# GIFTED EDUCATION PRESS QUARTERLY

10201 YUMA COURT P.O. BOX 1586 MANASSAS, VA 20108 703-369-5017

# Steve Jobs Hero of Giftedness



# WINTER 2012 VOLUME TWENTY-SIX, NUMBER ONE

The year 2012 marks our twenty-fifth anniversary of publishing *Gifted Education Press Quarterly*. Therefore, I would like to note some of the articles from previous issues that are still relevant for identifying and teaching the gifted. Subscribers to this periodical have full access to all articles from 1987 to the present time. The directions and codes for accessing all issues are described in the email I have sent you via Constant Contact. However, if you need help with locating articles, please contact me. Your search procedure should start with the Table of Contents (<a href="http://www.giftededpress.com/gepqnw.htm">http://www.giftededpress.com/gepqnw.htm</a>) — then type in keywords in the Find section of your browser.

Our primary reason for starting GEPQ was to offer a forum for discussing problems and issues, regardless of theoretical position, ideology or school of thought. Many of the articles were written by pioneers in the field such as Harry Passow and Virgil Ward. For example, Passow discussed designing a curriculum for gifted high school students (1991) and Virgil Ward addressed theoretical issues in differential education (1987). We also published a memorial issue to Dr. Ward in 2003 which included articles by his daughter and former students. One of our most popular articles was by Howard Gardner on whether Naturalist abilities should represent an additional intelligence (1997). In a subsequent essay, he discussed criteria for defining intelligence (1999). Another popular article was by Joseph Renzulli and Sally Reis (2007) on the Renzulli Learning System, which so far has over 98,700 hits. Other notables in the gifted field who have appeared in GEPQ are Joyce VanTassel-Baska (1991), Ellen Winner (1997), Linda Silverman (1998), James Webb (2002), Donna Ford (2005-10), and Joan Smutny (1992-2011).

I have always encouraged lively debates among authors and critics of the gifted field. Both Mike Walters and Stephen Schroeder-Davis have provided lightening rods for these debates

## www.giftededpress.com

about the need for gifted education, as well as Diane Ravitch (1989), William F. Buckley Jr. (1990), and Herbert London (1990). Schroeder-Davis's writings on the nature and purpose of gifted education are particularly noteworthy. His articles on Coercive Egalitarianism (1993, 1996) still have important applications to current gifted education programs, and his and Walters' debate with Mara Sapon-Shevin reinforce the importance of these programs (1994, 1995). In the next issue I will discuss the contributions of stalwart supporters of *GEPQ* including Mike Walters, Joan Smutny, Ross Butchart, Donna Ford, Stephen Schroth, Harry Roman, and Robert E. Myers.

## Articles in the Winter 2012 Issue:

- 1. F. Neil Mathews, professor at Louisiana State University, discusses the results of extensive surveys conducted by the local gifted association in Baton Rouge. This article can be used as a model for conducting parent surveys of gifted program effectiveness.
- 2. Ivan Frank, retired high school teacher from Pittsburgh, analyzes the importance of community issues in educating the gifted. This article is based on his book, *Not from My Lesson Plans* (Gifted Education Press, 2006).
- 3. Diane Witt, an educator from Ohio, shows how gifted elementary school children can learn and thrive in a technology intensive environment.
- 4. Harry T. Roman, master of STEM education, has written a tribute to Steve Jobs, and he shows how Jobs' ideas can be applied to gifted education. Harry's latest book, *STEM Education for Gifted Students* (Gifted Education Press, 2011), has been well-received by gifted educators across the nation.
- 5. I interviewed Mike Walters to highlight his ideas and essays written over the last 25 years on humanities education for the gifted, and his concepts of gifted education.

Maurice D. Fisher, Ph.D., Publisher

# MEMBERS OF NATIONAL ADVISORY PANEL

Dr. Hanna David —Tel Aviv

University, Israel

Dr. James Delisle — Kent State

University

Dr. Jerry Flack — University of

Colorado

Dr. Howard Gardner — Harvard

University

Ms. Margaret Gosfield — Editor, Gifted Education Communicator Ms. Dorothy Knopper — Publisher, Open Space Communications Mr. James LoGiudice — Bucks County, Pennsylvania IU No. 22 Dr. Bruce Shore — McGill University, Montreal, Quebec Ms. Joan Smutny — National-LouisUniversity, IllinoisDr. Colleen Willard-Holt — Dean,

**Dr. Colleen Willard-Holt** — Dean, Faculty of Education, Wilfrid Laurier University, Waterloo, Ontario

Ms. Susan Winebrenner —Consultant, San Marcos, California

Dr. Ellen Winner — Boston College

# **Analyzing Parent Evaluations of Gifted and Talented Programs**

## F. Neil Mathews, Ph.D.

# **Louisiana State University**

Parents want their students to succeed in school and are concerned about whether educational offerings are meeting their needs. Today, parents have more than one option for schooling their children (Webb, 2010). They can choose to educate their students at home, in private or parochial schools, public charter schools, or traditional public schools. The public school gifted and talented program is taking its place among the alternatives. Given the options available, parents want to be informed about the quality of the gifted and talented programs.

