have completed or are currently enrolled in graduate level programs for medical degrees, law degrees, master degrees, and PhDs. The number of years of graduate/post graduate work to complete their educational goals ranged from one year for a fast track masters degree to 11 years for med school + residency + fellowship. Students who anticipated graduate studies in the future or had pursued but discontinued graduate studies, were not included in the count of fifty-four.

In the midst of exams and work and life, these young adults took time to respond to our request for comments on education. Here are their perspectives on what works and what hurts.

(see ELAM, page 10)
"The world is so full of a number of things, I'm sure we should all be as happy as Kings." (Stevenson, "Happy Thought")

In his *A Child's Garden of Verses*, written in 1885, Robert Louis Stevenson captured the joy and enthusiasm of most gifted children as they begin formal education. For many, that attitude is nurtured and reinforced, but frequently we, as educators, fail our most gifted students and dim that light of joy with which they come to us.

For those of us who work with gifted children and adolescents, their well-being is often our primary concern. Others, superintendents, building administrators, teachers, and parents are forced to look at the total educational program and make decisions in the best interest of all children. In today's reality of high stakes testing and shrinking budgets, focusing funds on those students most obviously in need of services, the ones who can't read and won't be promoted to the next grade, makes sense. What then about the programs for gifted kids, the ones who "will make it anyway."

After over 50 years of dealing with the education of gifted students first from the student perspective then as teacher, parent, and administrator, I'd like to reflect on what works for gifted children and what doesn't. And overall, what works for gifted kids is a teacher who "gets it."

The teachers I remember most from my own school years were those who energized me or practiced "benign neglect." In those days before computers scheduled students into classes, a group of us got together and all signed up for the "hard" English teacher that we all liked. My school did not have gifted classes, and all students were grouped together in "regular" classes except for that year. For once the intellectual peers were together in one class with a teacher who allowed us the freedom to explore. We still had to read *Silas Marner* and *Julius Caesar*, but I also remember reading *Ivanhoe* and delving deeply into the crusades, fighting huge battles over grammatical constructions, and debating the difference between dolphins and porpoises using research Miss Hair insisted we have before we were allowed to debate.

Mrs. Gibson, on the other hand, ran a tight ship. There was geometry homework every night, and she insisted that it be done or the student would face the embarrassment of having to stand at the board with chalk in hand and admit to their failure. I refused to do geometry homework. It was easy, all you had to do was look at the problem and the proof just sort of blinked at you. Why should I waste my time? I went to the board every day, and (see HICKMAN, page 26)
I’m often asked by parents what they can do that will be most helpful to their gifted child. I don’t think there is any solid research on that topic. If there is, I have not had the pleasure of reading it — so I am forced to guess.

My guess is not altogether a shot in the dark, though. I’m fairly well read and have participated in a fair breadth and depth of discussions about gifted kids over the last 12-15 years. I’ve also given this topic a lot of thought.

I may be proven wrong once someone can generate data addressing this question, but the answer I give is in two parts —

I believe that it’s extremely important for gifted kids to have some sort of challenge in their lives on an ongoing basis. It may be struggling to be the best possible bike rider as a 6-year-old, striving to be the best chess player in town as a 10-year-old, and writing a fantasy novel as a high school student, but having challenges that give them experience working passionately about something they care about seems critical.

The second thing I believe is of utmost importance to gifted kids is that they find friends who are also seeking excellence in some endeavor. It’s fabulous if the gifted student has a friend who is pursuing a similar goal (such as a violinist and a cellist), but I’ve seen examples when the two (or more) friends were after quite different goals who were central to the happiness and joy one another found in sometimes boring environments, like school.

In this issue’s excellent articles by Colleen Elam and Dr. Dorothy Sisk, you’ll read the highlights of school experience as reported by many gifted youth and young adults. Three things stand out for me, they liked the challenge, they liked the peers they worked with and gifted education, and they liked the teachers and programs that brought these challenges and peers together. I don’t mean to minimize the role of the teachers, but I’ve found that sometimes the challenges and peers happen outside of school and are just as effective.

My guess is that is you asked most gifted students which friend they had during their school years that was most influential in their happiness, you’d find another student who was either identified as gifted or one who was achieving at a high level at some activity not addressed by the gifted program or even by the formal educational system as a whole. I’d also guess that if you asked a gifted adult whom they remember most fondly from their school years, they’d either name an old flame or another student who was also striving.

So there it is, my opinion on the long-term outcome of gifted education — challenge and friendships. Challenge is the hallmark of gifted education, but if I had to prioritize the two outcomes I’ve mentioned, I may have to place friends first.
Whatever happened to Andrew Kuklewicz?  
Reflections on the Texas Governor's Honors Program  

Dorothy Sisk

Whatever began as a simple question—Whatever happened to Andrew Kuklewicz? evolved into a full blown 12 year follow-up of former scholars of the Texas Governor's Honors Program, now known as the Texas Honors Leadership Program. The response to our e-mails, phone calls, and interviews was overwhelming; and what we discovered or more correctly rediscovered was that the "scholars" as they are called are keeping in touch with one another, and their enthusiasm for "the program" has not waned. The difficult aspect of the follow-up was how to select the students for inclusion in an article, so a random selection of students was made from the twelve years. One generalization from the follow-up will not surprise anyone in gifted education: These young people want to make a difference, and they are!! High school wasn't easy for them; they painfully speak of stereotyping and being ostracized. What the scholars gained from the program was a better understanding of self, a recognition of their giftedness, and the responsibility that goes with giftedness; opportunities to get to know people from diverse cultures; and the pleasure, excitement and motivation of learning with peers of similar abilities, interest and intellectual drive.

The follow-up has strengthened my resolve to continue "the program" and to see it reinstated as a Texas Governor's Program, in tandem with the twenty five Governor's programs in the United States, and to continue being an advocate of programming for secondary gifted students. The long-standing goal of the Texas Governor's Honors Program (TGHP), and THLP is to recognize outstanding potential and achievement in gifted secondary students, and to provide a unique teacher training opportunity with university faculty and secondary teachers in a learning community. The program introduces the students to a variety of ideas, points-of-view and leadership role models to encourage them to fall in love with ideas, to take responsibility for oneself, and to refuse to acknowledge preconceived limitations of ability and gender. The program not only provides recognition to gifted students, but it stimulates academic excellence. This summer will be the 13th year that TGHP and THLP have been held at Lamar University.

HISTORY OF THE PROGRAM

The program has touched the lives of over 3,000 young scholars, including junior and senior counselors. TGHP was established by Governor Mark White in 1986, and it was first housed at the University of Texas at Austin for two years. The following year, it was not held, and in 1989, the Texas Commissioner of Education, Dr. Thomas Kirby suggested that Lamar University submit a proposal to host the Governor's program in the summer of 1990. Lamar agreed, and a whirlwind of activity was initiated to raise the necessary funds to match the dollar-for-dollar state allotment of $100,000 for the program. With the assistance of Lamar University president Dr. Billy Franklin, and the Director of Research Mr. Bud Leonard, we approached the McFaddin-Ward Foundation, and they agreed to support the 1st TGHP at Lamar University in the amount of $50,000. The next $50,000 came from individual donors, and the University provided the funds 'upfront' until the match was secured.

A planning committee of supervisors, coordinators and teachers of the gifted, Lamar faculty, administrators, and community members suggested that leadership be the focus of TGHP, and that focus continues today. Students identify problems and issues in classes led by content experts designed to cover material that is not normally taught in high school (Philosophy of Religion, Marine Biology, Futures Study, Psychology of Persuasion, Psychology of the Deviant Mind, Group Dynamics, Environmental Ecology, Negotiation and Conflict Resolution, Psychology of Ethics, Logic, History of Jazz, Beginning Sign Language, Supreme Court and Constitutional Law). Each student selects three courses that
meet daily for three weeks, and in the afternoon, the students participate in activities including aerobics, tennis, basketball, soccer, dance, swimming and strength training. Special evening seminars are provided with speakers from the community, state, and nation who demonstrate leadership in their life and work. A number of individuals including Mr. David Beck, a world renowned lawyer; Dr. Jack Gill and Mrs. Linda Gill, president and vice president of the Gill Foundation; and Mr. Tom Harken, an international entrepreneur have been speakers, as well as substantial contributors to the program as individual donors. Another significant supporter and donor Mrs. Ida Pyle, serves as a liaison between the University and the community, and her leadership sustains commitment to the program.

DID THE PROGRAM MAKE A DIFFERENCE?
In the annual follow-up studies of TGHP and THLP scholars, 90-100% of the students makes applications and attends colleges, universities, and advanced technical training after graduating from high school. For the 12 year period, the average enrollment for advanced education was 95%. In face-to-face interviews, phone interviews, e-mail, pictures, and letters, former students from the 12 year period eagerly responded to the question: Did the program make a difference? Gathering this information was a heart-warming experience, and the sincerity of the students was overwhelming. One student said, "I think of the program frequently, it is part of my history." A second interview question: What are you doing now? provided information on their accomplishments and contributions.

--- It was an amazing feeling to be able to have real conversations with other people at TGHP, and to not feel alone or unusual—to just feel normal.

Richard Ramirez, a Junior counselor in 1995, after attending the Texas Academy for Leadership in the Humanities at Lamar University in 1994, the first year of its operation, came from Carroll High School in Corpus Christi. He graduated from the Academy with the equivalent of a high school diploma, and two years of college work, and then transferred to St. Mary’s University where he received a B. A. in Business Administration, with minors in International Business and Corporate Finance. Richard is currently a broadcasting project manager for AMFM, Inc. a merger of CAPSTAR and Chancellor, and he travels throughout the United States. He made the following observations:

"There were fewer limitations or restrictions at TGHP for the students when we were trying to develop new skills. We had opportunities to be more creative with our learning, and to develop within the subject matter. What I appreciated most was having more exposure to different points-of-view and a broader perspective, with peers with similar motivations and goals, and opportunities to meet leaders. Interactions with the professional community speakers spoke volumes toward my professional development and my ability to interact socially. Another important aspect was the emphasis on problem solving and opportunities to formulate solutions to meaningful problems; everything I do is problem solving. I learned that leadership isn’t just talking about ideas, but acting on ideas.”

Kurtis Kaspar, a TGHP scholar in 1993, junior counselor in 94, and senior counselor in 95, 96, and 97, received a B. S. in Biomedical Engineering from Case Western University in 1999. He is currently working on a doctorate in Bioengineering at Rice University, and he plans to be a doctor or to teach school. Kurtis says that he prefers high school teaching, rather than college because of college politics. What most people remember about Kurtis, was his spontaneity in standing and singing in a wonderful clear voice at closing and opening ceremonies of TGHP. He and Felicia Martin, another scholar and senior counselor would sing upon request, as if they had been practicing all morning. Kurtis studied music at Case Western University as an undergraduate, and participates in musicals in Houston. He recently performed in three musicals, Blood Brothers, Merrily We Roll along, and the Best Little Whore House in Texas. Kurtis shared the following about TGHP:

There are two things that stand out in my mind about TGHP, it was where I was able to build my self-confidence, and to see that there are other people like me, people who are skilled. The program was unique in that the students wanted to be there, and all of the students were gifted in some way, and not afraid to show their ability. I learned to express myself deeply, to open up, without fear of persecution and this

(see SISK, page 24)
Trevor’s Problem

Trevor was confused during the usual Thursday morning visit of Professor Edgell right after the new year (2002). Trevor and the 22 students of Mrs. Gena Orth’s 2nd grade gifted and talented program at Frazier Elementary have met every week with Dr. John Edgell, a professor of mathematics and mathematics education from Southwest Texas State University Mathematics Department, for the last two years. Trevor was confused.

The class had been asked to write the date at the top of their papers in base five notation and most all had seemingly accomplished the task, rather easily. Trevor is usually with the main group in activities associated with expressing numerals using base five multiplicative grouping symbols and has stayed with the group in applying modulo structures to arithmetic.

Since all of the students seemed ready to record random generated base five two digit addends, Trevor’s situation became rather evident. The group paused while waiting on Trevor. When asked, Trevor exhibited that he had expressed the month and day in terms of base five, but indicated that he was concerned about how to represent the year, the abbreviated form of the year, in base five. After being assured that the abbreviated form of the year in base five would appear to be the same as the abbreviated form of the year in base ten, he was willing to record that information, but he remained puzzled.

Trevor was able to ask such a complex question because of his exposure to the high levels of mathematical sophistication brought to him from Professor Edgell. Dr. Edgell presents a weekly lesson to this suburb community of students that have been identified as the top 5% academically gifted students of the 2nd grade.

Dr. Edgell first began working with the students at the beginning of first grade where, after learning that the students were conserving one-to-one correspondence, he introduced them to various numeral structures, starting with verbalization and these students are currently on the threshold of positional-base five numerations. The essence of this formative field research has been to learn about accessibility of non-trivial aspects of algebra. There is currently a national interest in accessibility of topics of algebra to students at the elementary school level. Dr. Edgell in conjunction with Mrs. Orth decided to investigate arithmetic applications of modulo structures. Modulo structures refer to non-trivial algebraic fields involving coset groups and is sometimes embedded in various aspects of discrete mathematics. Modulo, (McGraw-Hill Dictionary of Physics and Mathematics, page 636), structures begin with the idea of pairs of numbers being related by an equivalence congruence relation: two integers are congruent modulo N if and only if their remainders when divided by N. Some applications of this idea can be extended to the rational numbers and essentially separates all of the rational numbers, which includes the integers, into sub-classes, called cosets, less than the divisor. Dr. Edgell has mathematically researched/published various aspects/applications of modulo structures. An application of this theory is the cast out structure, known to apply to counting numbers and arithmetic, addition and multiplication, for thousands of years, (Boyer, page 263). Dr. Edgell has mathematically extended the operations to include subtraction and division and extended the number applications to include the rational numbers and has extended the numeral applications to begin with verbalization through the various positional-base representations. Dr. Edgell has several years of field research experience and presentations/papers in accessibility of such ideas at the middle school levels. Such research impacts teacher preparation and in-service programs.
The idea of the cast out of a number is related to the idea of numerical congruence as follows: the cast out of \((b-1)\) of a number \(n\) is \(d\) if and only if \(n\) and \(d\) are congruent modulo \((b-1)\). That is, the cast out of \(1231\) is \(3\) since \(1231\) and \(3\) are congruent modulo \(4\), or \(1231\) and \(3\) have the same remainder when divided by \(4\). It is traditionally chosen, which is one less that the base, \(b\), of a base related numeral and \(d\) is a digit of the base. Consequently it would seem that children would have to be able to formally divide integers, but that is not the situation. Although the idea and applications of cast outs are most evidently an advantage for arithmetic of base related numeral structures, it would seem that children would have to be involved with base related numerals before accessing, that is not a requirement, either.