Local parent associations throughout the country should use some form of assessment to evaluate the quality of gifted and talented programs. Learning environments may be evaluated on any number of dimensions: curricular offerings, student academic progress, student social adjustment, teacher and administrative performance, parent communications, school and neighborhood safety, and transportation issues, among others. Information may be collected through a variety of methods such as questionnaires, telephone interviews, or website surveys with findings being shared through parent newsletters, websites, and parent association meetings. Regardless of the process, most parent surveys attempt to determine if gifted and talented students' needs are being met in various learning environments to identify program strengths and recommend program enhancements.

Thus, it was surprising to discover in a cursory review of various websites provided by the ERIC Clearinghouse on Disabilities and Gifted Education (n.d.) that no articles were listed about models or results of parent evaluations of programs for gifted and talented students. There also are few reports available in the professional literature about parents as evaluators of students' programs.

The field of gifted and talented education has focused on educating parents about characteristics of gifted and talented students, various types of program offerings, curricular models, teacher qualifications, administrative arrangements, and parents' rights under prevailing laws. Though the National Association for Gifted Children website (2011) provides recommended standards for Gifted and Talented programs, there is no mention of encouraging parents to be involved in the program evaluation process. The purpose of this article, therefore, is to describe the process and results of two parent evaluations of a public school gifted and talented program, demonstrate benefits that other parent associations might derive from similar evaluations, and encourage parent associations to share survey results.

## **Local Parent Association Surveys**

The Baton Rouge Association for Gifted and Talented Students (BRAGTS) has a thirty-year history of working with parents to support an educational mission that "assures that all gifted and talented students in the East Baton Rouge Parish school system are afforded an appropriate educational opportunity through a public school program that maintains the highest standards of professional quality" (www.agts.net/aboutus.htm). BRAGTS accomplishes its mission by advocating for students in the gifted and talented program, interfacing with school system representatives, organizing membership meetings, presenting Teacher of the Year awards, and periodically administering parent surveys. Parent surveys collect information about various dimensions of gifted and talented programs including educational quality and recommended improvements.

The population of the greater Baton Rouge area is 771,000, and the East Baton Rouge Parish (EBRP) school system reported a total enrollment of 43,008 students in fall 2010. Since the early 1980's, school system demographics have changed due to an increase in minority student enrollment and a decrease of ~15,000 students overall from 68,000. Gifted and talented students comprise approximately 3.5% of the EBRP system population, with 874 students in the gifted program and 682 students in the talented program. Instructional services, preschool through grade 12, are provided in 23 elementary, middle, and high school sites by approximately 245 certified teachers in self-contained and resource room classes for gifted students and resource centers for talented students. The gifted and talented program is racially diverse with a 46% minority population (primarily black students) and a 54% majority population (primarily white students). The EBRP gifted and talented program receives supplemental funding from the state of Louisiana at approximately \$4,000 per student (Lussier, 2010).

The BRAGTS Board of Directors has provided parents of students in gifted and talented programs with opportunities to complete two voluntary program evaluation surveys, one administered in 2006 and the other in 2009-2010. Both surveys queried parents regarding their current experiences and perceptions regarding the gifted and talented program, particularly focusing on the quality of educational programming and potential future program changes. Survey formats included questions with basic yes/no responses, scaled ratings from 1-to-10, and closed-and-open respondent comments. Though there is content overlap in both surveys, each did not use identical questions.

## **Survey Challenges**

Parent associations face the following challenges when conducting a membership survey of a gifted and talented program: (a) accurately identifying major issues, (b) locating and adapting an existing survey or developing a new survey, (c) appropriately validating the final survey, (d) obtaining a significant number of surveys representing the population of parents, and (e) widely disseminating the results. In this case, neither of the surveys was appropriately validated before use, though the questions were considered carefully by the BRAGTS Board.

The 2006 survey was distributed via email, newsletter, and in-person to parents attending the 2006 Fall Annual Meeting. The 117 responses were summarized and placed online at the BRAGTS website (<a href="www.agts.net/AGTS2006Surveyresults.htm">www.agts.net/AGTS2006Surveyresults.htm</a>). The BRAGTS Board of Directors estimated that the response represented approximately 15.6 % of the potential parent responders.

The 2009-2010 survey used the same distribution system and received only 60 responses though the survey was available online throughout the entire school year. The BRAGTS Board of Directors estimated that the response represented approximately 8% of the potential parent responders. The BRAGTS Board then invited this author to separately compile the responses from both surveys to identify any meaningful trends.

The return rates for both surveys were well below what the association anticipated and what is considered statistically significant. One of the contributing factors is that there was no viable mechanism for successfully distributing parent surveys within the public schools. Recent school policies associated with the non-disclosure of student information prevented BRAGTS from developing an effective communication system with parents. The surveys were disseminated only to those parents who had access to personal computers, voluntarily placed their names on a master list for the BRAGTS newsletter, or received an invitation to the fall meeting. Consequently, the reported results cannot be presumed to be representative of the larger population of parents who enrolled their students in a gifted and talented program during those years.

For that reason, the following results of the two surveys use descriptive methodologies. Central tendency, as defined by Pearson (2010) using arithmetic averages (means) to calculate the values for all ratings, was employed for the scaled questions. The BRAGTS Board decided to interpret results as generally representative of the greater population of parents if an item received a response of greater than 70% agreement or a 7.0 scaled average on a 1-to-10 rating scale. Further, when any item received a positive ("Strongly Agree") or negative ("Strongly Disagree") response of 90% or more, the BRAGTS Board interpreted it to mean that the result was strongly representative of the larger parent population. Thus, only the most noteworthy issues identified by the parent respondents are highlighted.

This article, therefore, examines averages for each of the selected questions separately for the 2006 and the 2009-2010 surveys, followed by a summary section discussing results of similar questions on both surveys. The results cannot be used to generalize, infer, or deduce findings for any other parent population apart from those completing the separate surveys. The survey process and findings, however, are instructive to any parent associations that might want to conduct similar evaluations of gifted and talented programs.

### 2006 Survey Results

The specific goals for the fall 2006 parent survey were to solicit parental attitudes about the following identified issues: (a) quality of the academic gifted program, (b) interest in expanding and/or reorganizing the program, and (c) evaluating specified program dimensions: transportation, safety, school and classroom environments, and use of volunteers (BRAGTS Board, 2006). Results of the 2006 survey revealed that when consensus was reached, responses tended to be similar across all three school levels (elementary, middle, and high school).

Under the current Louisiana Board of Elementary and Secondary Education Bulletin 1706 guidelines, each parish program may choose to offer gifted and talented students instructional placement opportunities from a range of settings: (a) a resource center, (b) a resource room, and/or (c) self-contained classroom settings. Parents overwhelmingly preferred self-contained classroom settings over other options (96% of the elementary parents, 100% of the middle school parents, and 100% of the high school parents). Further, 97% of the respondents overwhelmingly rejected a "pull-out" resource room enrichment program.

Strong agreement (greater than 84%) was expressed for the following programmatic elements: (a) students' safety, (b) supportive principals, (c) "welcoming" school atmosphere, and (d) the gifted program's positive impact on students. Strong positive responses were received for various administrative functions: (a) the Individual Education Plan (IEP), (b) appropriately addressing students' emotional, social, and academic needs, (c) report card accuracy, and (d) classroom management. The BRAGTS website presents a report of the results (http://www.agts.net/AGTS2006Surveyresults.htm).

## 2009-2010 Survey Results

The 2009-2010 Parent Survey was intended to be a source of information and general program evaluation concerning: (a) students' curricular experiences, (b) teacher qualifications, (c) ancillary personnel, (d) students' social/emotional needs, and (e) facilities, transportation, and diversity issues. Open-ended questions focused on areas of greatest satisfaction, needs for program improvement, and potential areas of involvement by BRAGTS. Most items employed a 1-to-10 rating scale, and other questions asked for "yes" or "no" responses, calculated by percentages.

The respondents gave the Talented Program curriculum a positive 8.4 rating and teacher qualifications a positive 8.9 rating. Similarly, respondents gave the Gifted Program curriculum a positive 8.4 rating for being rigorous and meeting their child's academic needs. Other items received positive averages ranging between 8.3 and 8.6: (a) teachers' educational qualifications, (b) teachers' abilities to meet students' needs, and (c) overall support from the principal and staff.

Some questions were calculated on a percentage basis only. For example, parents were asked whether they believed their child had sufficient access to non-core curriculum offerings such as technology, foreign language, and music. Responses to these questions indicated fewer positive responses, averaging 55%.

Parents were overwhelmingly satisfied with the diversity of students and staff (92%). Parents also indicated that the gifted and talented programs met their students' social needs (7.6 positive rating). Most parents revealed their students had an average bus ride of 29 minutes, though 36% indicated that their students did not ride the bus, signifying they either walked or had parent transportation. When asked to rate school facilities, the school auditorium received the lowest average rating of a 5.1.

The final section of this survey revealed what three program improvements could be made: (a) dedicated, consolidated, and improved school sites for the gifted and talented program; (b) more challenging curricular offerings with supplementary foreign language instruction, better science labs and improved technology; and (c) more qualified teachers and supportive principals who understand gifted education. When asked to identify the three best program features, those receiving the most votes were: (a) the academic rigor with its challenging, creative, accelerated, and individualized learning; (b) excellent and dedicated teachers; (c) small class size; and (d) positive peer relationships and academic competition.

The last survey question asked respondents what they would like BRAGTS to address to enhance the school system's program. The largest number of respondents mentioned that the development and promotion of a "dedicated gifted academy" was their most significant concern. Second, they wanted BRAGTS to take a leadership role in improving networking among parents and students among all gifted and talented sites throughout the parish school system. The BRAGTS website presents a report of the results (http://www.agts.net/BRAGTS Parents Survey Results 2009-2010.docx).

## **Survey Recommendations**

Though the two surveys were administered three years apart, results indicate that parents overwhelmingly believe that students' needs would best be served in a school specifically dedicated to gifted and talented students. The Louisiana public charter school laws provide an opportunity for this development to occur. Also, parents concur that the provision of certified teachers and the gifted and talented curriculum meet their students' needs (8.4 positive rating in the 2009-2010 survey and 86% strongly agree/agree in the 2006 survey). Respondents of both surveys concluded that, in general, the gifted and talented program is (a) meeting BRAGTS' mission and goals, (b) providing students with appropriate educational opportunities at the highest standard of professional quality, and (c) providing challenging gifted and talented programs to achieve students' potential.