Dr. Edgell started these students determining and applying cast outs at the beginning of their numeral expressions, verbalization, which is essentially base independent. At this time these students are at the threshold of positional-base five numerations. In the process the students have been operational without a definition of the idea of a cast out and have continually been involved with modifying their personal algorithms for determining and applying cast outs. Applications of the theoretical algebraic modulo structures have been three-fold:

1. The cast out of a power of a base is one.
2. The cast out of the sum is equal to the cast out of the sum of the cast outs of the addends.
3. The cast out of the product is equal to the cast out of the product of the cast outs of the addends.

These students, taught in a constructionist mode, have made tremendous strides on these seemingly complex algebraic ideas. Tentative plans are to continue this longitudinal study in enlarging the scope of the numbers, numerals and operations. In the process of this study there have been some very interesting situations presented by the students. Trevor’s Problem is one such episode.

Because demonstrating an adequate response to alleviate the concern seemed somewhat remote at the time, it was put off to some later date. The rationale being that the students might be more receptive and mathematically sophisticated later.

Each week Dr. Edgell brings an activity that involves working in the base five modes. This creates a situation where these seven and eight years old can be complicated and bilingual in mathematics.

Trevor and the others proceeded to record random generated addends, in written name format, translate the addends to two digit multiplicative grouping base five numerals and determine: the sum, the cast out of fours of the sum, the cast out of fours of each of the addends, the sum of the cast outs of the addends, the cast out of fours of the sum of the cast outs and check this final result against the cast out of fours of the initial sum. The students were successful with several similar problems. An example of this activity, which demonstrates the level of mathematical sophistication of these students at that time, follows. Numeral names were arranged upon a pair of spinner backgrounds. Each spinner was activated to determine a pair of addends, for instance, seventeen and twelve. The students then recorded the base five multiplicative grouping numerical translations onto a prepared template page, \(\text{SPRING}\text{.T,MPO}\text{.TEXAS ASSOCIATION FOR GIFTED EDUCATION}\text{.LOOKING BACK: STUDENT PERSPECTIVES ON GIFTED EDUCATION}\), where the color red, as an indicator of a co-factor of five, was above the digits on the left and the color yellow, as an indicator of a co-factor of one, was above the digits on the right. Also, there was an empty position to the left of these pairs of digits which was designated as blue, an indicator of a co-factor of twenty-five. The students then determined the sum, \(\text{SPRING}\text{.T,MPO}\text{.TEXAS ASSOCIATION FOR GIFTED EDUCATION}\text{.LOOKING BACK: STUDENT PERSPECTIVES ON GIFTED EDUCATION}\). Students proceeded to determine the cast out of fours, “the cast out,” of the sum and each of the addends, \(\text{SPRING}\text{.T,MPO}\text{.TEXAS ASSOCIATION FOR GIFTED EDUCATION}\text{.LOOKING BACK: STUDENT PERSPECTIVES ON GIFTED EDUCATION}\). Students then determined the sum of the cast outs of the addends and the cast out of that sum to check against the cast out of the initial sum, \(\text{SPRING}\text{.T,MPO}\text{.TEXAS ASSOCIATION FOR GIFTED EDUCATION}\text{.LOOKING BACK: STUDENT PERSPECTIVES ON GIFTED EDUCATION}\). Mrs. Orth and the students are mutually impressed with their accomplishments on a continuing basis, often expressing such with spontaneous applause at individual demonstrations by peers.

After considering Trevor’s concern, it was determined that a guided discovery session appropriate for the relative mathematical sophistication of these gifted talented second graders addressing this issue could possibly be scheduled in the near future. What remained was to plan the session, gather base ten and base five power blocks together and to look for an opportunity to recall Trevor’s problem for the group with the intention to engage them all in participating in understanding a transformation from a base ten representation for the year two thousand two to a base five representation for the same year. Most of these students had had previous experience during research sessions with base five power blocks about a year ago but not to the extent as required for Trevor’s problem. Their previous experience with base five power blocks had been in association with discovering the principle that the cast out of the power of a base is one when making the transformation from tally numerals to simple grouping base oriented numerals. Three weeks later an opportunity occurred.

The session started with recalling the situation of initially recording the date three weeks before in base five and Trevor’s concern about recording an abbreviated form for the year, ‘02. It was suggested that perhaps there were others who also might have been unsure and that perhaps some had merely guessed or assumed that there would be no change in the abbreviated form. There was even the possibility that some had noticed what others had recorded and had decided to similarly record such. What ever the situation and since no one had offered a rationale when Trevor was confounded, it was decided to involve all of the students in participating in exploring a transition in terms of base power blocks.

(see EDGELL, p. 21)
Over the past few decades, the numbers and proportions of racially and ethnically diverse students in public schools have dramatically increased. Recent research, however, indicated that in spite of the efforts of states to address barriers in identifying underrepresented populations, the number of gifted students from minority and socio-economically disadvantaged groups remained significantly below their proportion in the general population (Coleman & Gallagher, 1995; Mills & Tisot, 1995). Unless identification procedures for gifted students from underrepresented populations are broadened, many students will have limited access to gifted programs and will miss the opportunity to develop their minds to the fullest (Awaya, 2001). Promising practices in the identification of gifted students need to be identified and reported so public school administrators have the opportunity to effectively identify racially and ethnically diverse students for gifted programs.

In order to address the problem, the present study involved the use of case studies of three elementary schools from three districts in Texas. The population for the study included school districts with student demographics including white, socio-economically disadvantaged, African-American, and/or Hispanic student groups. All of the districts studied identified students for the gifted program in proportion to the diverse student populations. Of the school districts selected, one was a small school district with just above 1000 students enrolled, one was a middle-sized district with approximately 7000 students enrolled, and one was larger with about 28,000 students enrolled. The case study of each elementary school selected in the three districts was focused on the definitions of giftedness promoted and the identification procedures used to select diverse student groups for gifted programs.

Findings emerged from the case studies of the elementary campuses that inhibit the identification of students from underrepresented populations. The study revealed that students are missed due to limited training efforts for potential nominators of gifted students. Limited training efforts existed focusing on the nomination process. In all of the districts studied, program awareness and training for parents and community members in the nomination process involved formal notification in writing through the use of newsletters, notes, brochures, and newspaper articles. Parents were usually directly involved through individual parent/teacher conferences only when teachers wanted to nominate students. In all of the districts studied, training in the nomination process occurred at the beginning of the year for teachers, but the training consisted of a program overview and a description of the characteristics of gifted students. The characteristics discussed were superficial and general in nature.

In addition, minimal training efforts to promote the understanding of giftedness and how cultural differences and socio-economic differences influence the development of giftedness negatively impact the identification of gifted students from underrepresented populations. Training in these areas was nonexistent for parents and community members and limited for teachers in all of the districts. Teachers had participated in some training concerning students from poverty and identification of students from minority populations, but the training was short in duration and did not involve all teachers. Formal training for potential nominators including the nomination process, characteristics of giftedness, and cultural and socio-economic differences is imperative (Fernandez, Gay, Lucky, & Gavilan, 1998; Ford & Harris, 1990; Ford, Harris, Tyson, & Trotman, 2002; Plata & Masten, 1998; Rhodes, 1992).

Also, eight identification practices were identified that promote the identification of students from underrepresented populations. Each practice is listed and explained.
1. Provide staff training efforts devoted to guiding teachers in using structured observation tools like the Kingore Observation Inventory (KOI) to improve teachers' ability in recognizing potentially gifted students from all ethnic and socio-economic groups. In two of the three districts, teachers were trained to use the KOI in four structured lessons. Teachers in these districts were able to implement consistent observation procedures, and this practice assisted teachers in identifying probable students for the gifted program. The practice of guiding teachers in the use of structured observation tools supported the findings of Coleman (1994); Ferbezer (1998).

2. Use open nomination phases and large nomination pools. Open nomination phases and large nomination pools that reflect the diversity of district populations buttress the identification of students from underrepresented populations. The gifted program guidelines and board policies in each district stated that nominations were to be made by students, parents, staff, and community members. The nomination phases in the districts were continuous and provided students numerous opportunities for identification. Furthermore, all of the districts studied nominated large numbers of students for the gifted program during the nomination phase. Nomination pools matching the districts' ethnic breakdowns were stressed. Authors Tannenbaum (1998); Kola (1999) supported the practice of promoting large nomination pools that reflect a proportionate sample of the student population.

3. Design testing settings and choose psychometric measures based on individual student need. Qualified staff who personally knew the students designed testing settings to benefit students in all of the districts. The personality and work habits of students were evaluated. For example, if a student showed a tendency to be distracted by others, an individual setting was chosen. Students could be tested individually, in small group settings, or in large group settings. Moreover, staff who administered psychometric measures decided which measures to use. Group and individually administered mental ability and achievement measures were available. If a student did not do well on a nonverbal mental ability measure, for example, a verbal mental ability measure was administered. Determining accurate mental ability and achievement data and benefiting students were objectives of the districts studied.

4. Use non-verbal mental ability measures such as the Raven's Progressive Matrices. All of the districts studied used nonverbal mental ability measures, specifically the Raven’s Progressive Matrices. Pyryt (1996) advocated the use of the Raven’s Progressive Matrices in the identification of disadvantaged students for gifted programs.

5. Implement district-level or campus-level selection committees who practice professional judgment based on supporting data instead of a strict adherence to set criteria. All of the districts set criteria for placement that included mental ability measures, achievement measures, and behavior or observation scales. Two of the districts used creativity measures. Additionally, other data was attached with the data collected to support student identification when the set criteria were not met. Letters of recommendation or portfolios of work were collected and presented to the committees by campus principals. Even though criteria were set, the committees placed students in the gifted program if additional data indicated that the students were gifted.

6. Provide opportunities for students to develop their giftedness. In each district, if the selection committee did not discover definitive evidence to identify students for the gifted program but did find evidence that students were potentially gifted, the committee recommended the placement of these students in classrooms with gifted students. In addition, the committee could recommend that students participate in the gifted pull-out program. Evidence that students were potentially gifted was displayed when students exceeded the set mental ability or achievement criteria but failed to meet other set criteria. The campus gifted program facilitator and classroom teachers on each campus monitored the progress of the students, and the students were screened for the program after they had time to develop their potential. Lynch & Mills (1993); Landau & Weissler (1992) indicated that every effort should be afforded to students to develop their potential.

7. Develop a strong leadership base of district board members, superintendents, gifted and talented coordinators, staff, and principals who are committed to diversity in the identification of gifted students. Equity, as described by Winebrenner (1999), was the rule in all three districts. In each district, a commitment to diversity and to high expectations for all was displayed. Coleman & Gallagher (1995) specified that identifying gifted and talented students required a strong commitment of effort and resources. All of the districts studied had principals that were committed to diversity in the gifted program. In two of the districts the superintendent demanded the construction of evaluation reports to track the diversity in the gifted program. Also, the same two districts had district coordinators that were active and committed to diversity. In one of the districts, the district's board demanded program diversity and required evaluation reports yearly that outlined the diversity in the gifted program.

8. Provide campus personnel dedicated to the coordination and implementation of the gifted program.

(see GRESHAM, page 23)
Looking Back: Student Perspectives on Gifted Education

(from ELAM, page 1)

Thank You to Parents and Teachers Who Do So Much

"During my childhood, I thrived in an environment in which education was the priority. My parents and teachers in the [Texas] ISD worked together to make it clear to me that I must do well in school."

"Parents are more influential than they could possibly imagine."

"Individual teachers were by far the greatest factor in the effectiveness of any class."

"My life science class in 7th grade was a very great hands-on class. The teacher made a good effort to keep the class interested in the materials. For instance, he would often make the extra effort to go to the slaughter house early in the morning before classes in order to bring in various animal (mostly cows) parts for dissection."

"I really enjoyed my education in general. I feel like the public high school I attended gave us ample opportunity to take difficult classes with great teachers. I think the key to a good education is getting good teachers - because that is what really sparks the student's interest. I almost feel like the students feed off their teacher's enthusiasm and vice versa."

Gifted Identification

Of the 93 respondents, 80 were identified gifted.

Identified gifted in both English and math - 56

Identified gifted in English - 5

Identified gifted in math - 3

Identified gifted in schools/districts with general programs - 16

No gifted program* or not identified - 12

No answer - 1

*The Texas mandate for gifted education in K-8 was effective in 1989. The mandate for gifted education in grades 9-12 was effective in 1991. Some of these students graduated in the early 1990's but some graduated as late as 1998 from Texas public schools where no gifted program was available.

"My recommendations - teachers who push you ... as I get older, I remember best the teachers who made me work harder than I thought possible ... or at the time necessary ... who students would say are the "hard teachers.""

"...the main reason I have been successful was because my parents taught me how to study at a very young age (2nd grade)."

"What worked for me is having parents who pushed me ... who I knew would be disappointed if I did not succeed... who would do anything for my education... I remember in 6th grade my parents taking time off work to buy me poster paper for the science fair, then went back to work... they taught me by example, that hard work pays off."

"The main thing is for parents to get involved in schooling their children... If parents set the rules early and make their children work hard, take the hardest classes, etc. it will be that much easier for the student to discipline himself/herself later."

"I never would have said these things during the classes, but I like tough graders, especially on English papers. Being able to express myself well (and grammatically correct) through writing has been the largest advantage I have over other students. I teach math, so speaking is also quite important, but being able to write well has opened countless doors for me in research and textbook writing. As I said before, school was always fairly easy for me. I can now look back and appreciate the teachers who really made me work hard for my A. Often, I find they are the teachers from whom I learned the most. I find now that many of my students refuse to work, and then just expect to complain and get the grade they want in the end; as if it is the teacher's fault they did not earn the grade they wanted. I expect the highest level out of my students when I teach. More often than not, they respond and even impress themselves with their quality of work."