Historically, previous local program evaluation results have verified broad support for gifted and talented programs by parents, students, school officials, and for related legislation supporting gifted and talented programs. Due to limited respondents and small sample sizes, however, these survey results must be considered informal, non-scientific, and minimally conclusive. Thus, though tempting, the results cannot be generalized or interpreted beyond the population of individuals who completed the surveys.

BRAGTS is considering the following recommendations to increase membership in the association, meet the needs of parents, and increase survey response rates:

- 1. The Association will reinstitute a minimal annual BRAGTS membership fee so as to solicit and obtain parents' names and addresses.
- 2. The Association will develop a plan to organize parents by classrooms to increase networking opportunities for parents and students
- 3. The Association will create an interactive website to capture relevant data and conduct parent evaluations of the East Baton Rouge Parish gifted and talented program services.

4. The Association either will use a pre-validated parent survey or develop a new survey using an approved process of instrument validation with the assistance of an educational professional in survey design and implementation.

### **Recommendations for Other Parent Associations**

The preceding account of two parent survey findings suggests that parents are highly supportive of the gifted and talented program and appreciative of the local school system for providing opportunities to educate their students in academically challenging environments. Nevertheless, parents want to select the best educational schooling for their gifted and talented students, and have other options. By providing parents with opportunities to evaluate their students' gifted and talented educational programs, schools are more likely to improve their services and retain high-performing students and supportive parents.

As mainstream public school programs for gifted and talented students are beginning their fifth decade nationally, it is critically important for schools to include parents in assessment and evaluation processes to assure local and regional program continuation, enhancement, and longevity. Parent associations should take the initiative to: (a) promote their organization among parents of gifted and talented students to obtain valid input, (b) attain the assistance of an educational professional knowledgeable about survey development, implementation, and reporting, (c) conduct a valid program evaluation among their entire membership, and (d) report the results to all parents, teachers, and administrators involved in the gifted and talented educational program.

#### References

Baton Rouge Association of Gifted and Talented Students. (2006). Results *of 2006 Survey*. Retrieved from: www.agts.net/AGTS2006Surveyresults.htm.

Baton Rouge Association of Gifted and Talented Students. (2010). About Us. Retrieved from: www.agts.net/aboutus.htm.

Baton Rouge Association of Gifted and Talented Students. (2010). BRAGTS *Parents Survey Results* (2009-2010). Retrieved from: <a href="http://www.agts.net/BRAGTS%20Parent%20Survey%20Results%202009-2010.docx">http://www.agts.net/BRAGTS%20Parent%20Survey%20Results%202009-2010.docx</a>.

Board of Elementary and Secondary Education (BESE). (2009). *Children with Exceptionalities Act* (Bulletin 1706). Baton Rouge, LA. Retrieved from: www.doa.louisiana.gov/osr/lac/28v43/28v43.doc.

ERIC Clearinghouse on Disabilities and Gifted Education (n.d.). Retrieved from: www.eric.hoagiesgifted.org.

Lussier, C. (2010, October 6). EBR schools report gain of 360 students, *The Advocate*, pp. 1B-2B.

National Association for Gifted Children (2011). Standards in Gifted & Talented Education. www.nagc.org/index.aspx?id=1863.

Pearson, R. W. (2010). Statistical Persuasion. Thousand Oaks, CA: SAGE Publications, Inc.

Webb, L., Metha, A. & Jordan, K. (2010). Foundations of American Education (6<sup>th</sup> ed.). Upper Saddle River, NJ: Pearson Education.

## The Teacher's Integrity and the Classroom Community's Impact on Self-Esteem and Integration

# Ivan C. Frank Pittsburgh, Pennsylvania

I believe that the teacher's inner self, how he thinks and what he believes, guides how one relates to the children's world. This is the hallmark of his integrity. It is an educational maxim that includes intellectual, emotional, and spiritual ingredients. We as teachers have to be resilient to face the many trying issues one finds in children, their challenges, frustrations, and anger. However, I also believe that if a teacher knows how to create a community with boundaries in which students work together, they can become artists, writers, scientists, engineers, or teachers, and in time develop into independent sovereign youth.

As Wolin and Wolin explain in the **The Resilient Self** (1993), at-risk youths' inner strengths overcome low self-esteem. Teachers also have resilient traits. Those traits, with spiritual and emotional components, guided and directed my work at George Westinghouse and Taylor Allderdice High Schools. They also enhanced my attempts to create a viable community with boundaries in which students could work together. Many years after teaching in those two high schools, I realized that I had an impact on the learning of the children who were from the poorer Homewood neighborhood and attended George Westinghouse High School. They were lacking self-esteem and facing the *Failure Syndrome*. I also had an impact on the middle class Squirrel Hill, Taylor Allderdice High School students. A good number of them found that they were receiving lower grades and were not reaching their expectations due to pressures that were either academic or social.

As one student, Johanna Lenkner wrote in the Foreword of my book **Not From My Lesson Plans** (2006), "Educators are responsible for more than their pupils' academic performance, but are required to serve as agents of social change and tolerance." She strengthens her point with the following insight: "They try to make lectures interesting, assign projects which are creative, and find innovative

ways to present challenging material. However, a teacher's passion about a subject is not necessarily what makes a class effective or enjoyable." She goes on to say, "Students do not expect perfection and are smart enough to spot qualities that attract them and to let others go." The teachers that succeed in integrating all the children into the community display caring and concern, a desire to encourage children to participate by creating a safe environment in a community in which all students receive respect, and believe in their students' ability.

In **Teacher** (2003) by Mark Edmunson, a young boy and his Meadville Massachusetts buddies faced down a new teacher by the name of Frank Lears by ridiculing and using major disruptive tactics. Rather than accepting the situation, he not only avoided their attempts to create havoc in the classroom, but also went on to teach them Philosophy and influence their lives.

At times, teachers are not even conscious of the relationships that they build with their students. During the time I was teaching at Westinghouse High School, an incident occurred in the counselor's office with a student named Saul. Saul was hyperactive in my class and had aggressively behaved towards girls sitting near him. The counselor and I wanted to motivate him to use his intelligence constructively, and we invited him to that counselor's office. He had a great amount of potential, but he was not applying himself to prepare for his senior year nor his graduation.

I was the "good cop" and the counselor was the "bad cop." During the discussion in the counselor's office, I coughed. Saul said to me, "Stop coughing Frank." I responded with, "I can take care of myself." He then answered, "You care about us, so why can't we care about you?"

Saul was from Westinghouse High School where individual problems of a different nature existed. The problems of constant physical danger, illness, and peer pressure not to achieve were all factors that hindered young peoples' development. However, I eventually realized that in both Allderdice and in Westinghouse High Schools, my relationships with many individual students in the upper grades were influential both in their history classes and in their lives. E was one example of that.

E was one of the most interesting young persons I had ever met. I knew him as a student at Westinghouse from 1994-1996. In the fall of 1995, he came to my class 70% of the time, but in the second semester, he attended 90% of the time. Although he made attempts to participate in class and even one day was assertive enough to ask me to read and explain a chapter from a book about Black Muslims, he often faced many personal problems. He was a heavy drinker and smoked marijuana. He did not have a relationship with his parents. His father had left the house many years before, and he was living with his grandmother. E had been on the Wagon Train in the West, and he described the physical tasks that he and other juvenile delinquents there had to finish every day. He loved movies like *Dancing With Wolves* that he associated with his forced trip to the west and his own ruggedness. He often disappeared from school after having a fight in the cafeteria or being shot at.

One week, I became very worried about him, since I thought he was in jail, but it turned out he had been hurt in a fight and returned with a black eye. He seldom did his homework, but he managed to achieve a "C" on the Final Exam. He exhibited the traits of the *Failure Syndrome* in school. It was not natural for him to succeed with grades of "A" "B" or even "C" and if he did, it did not become a trend. Immediately after that exam, he lit a firecracker in the hall a few doors from my room. The next semester, he missed the Final Exam.

E loved to study the 1960's using political buttons that I brought to class and draw political posters too. I tried to learn more about him and his future in 2000, but I was disappointed to learn that he was only "chillin." I had hoped and we had discussed his going to Community College after graduation. In 2004, I met him in my neighborhood. One year later I saw his grandmother at a coffee house. By 2005, E had a wife and a child, and his wife was expecting another child. He had a job in Construction and also had purchased real estate and was renting one property.

Although I had always realized my influence on him was less than his peers, I had hoped that my tolerance, interest in his life, and historical studies with him had motivated him enough so that he would lead a constructive life.

Although I was taken aback by the experiences with E, my integrity enabled me to create a safe environment in which he could express himself.

On the other hand, students such as A and other students at Allderdice had problems of anxiety and absenteeism for different reasons, especially if they were in advanced placement programs, since the expectations provided pressure from peers, and parents to achieve well enough to graduate with high GPAs, and to be able to attend the top ranked universities. A had terrible stomach aches in her freshman year, and her mother sought my advice after I had called a few times about her missing too many school days.

A was tested by physicians for different stomach ailments. Eventually, we reached the conclusion that the academic and social pressures had been overwhelming her and creating the "pain." After many informal discussions and some time for make up work, she

began to relax and do well. In her junior year, another history teacher and I noticed that she had become an excellent student, had very good attendance, and some good friends.

From 1976-1980 I had been able to review the case studies of four different groups of at-risk youth and worked with some of them in Israel and later a few similar groups in the United States. In a majority of the cases, the youth were not integrated into society, nor were many of the individuals whom I interviewed in any peer group program.

However, in 1976, I discovered and began to write my doctorial dissertation on a long range Israeli kibbutz-centered peer group program that utilized a strong counseling element and an excellent teacher. The *madrich* (counselor) had the daily task to mold the individual (with all of his/her initial social problems) into becoming part of the strongly self-disciplining group. The program included a teacher who taught the dropouts a number of school subjects in the morning. This was followed up by half a day of work provided by the kibbutz. The program developed a democratic societal youth unit, the *chevrat noar*. In Israel, it was considered a peer group community that was established to help youth tackle their social and emotional problems. The *chevrat noar* also developed positive ideological and social attitudes. Joint programming with the kibbutz community's youth was added during the last year. A Tel-Aviv social worker had accompanied the group at the very beginning of the program, and met with each individual at the end of the two year program to discuss the future.

The program resulted in higher intellectual scores and complete social integration for all nineteen members. The sixteen year olds who had entered the program then served together as a seed group in the Israeli army for three years and later became positive citizens of the State of Israel.