"I had an excellent education and at a wonderful school district. Competent, enthusiastic teachers and supportive parents are of paramount importance."

"There is a belief in education today that if you teach through technology it is superior to learning from a blackboard. I found quite the opposite and prefer involved blackboard teaching by the professor unless their multimedia approach is truly exceptional. (Understand that this is coming from a technology junkie.)"
## University Majors

At the university level, the respondents majored in the following. Twenty six earned degrees in two or more majors.

### Liberal Arts
- Art history
- Communication Disorders
- Communication Sciences and Disorders
- Communication Studies
- Education
- Elementary Education
- English
- French
- German
- Government
- History
- Human/Organizational Development
- International Studies
- Japanese
- Latin
- Math Education
- Music
- Philosophy
- Plan II Honors
- Political Science
- Public and International Affairs
- Public Policy Studies
- Radio-Television-Film
- Religious Studies
- Spanish
- Urban Studies
- Vocal Performance

### Science
- Agricultural Development
- Anthropology
- Biology
- Biochemistry
- Biomedical engineering
- Biomedical science
- Biotechnology
- Chemistry
- Genetics
- Microbiology
- Molecular Biology
- Neuroscience
- Nutrition
- Physiology
- Psychology
- Sociology
- Wildlife and Fisheries Science

### Math/Technical/Engineering
- Biomedical Engineering
- Chemical Engineering
- Civil and Environmental Engineering
- Computer Applications
- Computer Engineering
- Computer Science
- Electrical Engineering
- Engineering and Public Policy
- Industrial Engineering
- Math
- Marine Engineering
- Technology
- Mechanical Engineering

“My parents being interested in how I did in school also helped, and seeing how they read and did intellectual activities for fun made me more likely to enjoy learning.”

“In high school I think I was successful also because I had good relationships outside of the classroom with my teachers. They made a real effort to be there at anytime for us; in fact one of my best friends from high school was a teacher that I had.”

“I went to public schools in the ___ area in Texas and found my education to be of the highest quality. I believe that, above all else, teachers who show a genuine interest in teaching and are excited and motivated to teach students make up the most important component of a successful educational system.”

“I had some of the best teachers possible. I know because I’m where I am because of them... Teachers need to be recognized for their efforts as well as students.”

“The most important influence on a child’s education is not his educators, but his parents. Schools should emphasize this instead of fostering absenteeism amongst parents.”

“My elementary school was superb. My school implemented a TAG program when I was in 4th grade, and that was a great escape from the classroom. But even aside from that, I often had teachers who would let me work at my own pace, often independently. One teacher assigned me different projects from the rest of the class; another took me on excursions to the public library. Middle school was less impressive... an academically arid period.... High school was generally satisfactory. I had a few stellar teachers and many mediocre ones. Generally, I went to college with a good grasp of academic material but had little skill in analysis or forming conclusions on my own.”

“I think I had a good public school education. I had supportive teachers, which is the most important part I think. My university professors have been even better. I feel supported and challenged in each of my classes.”

“One of the main things I thought was a great asset was that most of my teachers treated us like adults and respected our opinions on a lot of issues.”
“A teacher’s satisfaction with their work sets the tone for a classroom. I would make that the highest priority, because what a payoff! Everyone knows the difference in mood between an educator who regrets their choice, is opposed to the curriculum, resents the administration and lacks passion for their subject and one who is at peace, personally and professionally; sees each day as an opportunity to grow in their skill to impart knowledge and delights in the interest of willing minds…. Regardless of the methods employed, to my mind at least, the focus should be on building a community of dynamic educators.”

**Questionable Qualifications**

“Some teachers may not be particularly qualified to teach their subjects.”

“Enormous variability exists in the quality of teachers in each school…. College students compare professors when they select courses each semester because they know this fact.”

“I think we should make an effort to make sure all teachers actually teach the material themselves. For instance in 7th grade during my Texas history class, the teacher herself NEVER taught anything. We literally listened to audiocassette recordings of the textbook ALL the time. Either that or we worked on elementary educate their students.”

“In my brother’s 6th grade HONORS math class, the only available teacher was very old (70+) former English teacher. In addition to not spending much time teaching, she was assigning students extremely elementary assignments. For example, some of their assignments consisted of simple addition of two 3-digit numbers. My mom complained to her about this, and her answer was that she was “lazy.” She didn’t want to go to the trouble of designing different assignments for her honors and non-honors classes. My mom told her that that was ridiculous and her answer was that, well, “That’s why I sent my daughter to private school.” This type of apathy is unacceptable and should be eliminated at all costs.”

“In his 9th grade English class, the regular teacher for the class quit unexpectedly in the first or second month of the class. For some reason, the district was unable to find a replacement for the teacher the entire school year. My brother was forced to learn English from a substitute teacher (who barely spoke English herself) for the majority of the school year.”

“The one serious hole in ____ was in teaching in newer subjects; the computer science AP teacher knew less than several of the students.”
"The main thing that needs to get better... is the qualifications of teachers these days. I was taught biology by a bunch of football coaches who really didn't know a thing about the subject. The same goes for chemistry courses and most of the other math and science courses."

"The amount of money allotted to the football program alone was more than the sum total of all of the teachers’ salaries. I found that appalling.... May our high school educations not revolve around football alone!"

**Sometimes Practice Makes Perfect**

"Daily timed tests to improve multiplication skills were very helpful, as were chalkboard math races."

"I feel that many things “worked” for me in my education, but none more so than what my Geometry teacher called “jump shots.” By that, she meant practice and repetition. This meant homework, in class problems, or anything else that repeatedly tested the students’ abilities with regards to a specific skill. All the best teachers - for me - were the ones that could isolate the skill, teach it, recognize when the student had caught on, and then have the student practice the skill repeatedly until it was second nature. This was successful for me from elementary, through high school, and even into some college classes like Statistics."

"...teach grammar as early as possible. You’d be surprised how many college students (and graduates) don’t know the basic parts of a sentence or how to properly punctuate."

"One last thing about K-12. Can we please limit the amount of time that must be devoted to that?! TAAS test? I can’t tell you how many weeks of class time were taken up practicing for this idiotic test that I’m sure baboons could pass if they went to school. Teachers hated having to stop class for 6 weeks to teach this stuff, but it was required by the school board. Why? Because they know they’re going to get a bad report when the scores come in because so many people fail. I will never understand how come so many people in my class did poorly on the TAAS. My point is, do after school programs or some kind of tutoring session outside of class. I’m not about getting rid of the test. Hell, if you can’t pass that thing, you certainly don’t deserve to graduate. But this comes back to what I said earlier, schools have a way of holding everyone else back to let the others catch up (which most won’t anyway) and in the end no good comes of it."

"STOP TEACHING TO THE TEST! If you teach everything a child should know in a manner that ensures he/she will learn it, then he/she should have no problems taking any test. However, if you teach only what appears on the test, then children will miss out on valuable information that [may not be] crucial [to] TAAS or the SAT, but is crucial to success in other areas in life."

"DON'T give lots of busy work."

"I really enjoyed the opportunity to participate in extracurricular activities that challenged my brain, as well as being fun. The best ones were often the ones that covered topics we did not learn about in the regular classroom. I participated many weekends in academic tournaments, and I loved being able to take number sense and trivia tests as well as history, biology, and algebra tests in those tournaments. Also, Academic Decathlon if GREAT! Things that I learned for that often come up in conversation or reading now, and I realize that the only reason I know who that person is or what that theory is about is because of Academic Decathlon."

"I suggest focusing on the “how and why” of math and not just teaching by example or patterns."

**The Challenge is to Think, Analyze, Discuss, Prove, Write, Present, and Apply**

"Because so little of what we learn at any level is actually applicable at the next level of training I believe it is equally if not more important to prepare students with skills for that next level—such as time management, interpersonal skills, teaching proper thought/investigational processes vs. brute memorization, and identifying personal gifts/interests as it is to insure mastery of the current content. In such a way one can be best put on a path that will provide future success and happiness and is given the tools with which to achieve to the best of his/her abilities."

"I sat in my Genetics class (yes, I’m a law student taking genetics) with a feeling of amazement as a peer attempted to answer the professor’s question. The question? “Did the plaintiffs in this case deserve something?” This was not asking if they had legal claim, just whether or not the plaintiffs deserved something for their obvious loss. The case concerned a family who had worked very hard for researchers (providing DNA, recruiting others, financing projects, etc) to help the researchers develop a test for a particular genetic disease. Upon its discovery, the family was expected to pay an exorbitant amount to receive the test that they had helped create. The student’s answer? “Well...if they were informed...no, they do not deserve anything.” Are you kidding?? This was a common sense question deserving a common sense answer: Yes, they clearly deserve something although the law might prevent or limit that compensation. Yet no one disagreed with this student. Not one student objected to his response. We could not think for ourselves. We had left instinct and common sense far behind. Another story: I was
called on in my first year Contracts class. The question was something similar to “Should the judge have allowed the construction company to bring suit for additional payment where the property owner had demanded that the company complete the building ahead of schedule by hiring additional workers to work 24/7 and spend well over the contracted amount?” I sat there dumbfounded when the professor suggested that I just “use my common sense.” It took several seconds for me to dig back to basic instinct and bring out the “Yes” he wanted. I had piled so much information about Magellan and Plato, the wars of the past, chemical structures, the laws of physics, proper components of a sentence, animal phyla, and calculus formulas in my brain that I could not immediately access the truly important stuff: if A injures B, should A help make B better? Clear answer: yes.

Common sense should receive more respect and emphasis in our education system. We are all born with some instinct of what is right and wrong (although I suppose that assumption is debatable), yet those principles are suppressed and rejected in some academic settings. Is this a good thing?

“In college, I enjoy classes where I have to simply regurgitate to survive. (I’ve learned to be quite good at it.) However, notes being posted on the internet and simple multiple choice tests do not teach us how to use our brains, but how to play the system. I suggest more innovative teaching methods and less spoon-feeding.”

“Most effective teaching styles—The Socratic Method, as employed in law school classes, has proven very effective; it provides a great incentive to come to class prepared on a daily basis. Further, the lack of exams during the semester with only one cumulative exam at the end of each semester encourages you to learn and retain the information in a cumulative nature. For college, discussion classes where students did the majority of the talking were the most effective; however, this teaching format requires a good professor who is able to point the discussion in the correct direction and ensure that students get to all the basic information.”

“Test both knowledge of facts and application of knowledge. I think this should be implemented as early as possible. Science projects are a good way to do this.”

“Looking back, I find I didn’t mind large classes as much as classes that weren’t challenging. And I never found rote memorization or very long process-following exercises (contrast biological taxonomy or simulating a program on paper with, say, mathematical proofs or literary analysis) as challenging as more deductive work. I felt very strongly that the first kind of problems were hard, but not rewarding. I think I felt most happy when doing analytic things—whether tight or broad in scope.”

“Test both knowledge of facts and application of knowledge. I think this should be implemented as early as possible. Science projects are a good way to do this.”

“As far as teaching style, interactive/Socratic method teaching is the best for understanding concepts; but oftentimes, straight lecturing is the only way to cover all the necessary material."

“Emphasize active class participation— i.e. get students used to asking/answering questions in class and practice/develop oral presentation skills. Once at the high school level, emphasize development of writing skills as much as possible - as a TA, I've graded numerous papers written by undergraduates and I've constantly been confronted with poor grammar/writing style/content and an inability to write concisely.”

“The main thing that was lacking in high school was writing. The AP timed writings were helpful, but there were so few research papers required in social science classes, and the papers required for English classes did not encourage independent thought. When I got to college and had 5 papers due for one class in the span of a semester I just about had a panic attack. High school students need to be prepared for this. I think all busy work type assignments should be eliminated in favor of SERIOUS papers. There was too much busy work in high school.”

“Most effective teaching styles—The Socratic Method, as employed in law school classes, has proven very effective; it provides a great incentive to come to class prepared on a daily basis. Further, the lack of exams during the semester with only one cumulative exam at the end of each semester encourages you to learn and retain the information in a cumulative nature. For college, discussion classes where students did the majority of the talking were the most effective; however, this teaching format requires a good professor who is able to point the discussion in the correct direction and ensure that students get to all the basic information.”

“Hands-on research projects in which I was required to teach/present to others on a topic were the most productive learning process for me. I also learned well in classes that encouraged group discussion. Too many of my classes were straight lecture in which there was little reason for class participation. I can remember writing papers about Beowulf and The Canterbury Tales. If the purpose of analyzing Beowulf and The Canterbury Tales over and over was so that I could intelligently converse about these tales in coffee break conversation, then the multiple papers I wrote about these tales were effective. But if the goal was to improve analytical and writing skills, then another topic would have motivated me much much more. Despite the above, I do think that the emphasis GT classes place on writing and analyzing skills did help me at University and has helped me in my career. I think, in general, my GT teachers were more open to creativity and debate than teachers in much larger, more mainstream classes.”

“It seems like I enjoyed school the most in the beginning (elementary school) when learning was more tactile.... Later on (college and medical school) I think that I realized that I don’t do well with large lecture hall type learning. Hands-on learning and interaction are what works best for me.”

“My main complaint would be that high school courses didn’t
really offer what I needed. I did great: straight A's, top ten upon graduation, honors, etc. I do not truly feel I was challenged in most of my work at this level. I found many honors courses simply entailed extra work outside of class. My only truly positive experience was the [GT] class our senior year. In my own study of GT students, for which I am certified to teach, I know and understand that classes and course work should offer different and challenging material, not simply harder work and a higher workload. I know the materials should be at a higher level and topics on a higher level of thinking than the rest of the students. My [GT] class did this as opposed to the honors classes doing the exact opposite. I truly enjoyed and needed that time with other students who were in the same boat, so to speak. I had friends and even a boyfriend claim that we didn't do anything in [GT] except art projects and talk; that the regular English class was much harder. They simply didn't understand what it was like. The other students in that class did. And yes, we had a lot of discussions about our reading material. Yes, we did have more freedom to choose topics of interest. Yes, we did have different projects that were not always lengthy papers. Yes, our tests did not consist of rote memorization. What the other teachers and students didn't realize is that this class was more challenging than any other because of these things. I did have classes that required more 'work', but they did not require more thinking."

"High school is far too easy in many ways. I left high school thinking I could still learn about everything out there for the rest of my life - which turned out to definitely not be the case. I guess it's a pretty good attitude to have, but... many of the subjects - especially the science classes which I can vouch for, did nothing but brush the surface of the topics. More like a survey course than learning any sort of real material. That can definitely be improved on. Kids in honors courses can definitely stand to be challenged more - give them more detailed information on some subjects so we really can understand things and maybe spark some interest. That's also true for History classes. They are too broad, too shallow. In college, I took upper level history classes, and I found those actually interesting which was a shock because history has always been extremely boring for me. Really, what do we really care about dates/times/factoids? History can be made way more interesting if we focus on stories - learn more about what people lived like than just on this date... I took a combined humanities course / US history course. 3 days humanities, 2 days history. What does that say? History was taught to us quick and dirty using the standard textbooks. It was so basic and uninteresting that we just rushed through it. Give us some analysis or something. There are reasons people remember the plots to movies which they see once but don't remember anything about their history which they supposedly learn everyday from a young age. Oh yeah, why is US history 2 years and world history 1? That never made any sense to me. The US has only been around for 200- years while recorded history has been around for thousands. I think this contributes to why Americans are so US-centric. We don't care about the rest of the world too much - we don't hear about it unless something major is going on."

"The competitive atmosphere that I experienced in high school and college was instrumental in helping me succeed during those years, although I recall that I pushed myself too hard at times. I guess in order to succeed, the right balance of motivation and dedication is needed as well as a calm and rational way to handle disappointment (because it will occur often). I would encourage school children to take challenging classes even if they are not necessary. The content of those classes may not be retained for very long, but the critical thinking skills, analysis and problem solving exercises will be invaluable to keep their minds sharp and give them an extra edge in higher learning."

"How GT services have helped me: "Thinking out of the box" this ability has helped in class discussion, clinical practicum, projects/assignments and much more. I was amazed at the amount of college students that do not have this ability and just see 'tunnel vision.' Another source that has been helpful is the ability to problem solve. Instructors like students who use their text, but also, who go search for the answer individually. Knowing that I can find an answer is better than quitting (which many students do). Often solving a problem takes determination and creativity. The big difference is the desire to go above and beyond; on the other hand, knowing when and where to go ask or find help."

"I am very happy with the level of education I received. My school system offered strong honors and talented and gifted classes, many of which were invaluable. I especially enjoyed, and learned best from, the TAG (or GT) classes that I took that emphasized logical thinking and reasoning, versus memorizing information for a test. I think I benefited much more from my dual enrollment courses than from my AP courses because I was able to focus on learning how to think and reason instead of learning how to memorize, since everything did not come down to a single test at the end of the year."

"The expository writing education in [my Texas high school English] classes was exceptional. We never focused on creative writing, and I would not have wished it otherwise. The competitive debate program at [my high school] was largely responsible for my logic and vocabulary skills. The English classes and the Debate program combined prepared me very well for writing college level papers.... Without taking a single Writing or Literature class in college, I was able to work as a writing tutor at my college's Writing Place.

The situation was more extreme with Mr.____'s calculus class. His course was so thorough that I received a C in his class and was able to get B+'s in college calculus. My conclusion is that
the math education I received at [my Texas high school] was
more rigorous than the average.
My feeling regarding the _____ High School experience: A
student can challenge himself or herself with the course and
extracurricular offerings. A student can also graduate without
putting forth a real amount of effort and without learning that
much."

"High school babies students too much and then there is a huge
shock when students go to college."

"My education made me a well rounded, trainable person. It
gave me the confidence I needed to be a successful member of
the working community. I received a specialized education, then
began working in a position that requires me to use nothing that
I've learned in educational institutions. It's as if I've learned
how to learn rather than learning how to do specific work. Since
I began working, I've felt that much of the knowledge I gained
from my education has slipped away from me, but that would
only bother me if I weren't taking in other knowledge at the
same time."

"As a person who has experience in the corporate world and the
institutional world concurrently for several years now, I would
stress again that communication and problem solving skills are
paramount in a person's development. I had memorable English
classes in high school for grades 9 and [STATE RESIDENTIAL
MATHEMATICS HIGH SCHOOL/COLLEGE], as well as a
stable basis of mathematical and science programs that strayed
away from the typical algebraic path (although still requiring
calculus), fulfilling fundamental thinking and design patterns,
usable in not only employment but in everyday life. Every
professor is different, and I cannot isolate one teaching style that
stands out from the rest as the proverbial "one true way." Instead,
it is imperative that a student experience a plethora of courses
with a wide variety of teaching styles and assignment variations,
because this is how becoming versatile and dynamic is
accomplished."

**Learning to Study**

"Did your K-12 education prepare you to succeed in your college
program? Not really. Didn't learn how to form my own ideas,
discuss. Didn't learn how to study."

"My experience at [state residential mathematics high school/
college] prepared me fairly well for college. I don't think that
my education up until that point had truly prepared me however.
Prior to [state residential mathematics high school/college] I was
rarely challenged with actual studying. Homework consisted of
busy work and rote reading. It was just something to get through
and then regurgitate on the test. Looking back, I don't know
exactly how much I truly learned from that method of "studying."

My Pre-Calculus class proved that I had not learned the basics
of Algebra in middle school. I'm certain a lot of that had to do
with my teacher's persistent absences from school due to surgery,
which resulted in weeks of various substitute teachers, each with
a unique style and attitude. Our class was rarely focused on
moving ahead in the book. We backtracked a great deal. The
other factor in my lack of Algebra skills is surely due to my
method of studying. I performed quite poorly in that Pre-Calculus
class and even worse in the next semester's Calculus course. At
one of several conferences I had with my professor, he
commented that I clearly understood the calculus aspects of
problems, I just did not have the algebra background. The
challenges of [state residential mathematics high school/college]
and the immediate realization that school is not always
going to be simple allowed me to enter college with my eyes
wide open. While other freshmen skipped class and stayed out
all night, I managed my time to study during the week and play
on the weekends. Academically, I felt fairly well prepared for
[state residential mathematics high school/college] and college
coming out of my school district. There were no large gaps
in my educational foundation. In every class I felt a faint familiarity
with the subject matter and could build upon that with moderate
success."

"I think my main complaint about the public educational system
(K-12) is that it wasn't challenging enough. Although my
knowledge base was sound for engineering, I never learned how
to study in high school. I didn't learn how to study because I
didn't have to. My math and science courses covered enough
ground to teach me concepts, but not application. I am not trying
to say that I am the most intelligent person in the world, but even
the honors courses went at a slow enough pace that you could
learn on the fly if you paid attention. When I arrived at (large
Texas public university), my inability to effectively and efficiently
study was apparent when I got my first grades. It took me over
a year to develop the skills necessary to succeed in college, and
I am still trying to bolster my grade point average from the woes
of my first year. On the positive side, as I mentioned, I saw a lot
of concepts in the first year of college that I had already been
exposed to in high school. This helped me tremendously as I
struggled with homework and (gasp!) reading textbooks.

"I remember failing the first time I took a compilers course in
college because I was essentially too scared to admit I was in
over my head and ask for help. I don't think I was very well
wired for "ask for help" when I was growing up. Most problems
were understandable if I thought hard enough. I think I considered
more rote activities theoretically doable, but not always worth
my time. I think that attitude was a little simple-minded, and
was probably one of the things that really kept me from excelling
in school. The other main one was not knowing how to ask for
help."
Relevance
"I think first you must make the need to learn the knowledge make sense. The study can't be a monotonous data dump from a lecturer. The studies must be fun, interactive, and stimulating."

"The [GT] program in Texas approached learning from unconventional methods. I still remember learning about math and money in 3rd or 4th grade by playing a fake stock market game. Each student kept a checking account and bought stock, followed it in the paper daily, and was rewarded for making money. We were encouraged to pursue our own interests. I learned measurements in the 1st grade by cooking tacos with my teacher."

"Another aspect of education that encouraged me was when teachers made the learning fun. In elementary school in the TAG program, we studied the nervous system and the brain. We actually constructed a larger-than-life brain, and then invited our parents to come and tour the brain! This gave us hands-on experiences in a real and tangible way."

"I studied abroad—an experience which opened up my whole mind. This was a program offered through the university and I received direct credit to my major as well as to my grade point."

"To this day, I'm still not sure why I was required to take a physical education class in college. I feel like once you are 18 — you should make your own decision as to whether or not you are physically active. In college I took an aerobics class to fulfill my requirement. It was purely a waste of my time and money."

"I think 50% of middle school was a waste of time and effort doing silly projects. "Current Events" reports are a notable example."

What worked was "studying courses that I was actually interested in."

"I think there is not enough opportunity for students to have independent study and research on topics which, while not perhaps mainstream, would excite and motivate more than the current curriculum. My brother, for instance, attended a private high school, which is an extension of ________ school [the private academy in San Francisco]. In this environment, he was encouraged to develop interests outside of the RRR's. He interned with a photographer for credit. He took Tai Chi as PE. He wrote papers about martial arts (a passion of his). In other words, the teachers took care to teach mainstream skills through encouraging the things he was interested in learning about."

"I have enjoyed having an education with a strong background in a variety of subject areas and a diverse range of points of view and interpretations of various topics. I think it is important to include material outside of textbooks and other dense materials to get students interested in the subject and active in class discussions."

"Did your education prepare you to succeed in your current job? Overall, yes. It's hard to measure success, but I definitely feel comfortable with the background education I've had. A lot of the schooling that I've been exposed to does not address real "engineering" issues. The assignments from classes are usually from the textbook; all variables and constants are in some table, and there's a correct answer. The schools I attended taught me how to think, and less about what resources are already out there."

"Another quick point I might make is that it's kind of upsetting that my degree is essentially useless in qualifying me for some kind of job... it's a bit discouraging."

Speed, Depth, Complexity
"I am very happy with my education. I would like to comment on the gifted program in elementary school. We were taught to speed-read. I think this really helps with school the rest of your life. We were taught how to write outlines for research papers and even took parts of the SAT. However, these things did not seem difficult because my teacher made it fun."

"I appreciate large all-encompassing projects. Some of my fondest memories come from long efforts in hard classes. Things that come to mind:*

* 2nd grade: independent research and writing on dinosaurs
* singing and acting in various productions in 3rd and 6th grades
* ninth grade, independent work in Pascal to produce a student database
* [state residential mathematics high school/college]: several weeks long projects in an algorithms class, term papers in my Classic Learning Core classes
* college: a quarter-long software development class with a single group project. A mathematics-based algorithm analysis class with major projects every week. Building a compiler for Pascal (though I had to take the class two times before I could get my act together enough to finish the project).

"My sophomore English teacher gave us lessons on college level vocabulary. Every week we were required to learn a new group of words (words from Latin, Greek, French, and other useful words that are helpful to an educated person). This was great."

"I wish there had been an extra-curricular option for me so that I could have been challenged, and so that I could have had an environment in which it was safe for me to be outwardly intelligent. One program that came close was the Great Books program."
Constructive Criticism

“[High school] teachers (for the most part) spent extra time helping me to improve (depending on the class) my accents in foreign languages, my writing styles in English, and they also recommended other resources I could seek outside the classroom. Most importantly, they said, ‘Look at this (essay, speech, work, etc). You made/did this, and because you made/did this, you show potential in (whatever subject).’ They did NOT say, ‘I think you are smart and you will do well in (whatever subject)’ – they used my own work to show me my strengths. However, these classes were competitive, and sometimes, teachers (out of frustration, not malice) would be overly harsh in their comments regarding our coursework. A teacher once wrote ‘what??’ next to five of my arguments in a paper I wrote about Madame Bovary, then, without further comment, gave me a 70 for content and a 70 for grammar. I did not seek her out for elaboration (and now I know I should have – hindsight is always 20/20).”

“More than anything else, I am thankful for teachers who carefully looked at my work and pointed out my deficiencies. I always thought I was ‘so smart’, but they continually picked apart my work and brought me back to reality.”

Foreign Languages

“Weakest area of education overall (particularly in high school) was foreign language. Foreign language was better in college when class was taught entirely in the language being studied.”

“One thing I think American schools should focus on is introducing foreign languages at an earlier age. I managed to pick up German pretty well just starting in high school, but it would make so much more sense to start in elementary school. I tried Spanish in college and didn’t take to it with nearly the same ease, maybe because I was older (maybe because I had more distractions!)”

“As far as subjects offered, I would have liked to have had the opportunity to learn Spanish earlier (we started sophomore year of high school).”

“Spanish speaking children should be encouraged to speak only English in the classroom and should be fluent in English before graduating elementary school.”

“I would like more private tutors or extra help after school as English was my 3rd language and I really had a hard time learning. One thing that really depressed me when I was in school was that I was very active in speech and debate team when I was in Taiwan, but I lost all my confidence when I first came to United States. Although the end is well because I am now a lawyer (which was my dream as a child), I still wish I could have done better here and there so that I could go to a better school like...”
"Being a college transfer student, I was able to experience many different types of education techniques from very broad to quite specific. I believe that though I ended up in an industry specific program, my liberal arts education was imperative in making me a more well rounded individual. I think it is important that students learn a great deal of information in a variety of topics so that they can find what best suites them. As for my middle, high school years, one thing I noted was that everyone was very college driven. Granted my high school was academically rigorous, however, most of the top students were so focused on taking A.P. and college courses that I think they missed out on some of the general, basic level classes such as photography, sculpture, theater, food nutrition, humanities- all important classes that did not receive the same recognition as A.P. or A.P. Statistics."

"Also it irritated me that no school I ever went to offered home economics or shop. Just because we were all smart, doesn't mean that we would not have benefited basic instruction in these areas."

"Other activities that helped were extracurricular music and athletic programs. I would highly encourage any parent to do all they can to see that their children have outlets such as these so that they can develop in a number of ways during their formative years."

"I'm glad I had the opportunity in 4th and 5th grade to start in the orchestra program. I think more funding should be placed in these programs. In fact, I was almost denied entry into the program due to lack of instruments. Luckily my mother intervened and I was able to join the orchestra. Today, music is an important part of my life, and I'm glad I had the opportunity to start that early on." (Ph.D. electrical engineer)

"I would have liked to know more about the business world before I got to college business school. I entered [university] business school with very limited knowledge on what business is, other than the simplicity of making money. I would have liked programs like Junior Achievement (JA) be more prominent at my high school. I did not find out about the benefits of this program until after high school graduation. I know JA is very prominent in some schools, but in many other schools, it is only known by a handful of students."