My analysis of the community's impact, integration and social change showed the success of peer group programs. It was important that in the late 1970's I was able to do this in Israel, and in the USA in the 1990's. I was involved with long range alternative educational peer group programs that created social change and integration. Eventually, I studied, volunteered with, or worked in A Chance for Youth in Oklahoma City, Boys Town Ranch, Three Rivers Youth's Alternative Educational Program in Pittsburgh, and the Highfields New Jersey Project, all of which succeeded in rehabilitating juvenile delinquents by using long range peer group programs. Each of them created recognition systems to develop some peer motivational competition and cooperation. (I also used that method successfully at Westinghouse High School, and occasionally at Alllderdice High School and Temple David 's Religious School). They enhanced the development of the social aspects of peer group progress as a major element during their long-range programs.

These anti-authoritarian peer group programs were also democratic in the tradition of A.S. Neill's Summerhill School, The Lane Montessori School, and the Froebel, Freud, and Jungian traditions of loving children and not punishing them.

In all of my experiences with peer group programs, *community*, whether it was in Israel, Texas, or Pittsburgh, played a major role in working with children. I especially learned that point in my own community of Squirrel Hill where I lived and where Allderdice is located. The community connection allowed me to meet parents on the street and help them and their children with difficult issues. Perhaps most significant was that my contacts continued after the students graduated, since we continued to meet in the street or even on occasion at the coffee houses of our neighborhood and discuss their lives and the lives of their siblings.

Inside the school, the classroom was also a community of children whose parents and older brothers and sisters I had known. Those vital educational connections provided educational consistency for at least a decade or more.

In the Pittsburgh Public School system today, there is a serious discussion about creating such an educational environment and training or possibly retraining teachers. They will need integrity to motivate more children to not only enter a gifted education program (where they can progress intellectually and socially), but also remain there and acquire higher expectations in a cooperative, peer group type of community classroom. I believe that such an environment will help them develop the self-esteem and abilities that lead to satisfying and productive lives.

## References

Edmundson, M. (2003). Teacher: The One Who Made the Difference. New York: Vintage.

Frank, Ivan C. (1983). *The Cycle of Learning: A Unique, Educational Approach in the Israeli Kibbutz*: Cambridge MASS: Harvard University Center for Jewish Studies.

Frank, Ivan C. (1992) Children in Chaos: How Israel and the United States Attempt to Integrate At-Risk Youth. Westport CT: Praeger Publishing Co.

Frank, Ivan C. (1996). Building Self-Esteem in Art-Risk Youth: Peer Group Programs and Individual Success Stories. Westport, CT: Praeger Publishing Co.

Frank, Ivan C. (2006). Not From My Lesson Plans: A Teacher's Impact on the Social-Emotional Relationships and Characteristics of Twenty-Six Gifted High School Students. Manassas, VA: Gifted Education Press.

Wolin, S. J. & Wolin, S. (1993). The Resilient Self: How Survivors of Troubled Families Rise Above Adversity. New York: Villard.

# Digital Knowing: How Young Children's Ease with Technology is Changing Expectations...Implications for Educating Gifted Students

# Diane Witt New Albany, Ohio

"So throw off the bowlines.
Sail away from the safe
harbor. Catch the trade
winds in your sails. Explore. Dream. Discover." Mark Twain

There is a good chance if you watch television, you've had the opportunity to see Verizon's lemonade stand commercial promoting small business. The commercial shows a dad leaving for work while his daughter is working the stand. As he leaves, he gives her his smart phone with a calculator. In no time at all, she is using the phone's calculator to set up her own stands, meet with her board and set up her own expanding industry.

While the spot emphasizes small business, there is also another component. Susie is a child that has her own business and embraced the opportunities the smartphone has to offer. She is confident, likable and engaging in the way she uses the technology. Like so many young children today, her understanding and interaction with the tool is easily mastered and applied to the situation.

AVG, a global security company, conducted a study in 2010 known as the Digital Diaries. This two-part study included research on babies and toddlers, pointing to the fact that 81% of children have some type of online presence before the age of two. Parents publish ultra-sound prenatal images, get e-mail accounts for their children and create a networking profile. This research was comprised of 2,200 mothers across the US, EU, and Canada. Parents were given a list of tech skills and life skills, and asked to respond to the skills their children had mastered.

The study indicated that 58% of the children between the ages of 2-5 years could play a simple computer game. In the UK and France, the number jumps to 70%. For all of the countries surveyed, only 52% can ride a bike. Shoe-tying also takes the back seat to using a smartphone app, with Australia and the US demonstrating three times the percentage of usage than Japanese children. No techgender divide is apparent – there is only a 1% gap between boys and girls when it comes to playing a computer game (58% boys and 59% girls) or making a mobile phone call (28% boys and 29% girls).

At the same time, the National Association for the Education of Young Children (NAEYC, 1996) has expanded its position on the use of technology in early childhood to include interactive digital and electronic devices such as tablets and ebooks, software, technology based toys, apps and video games. While the current position statement is still in draft form, it provides a framework for early childhood educators to evaluate technology and its appropriate use in different learning environments.

Since the 1996 statement, advances in technology and the impact it can have on the lives of young children has grown to include types, uses and impact of media literacy on young children. Parents, early childhood educators and families have seen a change in the way technology has been addressed in the areas of teaching, and learning, and the developmentally appropriate use of such new media.