**Grouping**

"I was very pleased with the education I received at my elementary school and at intermediate school (5th and 6th grade). It was when I got to middle school that things were not so good. From K-5, students were always placed in classes based on their academic performance. So, you had I guess what you would call the "smart" class, the "slow" class, and a few classes in between. So, I was in the "smart" class for those years. Then when I got to middle school, that changed. Everyone was mixed all together. I had to basically repeat 7th grade math because being in the top group in 6th grade, we were taught 7th grade math and even used the same book. Complaints were made to the school board and different departments at the middle school, but of course it was useless. (Keep in mind also that I was in the same school district my entire life. It's not as if I was moving around.) There were no types of honors classes offered in middle school, so it was very easy to get high A's without trying at all. Oh, and of course they used that lame reason of "the slower kids will benefit because the smarter kids will teach them, and the smarter kids will benefit because they get to teach the others." That's the biggest crock I've ever heard in my life. We did not like being grouped with everyone, and all it did was hold us back. Those are probably critical years in a person's life when they decide whether in the next four years they are going to apply themselves to be their best or not, and stifling that potential cannot be good. So, for anyone that supports mixing all students together, please tell them that they are completely wrong and that that type of system most definitely does not work."

"I believe surrounding intelligent kids with other smart children (like what happens in a college setting or at least in theory should happen) and allowing them to think out loud and express themselves fosters a desire and need to grow mentally."

"Grouping students with similar aptitudes is very important to keep the advanced students stimulated in one group, without leaving anyone sitting in the class behind."

"As an elementary teacher, I have seen what happens to GT students in regular classes. I have worked in three school districts in different areas of Texas. In the first two districts, GT students are grouped into a regular classroom. Their teachers are told to "modify" for them; the schools tell the state that GT students are provided for within their own classroom and so they are legally off the hook. You can guess what happens. These students are given extra "hard" work which entails lots of extra practice on subjects in which they are already proficient. Many teachers also got the idea some time ago that these students are excellent teachers themselves. Now, I agree that students learn from each other. What I see most of the time though is GT students tutoring low students. They may even like this at times, but it is not in the best interest of the GT student. Why is that fair? You're labeled smart so instead of getting extra stimulation and allowing you to work ahead or pursue other interests, you're assigned to "tutor" another student. I don't think there is any other situation like this in our schools today where this would be acceptable. I never had a star basketball player have to take time out from her winning game to help me shoot a ball because I wasn't very athletic and she was exceptional! I am not saying that GT should be totally self-contained. However, I know from my own experience and witnessing these students as a teacher that they do need time with other GT students to flourish and grow."
"The goal of the education system should be to allow every child to maximize their potential. The best way that the education system does this is by grouping. No one wants bored kids in their classroom - this makes for discipline problems. If the classwork is moving too slow, I promise you smart kids will come up with ingenious ways to cause problems. On the other hand, one does not want too much frustration or despair in the classroom - this also makes for discipline problems and causes kids to look unfavorably upon school. There is no way to set up a happy median in a heterogeneous classroom. The only way is with grouping. If not, one is going to have many students stagnating. Gifted students can be lazy like everyone else. We don't like busy work, and we don't like homework. So if the work isn't even challenging or over something new, what is the point? All students are in school to learn, so they should learn."

"I actually had a teacher hold me back in his class instead of letting me go to the higher level because he wanted me to help him teach the class. This should not happen.... Also one of the main problems in my high school was that once kids were tracked into a certain program even if they were doing very poorly they were seldom put in a lower "track." I use track lightly because I'm referring to an AP class vs. a normal class. By allowing kids who shouldn't be in the class in the first place you are holding back the kids who actually should belong there. ... I took two years of Chemistry, one of those was the "AP" class, and had everything I learned be taught in less than a semester in college. Besides the fact that I did the best of the class on the AP exam and I got a 2."

"Among my favorite experiences in school were the "fun" courses at my middle school. We selected a new class for an "activity period" slot each six-weeks. These were subjects like French, hand bells, sewing, drawing, and the like. I thoroughly enjoyed my experiences in each of the six classes that I took. This was an opportunity to relax and enjoy a learning environment. I was exposed to activities that had never before entered my life. The only negative thing that I remember from those classes was my surprise at how inattentive some students were. The classes mixed all the academic levels of the school so I was in class with students whom I'd never seen before. That was positive in that I was able to meet them but uncomfortable when I realized I didn't really like them strictly because of their behavior in the class toward the teacher. My regular classes were rarely so discourteous toward a teacher."

"I teach middle school in a low-income, low-performing area. I think I can draw more concrete ideas about education from these experiences than from my own as a child. ... It has been my experience that teachers are expected to work in small groups while the rest of the class is doing individual or group-based work with their peers. I think this is completely unrealistic, at least in the under-resourced, low-performing schools. I believe in tracking although I know that the trend these days is to move away from it. I think tracking provides students with the attention and level-appropriate approach that they need in order to do work and by being capable of doing work, feel successful. Students, even if put in a group with students of varying abilities, know who are the "smart ones" and who aren't. And in schools such as mine, I do not believe that students can learn from each other, not in this setting where more than half the students read below grade level and at least a third of them are two or more grade levels behind."

"DO continue homogeneous classrooms."

"The humanities, calculus, English, and science programs had a lot to offer, but discipline problems got in the way of learning. I think they should have a stronger weed out process, so that only serious students stay in the course."

"I believe in homogeneous classrooms. Allow teachers to be creative."

"In summary, I had excellent experiences with Texas schools, both in ... and at [state residential mathematics high school/college]—much better than I had in ___ in elementary school (where one teacher actually would assign me 3 times as many almost identical problems as the other students to slow me down so I wouldn't disrupt class with questions). If I can find an appropriate faculty position in Texas, I would love to return to Texas to raise my family there."

Peer Influence

"I would have given my left foot when I was in 7th or 8th grade to be in a place where I felt like I fit in for more than an hour or two. Eventually, I think I found that I had the power to shape the world around me—but this was pretty much only at the end of my college days."

"I have been fortunate enough to have peers who have worked together to achieve common goals such that everyone succeeds rather than compete against one another, hoping the others fail."

"In middle school, peer pressure sort of worked against education. The "smart" people were often looked down upon and called "nerds." In one math class, the teacher would read out the names of students who received high grades each week. Though this was supposed to be encouraging, it actually had the opposite effect because other students would complain about those who consistently did well. I remember intentionally missing questions on quizzes or not studying more so that I wouldn't always get my name called. (The teacher caught on to this, pulled me aside, and stopped announcing names after that)."
To an extent I lost years of learning during high school because I was convinced by my friends and teammates that education is uncool and I should suppress my desire to learn.

“My teachers were always very encouraging. However, I did not attend a “competitive” high school and the average class size for most of my AP classes was less than 10 students. Because of this lack of educational ambition on the part of other students around me, I never felt pushed to do anything more than the bare minimum, and the level of my education in K-12 did not match that of most of my peers in college. I don’t think my teachers were under-qualified or failed to teach me what I needed to know; it was simply the nature of my high school and the students who went there. My favorite teacher in high school resigned several years after I graduated because she was getting so many complaints from parents about students not making “good enough” grades in her honors math classes. Situations like this both deterred students from taking her class and kept her from demanding the highest level of performance from her students.”

“I think the reason I did well in high school was mostly because of my support system (more than because of the classes offered). I was fortunate to have friends in high school who were also scholastically-minded, which I think made it much easier for me to stay on the more difficult track instead of choosing easier courses.”

“Being around people with similar goals and scholastic level provided good exposure to how other high-level people think; having homeroom with random people from our grade level provided good exposure to different types of people (low income, remedial kids, etc); going to school where there were a lot of rich as well as poor people was good for my perspective, too.”

Class size

“Another huge problem was over crowding in classes. When teachers had 30-40 kids in a class for about 45 minutes there isn’t much that they can do. Especially if there is a wide range of intelligence levels in the class.”

“In my case, I think that smaller classes were more effective. I feel that I was much more focused on my education before I went to college and I honestly think it had a lot to do with going to smaller schools. I was confident speaking out in class when everyone knew me and felt more compelled to study and excel when the teachers knew me and seemed to care about me. I am glad that I went to a big school for college because I feel like I learned more about life and how to take care of myself than if I would have otherwise. At the same time, I think that being in huge classes where the professor did not even care if I came to class and I could buy the notes from an on-campus store before the test made it all too easy to slack off.”

“I think that especially in college, but also in K-12, one of the things that has made my time successful is the size of my classes. I have had very few classes with more than about 30 people in them and so I have been able to feel like I can talk to the educators.”

—End of Part One.

The second half of this article will be published in the summer issue of Tempo.

Colleen Higgins Elam is a past Parent of the Year as well as a past president of the Texas Association for the Gifted and Talented

(from EDGELL, p. 7)

Initially the students were introduced to the base ten power blocks including a discussion of the geometry of constructing a sequence of power blocks in general; small cube (unit or "one"), linear segment ("five"), square ("twenty-five"), larger cube ("one hundred twenty-five"), larger linear segment ("six hundred twenty-five"), larger square ("three thousand one hundred twenty-five"), .... From the student interaction it was fairly obvious that some of the students had had previous exposure to base ten power blocks elsewhere and that all of the students caught on to the idea that ten blocks in the geometry sequence could be traded for one of the next larger blocks in the sequence and such trades would preserve equality.

The students continued the discussion to include a large linear block which they decided must represent ten thousand. They continued the process to describe a large square block which was described as representing one hundred thousand. Not yet satisfied, they discussed the possibility of a giant cube which must represent a million. When one of the students suggested constructing the giant cube the others reacted by describing the seemingly impossible situation of getting a thousand of the large cubes together. And, the students caught on quickly to the corresponding principles with respect to the base five power blocks, that is: five blocks in the geometric sequence trade for one of the next larger blocks. In anticipation of the magnitude of the problem, five of the large base five cubes, each representing one hundred twenty-five objects, were taped together to extend the manufactured blocks one step further in the sequence to represent six hundred twenty-five. The next step was to select two of the large base ten power block cubes, each representing a thousand, with two of the small base ten power block cubes, each representing one. Together these four blocks represented two thousand two, or the numeral associated with the year in base ten, 2002. Ten of the large square blocks, one hundred squares, stacked up to replace one of the large cube blocks, one thousand cube, preserving equality, which was pointed out at each stage and be-
came a virtual chant with the students during subsequent transitions. Students quickly discovered that four of the large base five squares, each a twenty-five square, would trade for a large base ten square. When this trade was accomplished twice, resulting in eight of the large twenty-five squares, the students rapidly recalled that five of the twenty-five squares traded, preserving equality, for one of the large base five cubes, a one hundred twenty-five cube. Thus seven of the large base ten squares were sequentially traded for five of the large base five cubes with three of the large base five squares. At this junction the students were asked about trading the five large cubes. The students recalled that they had created a large linear block to trade for five of the large cubes. This trade resulted in a large linear block, representing six hundred twenty-five, with three of the large square blocks each representing twenty-five.

The trading continued in the same fashion, even trading two small base five unit cubes for two small base ten unit cubes. The two large base ten cubes with the two small base ten cubes had finally been traded, preserving equality at each trade transition. For three of the large base five linear blocks, each representing six hundred twenty-five, with one of the large base five cubes, representing one hundred twenty-five, with two of the small base five unit cubes, i.e. 3102 in base five. Consequently, they determined that the abbreviated form would be '02, which they had previously been using. Accordingly, Trevor recorded the date of the current session, the last day of January, as, 01/11/02.

All seemed well and almost everyone appeared to be satisfied with their accomplishment. In the following bubbling excitement over their accomplishment, Cory posed a question, "Why first?". Since there was some noise and perhaps the complete question hadn't been heard, Cory, who has demonstrated time and again lots of insights to the applications of the modulo structure to arithmetic and who seems to really have a grasp of arithmetic in general, was asked to repeat his question, which was again, "Why first?". No one seemed to know how to respond to or interpret his question, including Mrs. Orth, and so he was asked to repeat his question again, which he did. He finally explained, "Why did we start with base ten power blocks first when we had learned about base five power blocks initially?" Cory had been patient and apparently had not wanted to interfere with the flow of the exploration and had waited until then to voice his concern. His concern had to be acknowledged and those students of the group who composed the research class a year ago understood his perspective and rallied in support. The issue was subsequently discussed and determined that Cory was right about being concerned about the order of the examination of the sequences of power blocks and the issue of trading within the sequences. But, Cory's concern did not extend to the transition from the base ten representation of the year to the base five depictions.

The research session continued with random generated, five color coded decks of five digital cards, base five multiplicative grouping five digit numerals with the objective of determining the cast out of fours of the numerals. For example: 20341 2. Such problems were quickly addressed which again demonstrates the relative mathematical growth of these students. The eventual goal of this experience was to crystallize the basis for students writing their individual personal algorithms in determining cast outs and later applying these cast outs to checking arithmetic, such as with multiplication.

As usual, after each session, Mrs. Orth and Dr. Edgell confer about the session, progress of individuals, the dynamics of the group, sometimes about mathematical specifics and the general objectives of the research. Very often Mrs. Orth's primary role has been to be supportive of the students for whom she is responsible. Sometimes she will offer hints about a problem during the progress of a research session to individuals. Occasionally she becomes the camera technician in making adjustments to the video camera or taking digital pictures. She always helps maintain order and facilitates organizing the students in setting up the room and in putting the room back in order. Her occasional comments about a session are highly valued since she is with gifted talented elementary school students on a regular basis and has several successful years of teaching at the elementary levels. Mrs. Orth was excited about what she had witnessed during the session, particularly in association with addressing Trevor's Problem. The thrust of her main comment about the students resolving Trevor's Problem focused upon the apparent insights in the geometrical sequencing of the power blocks, the trading transitions preserving equality, the emerging understanding of the role of digits as co-factors, i.e. place value, and general gains in numerical sophistication by all of the students, especially the newer students.

References


Two of the districts had full-time teacher facilitators that were devoted to the coordination of the campus gifted program. The responsibilities of the facilitators were parent and teacher training, student identification, program communication, and teaching gifted students in a pull-out situation. The identification of gifted students from all student groups was a primary objective of the teachers. The facilitators screened district and state assessment data to locate potential gifted students, encouraged teachers to refer students from underrepresented populations, monitored the achievement of potential gifted students, and provided training designed to prepare potential students for the identification phase.

Gifted and talented students penetrate all cultural and socio-economic groups in the state of Texas. Yet, as stated by Coleman & Gallagher (1995), low numbers of students from minority and low socio-economic groups are identified for the state's gifted programs. School district educators must provide an environment in which the individual needs of all students are met. The goal of meeting the individual needs of all students is promoted in gifted programs when training and identification practices are enhanced.

References


Jeanie Gresham has been employed as a first grade teacher, teacher of the gifted and talented, elementary counselor, assistant principal, instructional services research specialist, and director of elementary education. In December 2000, Jeanie earned a Doctorate in Education Leadership from Stephen F. Austin State University. Presently, she is an executive director of instruction in Nacogdoches Independent School District.
enabled me to discover my true self. I met and interacted with so many different people, and I formed powerful relationships. I was always interested in education as a career, but it was intensified at TGHP, particularly when I taught my first class in Persuasion.”

Kevin received a B.A. in Mathematics and Theology from Notre Dame, and a M.A. in Education from Notre Dame. Currently, he is a teacher of Religion at Blessed Trinity Catholic high school in Roswell, Georgia, and he is applying for an Assistant Principal position. Kevin uses TGHP principles with his students, “to go above and beyond in a safe environment”. He said: “In some sense, without being religious, the Governor’s School was a spiritual experience; we came to realize that there is something more important than self—ethos, the human experience.”

Denise Garcia attended TGHP in 1991 as a scholar, graduated from high school in 93, and then attended St. Mary’s University in San Antonio where she received a B.A. in political science. Denise was awarded a fellowship in public policy during the summer before her senior year at the University of Maryland, and upon graduation, attended graduate school at the Georgetown Public Policy Institute with a concentration in education policy. She shared the following:

“TGHP was a great experience for me, life-changing in many ways. Before I attended the program, my heart was pretty much set on becoming a pediatrician. The experience of that summer changed everything. Interacting with students from small school districts to large school districts, I learned first-hand how the quality of education can vary from place to place. I decided that there would always be doctors, but I didn’t know many people fighting for a high-quality education for all kids, and so a passion was born in me. For the last two years, I have been a Research Associate in the National League of Cities Institute for Youth, Education & Families. I was asked recently in a TV interview; When did I discover my leadership ability? and I spontaneously answered at a summer program at Lamar University, TGHP.”

Andrew Kuklewicz was a Senior Counselor in 1995 from Robert. E. Lee high school in Tyler. He came as a scholar in 1993, and a junior counselor in 1994, and attended Yale University, graduating with a degree in Computer Technology and Philosophy. Andrew is currently a computer design technician, living in Boston with his wife Lynda Vroomer, an intern in Pediatrics at Boston Children’s Hospital. Andy says he still dances, and he and Lynda tap-danced at their Italian wedding. He plans to go to graduate school and to study Math and Computer Technology. He had the following to say about TGHP:

“Some of the things that I remember about my time at TGHP, were that I wasn’t particularly happy, nor felt I belonged at high school. It was an amazing feeling to be able to have real conversations with other people at TGHP, and not feel alone, or unusual- -to just feel normal.”

“The classes that I took impacted later academic and life decisions; for example, Opel Brown’s Logic class turned me on to Philosophy, which I majored in at Yale; and Mark Brady’s history class turned me on to the realization that everything that is in the history books isn’t the whole story, and Charles Whaley’s future class was impact. I was never physical; yet, I got up every morning to run with Mr. Whaley and about ten other guys. That spurred me on to improve myself, to become more balanced, and I continued to run even at Yale. I left the program a ‘changed man’.”

Multiple Attendees from Families

One interesting aspect of the TGHP and THLP scholar population is the significant number of multiple attendees from a given family. Several families have had as many as five scholars attend the program over the 12 years (1990-2002). The Wilsker family in Beaumont had three daughters attend. Tammy Wilsker came to TGHP in 1995, finished her B.A. with a triple major from Stephen F. Austin University, enrolled as a full-time law student at the University of Miami, and currently, she is involved in a 2 year post graduate study. She says: “One of the biggest things I remember about TGHP was realizing that I didn’t feel alone. In my school if you exhibited a lot of intelligence, you felt stereotyped or outcast, but at TGHP, all of the people were of similar ability, everybody was intelligent and positive. One course that helped me was the Supreme Court, in which we had to take a point and argue—and argue logically to convince people. That course certainly helped me in law school. Another important aspect of the program, was the fact that everyone had ability, and you began to realize that you were special too, and with that talent comes an obligation to give back to society, to use your talent.”

Tammy has been awarded a fellowship with Equal Justice Works, and she will represent older foster-care children, who at age 18 are often put out in society to find jobs, apartments, and to function as adults, when they aren’t ready for that responsibility. Tammy says there is an array of services that they should receive, and she will be helping to make sure that these services are available to them. She says, “I’ll be working with lawyers to change the law.”

Amanda Wilsker attended TGHP in 1997, and she is completing a degree in Economics at Texas Christian University. Amanda plans to seek a Ph.D. in Health Economics or Public Policy. She said: “THLP was an opportunity for me to meet people with varying interests; yet, we all had respect for the interests of other people. The program offered me opportunities to study topics outside of the traditional high school program, such as the Supreme Court and Constitution Class. This class helped me to successfully participate in mock trials, and to understand political systems; and the information on the right brain research that Dr. Sisk was conducting helped
Leslie Wilsker attended TGHP in 1999, and she is currently enrolled at the University of Texas in Dallas, where she is working toward a degree in Psychology. She emphasized the impact of the “family” on her as a scholar:

“I remember the family experience and my roommate at TGHP. In high school, there were cliques, but at TGHP each scholar was assigned to a family of scholars with a counselor. We learned to set aside our differences, and to really get to know one another. After TGHP, I felt more courageous in speaking up, particularly in getting up in front of people and expressing myself. A favorite class was Marine Biology, and the field experience to Galveston Bay.”

Evelyn Chen was a TGHP scholar in 1995, a junior counselor in 96, and a senior counselor in 97. She graduated from the University of Texas at Austin with a B.S. in Electrical Engineering. She is currently working at Fulbright & Jaworski in Austin as a technical advisor, where she prepares and reviews patent applications. Evelyn plans to continue her studies in law school and to become a certified patent agent and attorney. She shared: “TGHP provided me the opportunity to develop my leadership, particularly serving as a Senior Counselor, and nurturing the scholars was a wonderful rewarding experience for me. I found that responsibility greatly impacted my own social and emotional development.”

Ted Meredith was a senior counselor in 1998, and a scholar in 1997. He is currently attending Southwestern University working toward a B.S.A. in Theatre Production, and he plans to go to medical school. Ted recently worked with a production of Cabaret. At TGHP he directed the scholars in a production of A Funny Thing Happened on the Way to the Forum. He says his goals in life are to travel, to act and to be a father. Ted said:

“One thing that stands out in my mind during my scholar year was when my grandmother died, and I had to leave the program for the funeral. On my return, the scholars were at the door to meet me, and I felt the support of everyone, and it renewed my faith in what the program represents. The first year I was unsure, learning about myself, my capacities for learning. What I remember most was meeting so many new people, and the possibilities for new bonds. I experienced genuine friendship and honesty with everyone.”

Cody Cox was a scholar in 1998, and a Junior Counselor at TGHP in 99. He graduated from Midway High School, and then went on to Southwestern University where he received a B.S. in Psychology and Religion. Cody worked as a counselor in a Denver Rehabilitation Center, and he is currently in South Korea planning to teach English as a second language. He says: “Right now, I am traveling and attempting to assimilate into other cultures. When I return, I will enroll in graduate school and engage in the next stage of my life. Whatever I do, the confidence and self-assuredness I took from Governor’s School, as we came to refer to it, will assist me.”

He further reflected: “The Governor’s program was wonderful for me, as it came at a time when I was beginning to see college as a reality. I was able to meet with other students who had strong ambitions, and I remember well the opportunities for leadership that the program provided, such as when I worked on the mock trial. I was allowed to be the prosecuting attorney, and I worked long hours with two other students developing our ‘case’. These kinds of opportunities were not available to me in high school, and it was really amazing to be given a role and the responsibility to perform that job well.”

Felicia Martin was a scholar at TGHP in 1992, a Junior Counselor in 93, a Senior Counselor in 94 and 95, and a Research Assistant in 96. She shared: “I remember the anxiety associated with being surrounded by total strangers, away from my normal teenage life. I didn’t know it then, but the next few weeks would impact my future in numerous ways, by increasing my desire to share, not only my feelings, but my experience, by creating an impetus for discovery beyond the normal scope presented at the high school level, and by providing a foundation to explore my sense of self in comparison to those around me.”

Felicia attended Rice University, where she earned a degree in Sociology and Education, combining her interests in culture, society, and the acquisition of knowledge. She says: “I have always loved discovery, and my first exposure to research came under the direction of Dr. Sisk, when I assisted in some research based on Dabrowski. This experience gave me the desire to seek out new theories, to present my own ideas.”

Felicia is the Assistant Director of International Admissions at California Lutheran University where she meets with students and educators from around the world. She coordinates the University effort from an admissions standpoint in diversity and community outreach. She said: “I have an inherent desire to make things right and just in the world, I’m not sure how this desire will manifest itself in the future, but I would not be surprised if I were still working in the realm of education in some capacity in the future. I can not imagine that the direction I took was not impacted in some way by my experience at TGHP.”

The Texas Governor’s Honors Program and the Texas Honors Leadership program have been able to motivate gifted students to both academic and personal success as attested by their candid statements. Summer learning experiences foster a strong sense of community among gifted students, and they provide the students opportunities to explore new ideas, and to engage in community service related activities to help ensure that they become well-rounded caring individuals, capable of making a difference.

Rising juniors who wish to participate in THLP can make application to Lamar University and indicate their academic
achievement through SAT, PSAT, and ACT scores, standardized achievement test data, and grades. Consideration is given to those students enrolled in gifted programs (AP, Honors) and International Baccalaureate high school programs. Special care is given to include economically disadvantaged students. A student fee of $250 is required, and the monies raised from foundations and individual donors help to pay for student room and board, the room and board, and stipend for teachers and senior counselors; and administrative and material expenses.

Dr. Dorothy Sisk specializes in the field of gifted education focusing on creative behavior and leadership development. She holds an endowed chair and is currently a professor in education at Lamar University, where she directs the C.W. and Dorothy Ann Conn Chair for Gifted Education and the Center for Creativity, Innovation and Leadership. She also coordinates teacher training in gifted education.

Dr. Sisk is world renowned for her leadership in gifted education over the last twenty years. She is co-author with Doris Shallcross of Intuition: An Inner Way of Knowing; Leadership: Making Things Happen; and The Growing Person: How to Develop Healthy Emotional Development in Children; co-author with E. Paul Torrance, Teaching Gifted Children in the Regular Classroom; co-author of Leadership: A Special Type of Giftedness with Hilda Rosselli; and co-author of A Primer for Futures Studies with Charles Whaley. She was author of Creative Teaching of the Gifted. She has also authored and co-authored numerous chapters, articles and papers.

Dr. Sisk served as the Director of the U.S. Office of the Gifted and Talented, playing an instrumental role in increasing the cadre of professionally trained consultants for the gifted, thereby expanding opportunities for students.

Dr. Sisk held the positions of the President, Vice President and Executive Administrator of the World Council for Gifted and Talented Children and President of the Association for Gifted (TAG). She was the first President of the American Creativity Association (ACA) and currently serves on the Board of Directors. She also served as Editor of the Gifted International journal and is an associate editor of the Journal for Creative Behavior and Gifted International.

(from HICKMAN, page 2)

it became my goal. Could I beat the teacher at her own game? Probably not the best plan for a g/t program, but I loved it, and looking back, I suspect Mrs. Gibson planned the game. Then there was Mrs. Roberts, my Algebra II teacher, who made a deal with me. “Listen to the explanation once, then go to the back of the room and do the homework, and then you can read (my passion).” The secret here, again, was a teacher who understood her student and structured the program for a win-win situation.

After a few years as a teacher, I began to realize that different kids needed different things and that being “fair” did not necessarily mean doing the same thing for all kids. Serendipitous differentiation may work if the teacher is sufficiently creative and flexible. But many teachers who lack gifted and talented training (and some who have it) struggle with justifying and explaining to themselves and parents why everyone isn’t doing the same thing or getting the same grade. As a teacher of kids, gifted or not, the rubric has been the most effective document I have found that allows lots of choice, multiple directions, and unlimited creative decisions. Curriculum compacting is another wonderful tool that allows students to document mastery of a concept and then move beyond the basics to challenging material.

As a parent of two gifted children, I saw education from a new perspective. My son is the poster boy for the “List of Characteristics that Frequently Screen Children out of Gifted Programs.” As a child he was mouthy, precocious, opinionated, and busy. Fortunately his kindergarten teacher liked and appreciated him and reminded me regularly that those traits would probably make him a successful adult even if they were driving his first grade teacher to consider retiring. That first grade teacher never did understand why he wouldn’t sit quietly to read the primer when he was reading National Geographic at home. In fact, she explained to me in all seriousness that he had “learn to be bored.” In the fourth grade he drew the worst teacher in the school, but her class produced one of his best years. They made a deal early in the year that if he read whatever he liked, occasionally took the required tests, and left her alone, she would leave him alone. He explored, read, experimented, researched, and had a wonderful year. Benign neglect sometimes works.