In the classroom, the focus is on tools. Digital cameras, promethean boards, document cameras, the LCD projector and computers with Internet access are used on a daily basis in elementary classrooms. NAEYC's expanded definition of technology and media literacy is now inclusive for children in early childhood settings and includes children between the ages of birth to eight.

The NAEYC 2011 draft recommends appropriate classroom practices for infants and toddlers, preschool and kindergarten, and school age children. School-age children enter school with some understanding of digital technologies. Skills involving the use of a mouse and keyboard are not uncommon. By the time they reach the elementary grades, they have used literacy software, games and other technologies that give them a chance to express different forms of creativity.

The information is especially timely when you look at the elementary classroom. Chandler Elementary, a school located in Warrick County, Indiana serves students in grades K-5. Bridget Love – first grade teacher, Lauren Mosbey – second grade teacher in a coteaching classroom, and Cathy Brown – fourth grade EXCEL teacher have been integrating technology with hands-on experiences and tools that enhance the learning process.

While each of the teachers had a somewhat different approach as to how they used the technology, they all agreed on one thing. Children are coming to the classroom with a more relaxed and comfortable approach to getting on the computer and interacting with new media.

According to Bridget Love, "Most students at the first-grade level know how to enter their favorite website, but don't know how to apply it educationally. However, the ability of knowing how to enter a web address and being familiar with the keys on the keyboard helps greatly in the classroom." (B. Love, personal communication, May 8, 2011).

Many first graders already come to school knowing how to use a keyboard, navigate Google and search for games, photos, etc. This understanding makes it necessary for parents to set up parental controls to avoid mishaps that lead to stumbling upon adult content or violent online videos when searching for things such as "cougar rescue." Many also demonstrate the ability to know how to start the computer and remember distinct passwords for different laptops. However, this same child may have trouble remembering the spelling words for the week. These self-navigating skills take them to websites for products and organizations they see on TV (such as the World Wildlife Fund where filling out the Giving form to help save the bears, after a commercial about their plight, turns out to be something they are unable to do).

This interest in the computer can begin at a young age. Children are fascinated by what the computer can do, and that interest continues to grow with exposure. Most are still unable to read but know how to turn it on and handle a mouse, a skill they picked up while playing games sitting on mom or dad's lap. For many children with an aptitude for technology, their skills and interests are beyond those of their peers, and their passion is real. (Witt, 2010).

The use of technology changes from classroom to classroom and it is not the only resource that teachers use. It does, however, open up new venues for thinking and learning. These young children who are growing in number in our schools have emerging characteristics that make the computer so appealing: • They like to explore new worlds that the computer has to offer • They have great focusing ability but often lose sight of the task at hand • Get excited about the mastery of a new tool, and readily adapt that skill to one that is more difficult • Are independent and often prefer working alone • Many of these children are self-taught.

Gifted EXCEL teacher, Cathy Brown, sees a different type of student. "Gifted students bring a knowledge base of technology before they enter the classroom," says Cathy. "But creativity distinguishes the gifted from those who are intelligent or high achievers. I feel we must have a curriculum that uses activities and hands-on experiences where children need to think outside the box and come up with creative ideas without using technology all the time." (C. Brown, personal communication, May 8, 2011).

Motivated by the power of the computer, it is not uncommon for young gifted children to be ahead of their peers technologically. Fourth graders are capable of doing a number of advanced activities. Among these are: • Building their own web content • Writing their own code • Using multimedia for power point presentations • Producing animated short films • Connecting with peers on a project • Connecting with professionals to help with research • Demonstrating proficiency with certain software programs.

Every time a child learns how to use a new tool or application, their curiosity and confidence grows. Success is a motivation of itself and they are easily motivated to learn more. These new experiences make ideas, places and new worlds within reach, and higher level thinking skills accompany the environments they enter and create.

Embracing the way students learn is the best way to reach them, and technology has opened that door. Today's elementary teachers are faced with very discerning critics. These young students have grown up with story time at the computer, probably on their parents' laps. They have become proficient users of Leapsters, ipads, and computer games. Technology has raised the bar in the classroom, and it is not uncommon for students to come to class expecting the same level of engagement from their teacher.

All three teachers agreed their job was split between traditional teaching and technology. One without the other doesn't work. These tools help to boost student literacy, especially since not every student has a computer at home.

One of the most common tools used by each teacher was the LCD projector. It is a great management tool and is used to project still images onto a screen. The projector can be combined with a wireless keyboard and a mouse for classroom games that everyone can use. Its applications are ongoing and can be applied on a daily basis to illustrate concepts. PowerPoint presentations can be used to teach materials, or its absence can empower students to become free thinkers.

The document camera is used with the LCD projector, computer and Smart board. One of the most powerful tools in Bridgett's class is the camera. It allows children to see details better than shadows on the overhead, and they are excited to view their movement on the screen. They can also create an e-portfolio to share with families and demonstrate a child's progress. In addition, children can use the camera to create digital journals. Because the school is small, teachers have to share the equipment.

These basic tools create a foundation for the teachers to enhance technology, and promote higher level thinking skills with their students. For the child that enjoys what technology can offer, it opens doors of possibilities, but young children need a balance and work best with both a hands-on curriculum and technology.