One of the primary rules for our sonwas that he was not allowed to abuse teachers even if he was bored. One of the saddest phone calls I received was one in which his middle school language arts teacher called to tell me he was disturbing the class. I assured her that we would deal with the problem. Hearing the tone of my voice, she urged me to not be too hard on him; he was just bored. I suggested that there were a lot of things that he was really interested in, and would she mind letting him research and report on those things when he had mastered concepts in her class. She agreed readily but asked if I were sure that it would be ok if he were asked to do assignments beyond what the other children were doing. Have we as parents second-guessed our teachers that they are afraid to implement appropriate differentiation for the students? Or have we as teachers met the needs of our gifted
SPRING Teachers who graded directly from the teacher's manual and never have maximum access to appropriate programs tuning may make she was very average until her teacher assured me otherwise, support those teachers when they find creative solutions for all children, to give them trained teachers who care and to friendlier place for gifted children so that when they leave formal life more difficult for already over-worked counselors, but it, education language of qualified teachers. While the teacher of the gifted does not have individual classroom is the one who really matters. In the well-trained teacher, who understands the specific needs of gifted kids, makes the greatest difference. Regardless of the programs in place to serve gifted students, the individual teacher in the individual classroom is the one who really matters. In the language of “No Child Left Behind,” gifted children need highly qualified teachers. While the teacher of the gifted does not have to be gifted, he/she must be well enough grounded in the subjects taught not to be threatened by the kid who knows “everything.”

Second, individualized programs for gifted kids do not have to be expensive. Moving a child around within a building to classes beyond his chronological age costs nothing. Allowing a gifted student to pre-test on TAKS skills, document mastery, and move on to study areas of interest at greater depth costs nothing but teacher time and access to the library and internet. Setting master schedules and then manipulating them so that gifted kids have maximum access to appropriate programming may make life more difficult for already over-worked counselors, but it, too, costs nothing.

Most of all gifted kids need administrators who are willing to work for the growth of all children. Every child deserves to have an education appropriate to his/her strengths and weaknesses. As we struggle to raise the bar for our weakest students, we must also struggle to assure that our gifted students are not left behind. We must have the courage to do what is right for all children, to give them trained teachers who care and to support those teachers when they find creative solutions for their gifted children. Few strategies are right for all children, but many simple, inexpensive, commonsense solutions can make school a friendlier place for gifted children so that when they leave formal education “the glory kept shining and bright in my [their] eyes/ And the stars going round in my [their]head.” (Stevenson, “Escape at Bedtime.”)

My daughter, so different from her brother that I thought she was very average until her teacher assured me otherwise, was a teacher pleaser. While my son never doubted that he was more intelligent than anyone else in the world, my daughter never quite believed that she was bright. Teachers who fussed at the whole class for not working hard enough spoke directly to her. Teachers who graded directly from the teacher’s manual and never considered the answer two steps beyond the obvious, made her weep in frustration. Most of her teachers were outstanding, giving her the tools to soar and then allowing her the freedom to do it. Her problems were with the system that failed to recognize that she needed to graduate early and to provide options to allow her to do so. I will be forever grateful to a private high school and Texas Tech for making her dream of being a professional dancer a reality and for allowing her to graduate from high school at the same time.

Finally as a building principal what have I learned? First, a well-trained teacher, who understands the specific needs of gifted kids, makes the greatest difference. Regardless of the programs in place to serve gifted students, the individual teacher in the individual classroom is the one who really matters. In the language of “No Child Left Behind,” gifted children need highly qualified teachers. While the teacher of the gifted does not have to be gifted, he/she must be well enough grounded in the subjects taught not to be threatened by the kid who knows “everything.”

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Many parents have the disheartening experience of having a gifted child and finding that the local school district has, if anything, a very limited program for advanced learners. And most established programs, while good at what they offer, can’t offer every possible option of student interest and ability. Beverly Parke has put together a helpful new book that addressed problem from a new perspective - looking in places where you don’t see the word gifted.

The opening chapters offer background information on the concepts of giftedness and talent development, relying largely on Gagne’s work. Included are instructions with examples for creating profiles of abilities for students.

The idea that there are all sorts of programs already existing that can address the needs of talented learners is developed through a checklist in chapter three, “Ten Telltale Signs of a Hidden Program.” The characteristics are based, in part, on the Standards for Programs Including the Gifted and Talented (CEC­TAG) and PreK—12 Gifted Program Standards (NAGC).

The centerpiece of the book is the listing of 65 programs that can develop talent. From 4-H to Advanced Placement to Student Newspapers, the programs are described in terms of their impact on gifted children and each is rated for its ability to serve talented students through accelerated content, in-depth immersion in topics, and exploration of content. Treffinger’s Level of Service (LoS) is also given.

This is a valuable resource for parents as well as teachers and gifted program specialists as it presents new applications for existing opportunities.

Looking Back: Student Perspectives on Gifted Education

Discovering Programs for Talent Development

(from BOOK REVIEWS, page 33)
What the Research Says About Long Term Effects of Gifted Programming

Susan K. Johnsen
Cindy Little

As A. Harry Passow (1994) mentions in his foreword to Beyond Terman: Contemporary Longitudinal Studies of Giftedness and Talent (Subotnik & Arnold, 1994)*, longitudinal studies have “inherent problems of subject attrition, missing data, and changing outcomes ... but there can be no question that, in the end, the findings are more meaningful, enduring, and significant than a good deal of the short-term research reported in the literature (p. xv). He cites his own 1966 study of bright underachievers who performed differently in each of the three years he studied them and a control group. He reflects, “First the controls did better, then the treatment group did better, and finally, neither group did very well! Had the study not been longitudinal, we would have reported very different findings and arrived at very different conclusions” (pp. xiv-xv).

Obviously, as educators, it is important to observe the effectiveness of what we do over time. That examination of effects is the primary purpose of this review. This review examined articles published since 1991 in Gifted Child Quarterly, Gifted Education International, Journal for the Education of the Gifted, The Journal of Secondary Gifted Education, and Roeper Review. To be included, the article needed to focus on the effects of K-12 programs that occurred after high school. Case studies of only one or two students were excluded. Given the small number of articles, international studies and reviews of the research were also included. These selection criteria identified only 12 studies, with one being a review, and two being from international researchers. The studies focused on a wide array of K-12 programs for gifted and talented students. Three related to acceleration or ability grouping (Gavin, 1996; Swiatek, 1993; Wu & Chen, 2001), one to general acceleration and early admission to college (Noble, Robinson & Gunderson, 1993), two to mentoring (Davalos & Haensly, 1997; Reilly & Welch, 1994/1995), one to a special career program for girls (Hollinger & Fleming, 1993), one to involvement in self-selected extracurricular activities (Milgram, Hong, Shavit, & Peled, 1997), one to an enrichment program with independent study (Moon, Feldhusen, & Dillon, 1994), one to a summer arts program (Confessore, 1991), and two to talent search programs (Olszewski-Kubilius, 1998; Subotnik & Steiner, 1993). With the exception of the Swiatek (1993) and the Milgram, Hong, Shavit, and Peled (1997) articles that included some 30 year olds, all of the study participants were primarily in their 20s. Three of the studies examined the effects on young women only and did not include any young men in their samples (Gavin, 1996; Hollinger & Fleming, 1993; Reilly & Welch, 1994/1995).

Dominating the methods used to collect data were follow-up questionnaires or surveys (92%) in which the participants would reflect on their experiences. Two of these researchers also collected data from interviews (Gavin, 1996; Wu & Chen, 2001). None of the studies had control or comparison groups. Olszewski-Kubilius (1998) reviewed the literature for effects of talent search educational programs. The researchers described mostly positive academic and social effects from these programs. The majority of students who were in accelerated or in special math and science programs entered highly selective colleges, majored in these special areas, were successful, and pursued advanced degrees (Gavin, 1996; Hollinger & Fleming, 1993; Noble, Robinson, & Gunderson, 1993; Olszewski-Kubilius, 1998; Wu & Chen, 2001). In addition, Noble, Robinson, and Gunderson (1993) reported no social and
emotional adjustment problems of students who entered college early.

Mentoring programs that were either community-based or school-based helped students select a vocation or career, interact better with professionals, and have more confidence in their abilities (Davalos & Haensly, 1997; Reilly & Welch, 1994/1995). The Mentor Connection also assisted students in understanding the importance of professional networks (Reilly & Welch, 1994/1995). Davalos and Haensly (1997) concluded, "these programs are a powerful, economically beneficial option for gifted youth, an option that has long lasting effects" (p. 207).

Enrichment programs included talent search and extracurricular activities, competitions, special summer programs, and school-based enrichment classrooms. Students who participated in the school-based enrichment program did transfer some of the creative thinking and problem solving skills to content-specific subjects (Moon, Feldhusen, & Dillon, 1994).

Those who were involved in talent search programs or competitions took more AP classes in high school, attended more selective colleges, entered college earlier, and were more likely to go on to graduate school (Olszewski-Kubilius, 1998). Those who participated in extracurricular or summer arts programs persevered in following their interests (e.g., Confessore, 1991; Milgram, Hong, Shavit, & Peled, 1997). Confessore (1991) noted that 83% reported that the program confirmed their identity as artists. Other researchers concluded that "out-of-school activities have an important role to play in career development. The leisure activities that [researchers] consider important are the informal, freely chosen, intrinsically motivated, out of school activities that children do" (Milgram, Hong, Shavit, & Peled, 1997, p. 118). Young women appeared to particularly benefit from special programs. Hollinger and Fleming (1993) who developed a career program for gifted and talented female adolescents found that 45% had attained advanced degrees, 19.8% attained the highest career level and 50% included middle level corporate managers. Women who were in the top math groups throughout most of their K-12 years maintained their interest in mathematics in spite of grades becoming lower in college (Gavin, 1996). This enduring interest developed from "the positive feelings that encouraged self-concept in their precollege experiences (e.g., in meeting easy success and often receiving awards in math, in being able to 'get the right answer,' and in having at least one encouraging teacher in middle or high school) ...." (Gavin, 1996, p. 483).

A few of the researchers did mention some negative effects. Wu and Chen (2001) reported that 65% of the physics and chemistry Olympiads in Taiwan felt burned out by the intensity of the experience. Subotnik and Steiner (1993) found that 11 men (18%) and 13 women (34%) who were among the finalists or semi-finalists in the Westinghouse Science Talent Search found careers in other disciplines. They left the scientist's lifestyle because secondary school officials gave inappropriate guidance, mentors in science were unavailable, and/or undergraduate science instruction was of low quality. The authors concluded that the results of this study confirm the poor quality of science education in the United States.

In summary, few studies examine the long-term effects of programs for gifted and talented students. No studies included control or comparison groups (e.g., students who were gifted and talented but did not participate in the program); although Swiatek did compare the performance of the accelerated students with the national average. Because of this lack of control, researchers still do not know if gifted and talented students would have experienced the same success without the special programs. The field desperately needs empirical, well-designed studies to examine these long-term effects.


This article describes a follow-up study conducted 9 years after a group of 27 adolescents participated in the Johnson State Early College Summer Arts Program. The population studied was a group of 13 males and 12 females from rural communities, ages 23-27 who participated in the program when they were 14-18 years of age. Data were gathered by means of a questionnaire that consisted of 2 sets of Likert-type items and 14 items that required either a yes or no response and a brief explanation. The first set of 16 Likert-type items was administered as a pilot in the development of an instrument tentatively designated The Arts Drive Scale. The second set of Likert-type items asked respondents to agree strongly, agree, neither agree nor disagree, disagree or disagree strongly with 4 items measuring present attitudes (Now Scale) and measuring their attitudes in 1981 (Then Scale). Results from these instruments indicated a strong positive orientation on the dimensions of desire, initiative, resourcefulness and persistence at the time of this study and during the program selection period. The author found that 78% of the respondents still actively engage in their art form, 91% felt that they possessed the characteristics defined by the program's selection criteria and 83% stated that the program helped them confirm their identity as artists.

Based on data from his 22-year longitudinal study of 200 creative children, Terman (1984) concluded that every successful person has a mentor who may have changed the course of his or her life. This study focused on the effects of a high school student independent study/mentorship class. In this course, students were able to explore an area of special interest, usually related to a potential career, through a yearlong investigation of a research topic. The research was guided by a community volunteer mentor with expertise in that particular field and a teacher for the gifted and talented. The class was arranged as a two-hour block so that students could leave campus to meet with mentors. They also attended class as a group with their GT instructors. Each spring the high school students prepared presentations to report the results of their research to audiences with common interests. The mentor, the GT teacher, and the students formally evaluated student presentations. To determine the long-term benefits of the program, a questionnaire was mailed to 354 former GT students who participated in the Independent Study/Mentorship Program at six high schools during the years 1989-1994. Ninety students responded. While the sample was biased, students most often agreed or strongly agreed with the survey items. The students reported that the mentorship program was memorable (84% agreed or strongly agreed); affected extracurricular activities and accomplishments (64%); contributed to overall academic achievements (73%); helped them select a particular vocation or career (74%); personal view of self (77%); and personal growth and development (64%). The authors concluded that "these programs are a powerful, economically beneficial option for gifted youth, an option that has long lasting effects" (p. 207).


The purpose of this study was to identify factors that influenced women in selecting mathematics as a major in college. The author used a qualitative research design in investigating the backgrounds, characteristics, and school mathematics experiences of 16 women in a liberal arts women's college who ranged in age from 19 to 22 years. Data regarding (a) attitudes toward math and math self-confidence, (b) grades in math throughout school and placement in honors and/or gifted math programs, (c) classroom experiences including teacher influences, (d) familial influences, and (e) the college environment were collected using a questionnaire and interviews. All were serious about their studies, competitive, and concerned about making an "A." All were in the highest math group, whether it be the gifted program, honors classes, or International Baccalaureate, for at least part, if not all, of their elementary, middle, and high school years with the majority taking calculus during their senior year. Peers, teachers, and themselves also recognized each of these young women as being one of the top math students in the class. Interestingly four of the students were not placed in the highest math group at one point in their secondary school experience and suffered a loss of confidence in their math abilities. However, these students along with their parents, fought the placement, and they were eventually moved to honors classes. Four of the students stated that a high school math teacher had a strong influence on their decision to major in mathematics in college. In college, teachers were still important with these women talking about professors who personally encouraged them and make the content understandable. Even with their academic grades decreasing at the university level, they persisted in math and became more interested in understanding the material. Almost all did not like the abstractness of the higher level courses and did not want to become mathematicians but rather apply their ability in a business career or in teaching.


Creating Her Options in Career Exploration (CHOICE) was a career development program for gifted and talented female adolescents in Cleveland, Ohio. From the original population of 1141 female sophomores, 335 were identified as gifted and talented. The program involved identifying barriers to the realization of career potential and designing and implementing interventions to overcome these barriers. This study was a follow-up of 126 Project CHOICE participants was conducted as the young women were approaching their thirteenth birthdays. Over 45% had attained advanced degrees; 19.8% of the sample attained the highest career level (lawyers, physicians, and corporate managers) and 50% included middle level corporate managers, teachers, and nurses. While fewer than half were married and only 27% had children, the respondents were "very satisfied" with their life.


This study in Israel examined the long-term predictive va-

The long-term effects on a group of 23 students and their parents of the Purdue Three-Stage Model was examined. These students participated in the elementary program for at least 3 years and were either seniors in high school or were attending college. Along with school data, participants and parents responded to a questionnaire. The enrichment program appeared to have had a positive impact on the students and was successful in achieving program goals. Negative effects included being pulled out of the regular classroom, increasing boredom with the regular program, and being different. Contrary to research, students did transfer some of the creative thinking and problem solving skills to content-specific subjects. Since students did not appear to enjoy assigned independent projects, the authors conclude that student-generated studies around their interests may be more effective.


The Early Entrance Program (EEP) has enabled highly capable adolescents in western Washington state to enroll in college before age 15. Students are selected for the EEP on the basis of scores on the Washington PreCollege Test, the Stanford-Binet IV, a 20-minute essay, achievement test records, class grades, teacher recommendations, interviews with students and their families, and the student’s own motivation. A follow-up survey of 109 participants indicated that these students were satisfied with their decision to accelerate their secondary education, were working in career-related jobs or were planning to attend graduate school. The authors found no social and emotional adjustment problems.


This literature review examined the validity of the talent search protocol and the predictive validity of talent search scores. The author reported that research evidence does suggest that middle school students who make an average score similar to those entering college are able to master advanced content (e.g., high school) in short summer courses that are not detrimental to long term retention or to subsequent courses. Students whose SAT scores are in the top one percent also perform better in high school, college, and graduate school than students whose scores are in the bottom quarter. The author also reported the effects of talent search educational programs. She found that female students were able to keep up with talented boys. All of the students took more college classes in high school (e.g., advanced placement). They are more likely to attend a more selective undergraduate institution, to enter college earlier, and to go on to graduate school.


The Mentor Connection is a community-based learning experience for 11th and 12th grade girls enrolled in suburban high schools in the Minneapolis-St. Paul area. Students who participate complete an application and must show evidence of perseverance, ability, creativity, and have an identified area of study. This study reported the reactions of 162 former students to their mentoring experience. The participants reported these effects: the identification of a career; more confidence in their professional and personal abilities; an increase in ability to interact with other professionals; an understanding of the importance of networks; a relationship to their current career choice; and an overall enthusiasm for the high school experience.


This study examined the 98 men and women who were among the 300 semi-finalists and finalists of the 1983 Westinghouse Science Talent Search. At 26 years of age, 49 of the 60 male participants and 25 of the 38 female par-
Participants could be categorized as scientists or mathematicians because of their study or employment. The 11 men and 13 women who left science had, for the most part, found careers in other disciplines. They left the scientist's lifestyle because other fields were more attractive, mentors in science were unavailable, parents and secondary school officials gave inappropriate guidance, and undergraduate science instruction was of low quality. The authors conclude that the data collection confirm the poor quality of science education in the United States.

Swiatek, M.A. (1993). A decade of longitudinal research on academic acceleration through the study of mathematically precocious youth. *Roeper Review, 15*, 120-123. Five cohorts who participated in the Johns Hopkins University Study of Mathematically Precocious Youth were surveyed at the age of 19, some at the age of 23, and some at the age of 33. Students who choose to accelerate in high school do not suffer academically but gain speed in their educational preparation. These students perform well at advanced levels of study, complete college, and attend graduate school in numbers that exceed the national average. In addition, the students also express satisfaction with college and their experiences.


This study examined these questions: (1) What are their current statuses? (2) What family and school factors contribute to the development of their scientific talents? (3) What impact did the Olympiad program have on them? In Taiwan, the Olympiad Program is for students who are talented in math and science. The sample in this study was 29 males and 3 females who participated in the physics and chemistry Olympiads. In this study, questionnaires and in-depth interviews of Olympiads and their parents were used to collect data. The researchers found a relationship between the high quality of intellectual stimulation in the home environment and academic performance. While all of the Olympians attended public schools, only 7% were enrolled in gifted classes during the elementary schools. During this time their families likely assumed the major responsibility in satisfying their children's special needs. The enrollment rate increased at the junior high level (14%) and at the senior high school level (86%). Consequently, 86% of the physics and chemistry Olympians were selected from talented math and science classes in 14 senior high schools around Taiwan. In most cases, only the top 2 or 3% of the students in very large schools are selected for these special classes, which means that many scientifically talented students do not receive enriched training. The Olympians reported that "being accelerated, having a great teacher, participating in a school gifted education program, and having stimulating peers were positive influences in their development of scientific talent" (p. 20). The researchers also reported that the families probably played the same important role as schools in the development of the Olympians' potential. Most Olympians reported that the Olympiad program made them aware of better educational opportunities, reported positive changes in others' attitudes toward them, helped them accept their talents, and improved their attitude toward science. However, 65% of the Olympians felt burned out by the intensity of the Olympiad experience. The Olympians were also admitted to elite universities without any difficulty although no special programs were provided. The authors felt that the Olympians had not experienced significant academic productivity adding, "only nine Olympians had published articles, six had published research papers, and one had published a book (p. 22).


Susann Johnsen, Ph. D., is a Professor of Educational Psychology at Baylor University and directs the Programs in Gifted Education. She is Editor of Gifted Child Today and the author of three tests used to identify gifted students: Test of Nonverbal Intelligence (TONI-3), Screening Assessment for Gifted Students (SAGES-2), and the Test of Mathematical Abilities for Gifted Students. She is a past President of the Texas Association for the Gifted and Talented.

Cindy Little, MAT, is pursuing her Ph.D. in Educational Psychology at Baylor University. She has taught in gifted, Montessori and regular classroom settings and is the Managing Editor of Gifted Child Today. Her research interests include twice exceptional learners and wisdom studies.

Written in an easy conversational style, this is a tale of a woman caught between two generations of giftedness. Her mother was wacky-gifted and her children were super-wacky-gifted. Her Dad, she said, was in recovery. She calls herself the “recovering child of a gifted person.” (It turns out that she and her other five siblings are gifted kids, too; and, good grief so is her husband!)

She writes about her mother. “I was always confused about my mom, proud because she was different from everyone else’s mom and embarrassed because she was different from everyone else’s mom.” Her mother was an artist, having been discouraged by the counselor from becoming a scientist. During a budget crisis one year, her mother decided to make the five girls’ underwear. She went to Fabric Warehouse and bought an entire bolt of powder blue double knit, bullet proof, satin tricot on sale. To make sure the underwear was modest, she added 4 inches to the length at the waist, and to make sure they were warm and durable, she doubled the already bulletproof fabric. She made thirty pairs all the same size, even though the author was 17 and her youngest sister was 6. It was probably the only underwear in the world that could be used as a bathing suit or a coat, with only minimal adjustments. She said that the modesty part worked well: she figured out how to change her clothes inside her P.E. locker.

When her first son (she was to have 4 more) was nine months old, he pointed to the letters on her tee-shirt and started saying the letter names. He had watched Sesame Street three times a day. At twelve months he read the labels in the grocery store and at two and a half he was reading all his storybooks, understanding punctuation, and correcting his parents. Their first experience at school with this son who at three read the newspaper, and by four could read his father’s college textbooks was scary, even to me. To test for kindergarten, the teacher told him to repeat the sentences she gave him. He repeated the first two perfectly. On the third he leaned over and looked at her paper, then repeated the sentence perfectly! Instead of saying, “Good Heavens, this child can read upside down,” she screeched, “This child is CHEATING!!”

A few months later the author took her son to the university to have his I.Q. tested. As she listened, she heard answers like this: Examiner: “Do you know who Christopher Columbus was?” Child: “No.” Back in the car after the test, Mom had some questions of her own. “Why did you tell him you didn’t know who Christopher Columbus was?” He answered that well, of course, he knew who Christopher Columbus was and what he did, but he didn’t know him. He said, “I never actually met the guy.” Even with answers like he still made a very high score.

Parts of the book were hilarious. It is both entertaining and serious, and in the end you realize that it is a handbook for parents of gifted kids. She goes through the entire gamut of characteristics with anecdotes for each one, and explains why gifted children really need to be put together in school for their survival. I thoroughly enjoyed this book. It should be required reading for parents of young gifted children and a text for teachers.

One more story: the little boy was told that he couldn’t leave the cafeteria to go out to play until he finished his chili. So being a creative problem solver, he spooned his chili into his pockets, raised his hand to show his empty tray to the cafeteria warden, and left with a smile on his face, but a “rather strange gait.”

—reviewed by Mary Seay


The combination of children and philosophy doesn’t seem at first glance as natural as say, children and games or children and cookies. However, as this book shows, the connection is as natural and vital as a healthy diet and exercise.

Chris Phillips (also author of Socrates Cafe: A Fresh Taste of Philosophy) is convinced that the “fourth R”—the ability to reason, can be fostered by engaging in Socratic dialogues with children. Dialogues are, of course, based on questions, and this book probably has a higher percentage of questions than any you have previously read.

The text is built around questions that children might ask, or at least find fascinating. Question include:

“Which came first, the chicken or the egg?”
“What is philosophy?”
“What is violence?”
“Is this glass half empty or half full?”
“What is silence?”
“What is the difference between the truth and a lie?”

The question is first explored on a beautifully illustrated two-page spread, with a few different answers, and then more questions. The following two pages have related questions, but no answers. Kim Doner’s illustrations add great depth to the questions and the concepts being explored.

In an opening for parents/teachers, the author suggests reading aloud one of the dialogues, then asking the questions that follow and see where it leads. There is also a readers guide available by mail or online (www.philosopher.org). This readers guide has much useful information for anyone interested in facilitating a philosophers’ club for children.

(see BOOK REVIEWS, page 27)
In T. H. White’s novel *Once and Future King*, Merlin explains to his pupil, Arthur, that “[learning]... is the only thing that never fails... the only thing which the mind can never exhaust, never alienate, never be tortured by, never fear or distrust, and never dream of regretting.” My own education as a student in public Texas gifted and talented classrooms instilled me with this desire to learn, and I believe this is at the core of an outstanding gifted program.

From grades 4-8 I was a student in the Connections and Humanities G/T programs in the El Paso Independent School District. For these programs, students identified as G/T go to a separate class for combined reading, writing, and social studies lessons.

It was fortunate for me that I was given this opportunity to truly enjoy my education, because by the end of the third grade I considered school solely a place for rote memorization and fill-in-the-blank worksheets. Classrooms were the mundane places where I had a surplus of time to doodle while I watched the other students struggle with reading and completing their assignments. This all changed when I was admitted to the Connections gifted program as a fourth grader. Suddenly, I was spending my afternoons in a class where we learned geography through computer games, broadened our vocabulary by completing cross word puzzles, and wrote so frequently that it became like second nature. This writing was constantly validated as an important form of expression because we typed, illustrated, and bound it all like real books. I was further empowered as an author when I wrote a story about a girl whose carrot-colored hair made her stand out in a crowd of long-haired classmates. This writing was constantly validated as a tool for self-expression because we typed, illustrated, and bound it all like real books. I was further empowered as an author when I wrote a story about a girl whose carrot-colored hair made her stand out in a crowd of long-haired classmates.

The physical environment of the G/T classroom was as different from the regular education setting as its curriculum was. There was carpet on the floor, large pillows to lounge on, and the walls were hidden behind bookshelves crammed with class sets of novels. As my gifted education in the Connections program continued the next year, I had a teacher who taught us useful study skills by having us make flash cards to learn about the explorers. When she read Roald Dahl’s *The Witches* aloud to us, this teacher would wear a pair of long black gloves and periodically stop reading to scratch her scalp or sniff the air (proving that she was a witch in disguise).

In the middle school gifted program called Humanities, my drive for independent thought and learning was sparked further by the intriguing world of history. In Humanities, every couple of weeks we would begin a new integrated social studies and language arts unit and choose several projects to complete from a long list. The projects all required extra research, planning, and a large amount of thought, and played to the different students’ strengths. For example, I made an “antique” tea-stained scroll detailing the process of mumification, a life-size pastel mural of a battle in the Texas Revolution, and an accurate paper mache model of a medieval cathedral. Each of the units was also accompanied by several novels, such as *Once and Future King*, some of which we would read together and some individually. As a class, some of our activities included a toga-wearing Greek feast, learning prepositions by singing them in a song, creating our own civilization and then holding an “archaeological dig” in the school yard, as well as publishing an extensive classroom newspaper. Instead of using question and answer worksheets to assess our learning, my teacher had us play jeopardy with the information and social studies bingo with the vocabulary words.

These two gifted programs not only gave me a chance to enjoy and apply my academic learning, but they also gave me a place to fit in socially. Unlike in many classrooms, the Connections and Humanities rooms were always places where knowledge and thinking were highly valued by the students and teachers alike. I never felt the need to suppress my intellect or creativity as (being shy) I might have otherwise.

While my G/T instruction was certainly academically rich and a lot of fun, I got more than information and a good time out of it. Throughout my continued education, school never ceased to be one of the most important aspects of my life. I was given an ever-hungry appetite for new knowledge, and a love of reading and writing that helped me graduate with honors from the University of Texas at Austin in less than four years. However, I did not graduate early to get away from school, I did it to get a jump start on my own career as a teacher. Because I know how wonderful school can be, I feel that it is my duty to bring this excitement to future generations of students. I believe that all teachers (whether they have two G/T students in their class, or 20), need to realize that a comprehensive education must become something that students seek out on their own. If we can encourage any of our students to truly enjoy the knowledge we try to give to them, whether through a compelling curriculum or through our own excitement, then our ultimate goal as educators has been completed. As a G/T student I received more than top-rate academic education; like Arthur, I was encouraged to think for myself and to enjoy the process of learning, and I have never regretted it.

*Teresa Hackett, who teaches fifth grade in the San Antonio ISD, is filling in for her father in this column.*
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