While educators continue to search for the ideal strategy to meet the needs of children that experience technology on a daily basis, one of their best advocates is the parent. Parents with children of all ages are embracing technology in and outside the classroom. In pediatricians' waiting rooms and school carpool lanes, parents are handing their children tablets and e-readers instead of coloring books and word search puzzles to pass the time. At home, TV is often not the biggest "screen time" offender, taking a backseat to computers and other gaming devices.

But parents are turning to emerging technology not to simply entertain their children, but to educate them as well as hoping the school systems will soon follow suit.

"I imagine very soon our annual book rental fees will be applied to leasing tablets, or maybe even basic laptops for kids," said Erin Simons, mom to a first grade daughter and second-grade son. In the drive to be green and cut back on costs, our school is already virtually paperless. No newsletters come home – parents are driven to the web site for all information. I think having kids complete assignments on a tablet or computer in the classroom, and nurturing e-relationships outside the classroom, and emailing them to their teacher for grading, is only a few years away." (E. Simons, personal communication, June 29, 2011).

#### **What Parents Want:**

- electronic memory box items – scanned projects sent to parents as PDF files for preservation. - access to tablets through the school system for in-class use, and perhaps for doing homework. - log in protected access to students' portfolios of current work (scanned PDF files of class assignments), as well as grades, in real time via a secure server. - technology credits to help parents purchase tools for students, i.e., basic laptops. - the ability to connect with other parents online through opt-in e-mail list serves, classroom bulletin boards and school sanctioned social media, etc.

Some tech-savvy teachers are already ahead of the curve, texting important information to parents. Here are a few parent responses:

"I still remember the first time my son created an animated movie using only Legos and our video camera," shares Tamara Wandel, Professor of Communication at the University of Evansville. "It's amazing what kids can do when given the freedom to play. Kids aren't intimidated by technology, and they love manipulating it. A child's imagination is endless, and technology allows them to be innovative in much the same way you'd see a preschooler be clever in manipulating Play-Doh to make up something."

"Technology should never replace content but, instead, enhance it. Gifted children are naturally curious and autonomous learners, and technology can help them move at a quicker pace as they soak up the information. The right technological tools can help them conduct more thorough research, give better presentations and experiment with different subjects. I want my child to have access to pencils, books and calculators to help him learn and be inspired. Why wouldn't I also want him using the best technology available to enhance his learning and inspiration?"

"My son is part of a wonderful gifted program in Warrick County, Indiana. He'll be with me for a few months next year when I'm teaching in Europe, and we're already looking forward to him skyping with his teacher and classmates while he's visiting places like Stonehenge and the Louvre. Not only will he utilize technology to develop presentations for his class and offer facts and statistics about the places he's seeing, but his friends will get to experience the monuments and museums on a virtual field trip."

NAEYC's forthcoming position statement on young children recognizes that they begin using tools already used by others in society with ease. They learn how to read and write, study and investigate. Digital technologies are learned through imitation, representational play and mastery of the tools. Early on, children learn how to use Web 2.0 technologies to express their learning. Mastery is apparent as they become motivated and interested in the usability of the tools they have learned.

The following are recommendations from NAEYC (2011) regarding school-age children and technology: • Explore a wide range of quality interactive media experiences, on a variety of platforms. These include literacy software, games and technologies that go beyond drill and practice that foster creativity. • Use Web 2.0 tools for writing, collaboration and playful experimentation. • Include a range of assistive technology devices to expand access for children with special needs. • Include language translation software and keyboard adaptations for dual-language learners. • Provide geometry software that allows children to explore the concept of shape by stretching, bending, shrinking, or combining images. • Use gaming as a way to explore math, readings, social studies and science concepts. • Provide digital microscopes and other digital tools for investigation. • Encourage children to become proficient in using digital tools such as camera, scanners, recorders, and editing software. • Integrate the International Society for Technology in Education (ISTE) standards into the curriculum. (NAEYC recognizes that it is possible that the text that appears in the final approved version may be different from the draft.)

The world of work is changing – evident by the effects of new media. Today's college students face a much different education, and the jobs of tomorrow will reflect that change. Today's students learn differently, and express themselves differently. Michael Wesch, Associate Professor of Cultural Anthropology at Kansas State University is exploring the effects of new media on society.

Wesch's students disclosed the following regarding their lives, technology and education. It is a profile of today's student:

During their coursework, a group of 200 students made three hundred edits on a document, they will read an average of eight books in a year, visit 2300 web sites and write 500 pages of email. In one day's time they will listen to 2.5 hours of music, talk on their cell phone for two hours, and spend three hours studying. They are multi-taskers. The average student spends 3.5 hours online, will use Facebook through most classes and graduate with over \$20,000 dollars in debt. (Wesch, 2010).

Some believe technology is the only answer to our nation's problems. Clearly, it is a good investment, but only addresses some of these problems. We are currently living in a world where easily packaged, distributed and marketed information is driving the economy.

One of the smallest proportions of fifteen year olds demonstrating the highest levels of proficiency in math is found in the United States. Korea, Switzerland, Belgium, Finland, and the Czech Republic have at least five times the proportion of top performers as the US. (McKinsey & Co., 2009).

At the same time, China graduates about 500,000 engineers per year, India produces about 200,000 engineers per year, and the United States turns out about 70,000 engineers per year. (Davidson Institute of Talent Development, 2009).

About one-third of all jobs in the United States require science or technology competency, but only 17% of Americans graduate with a science or technology major. Overall, 52% of college degrees awarded in China are in science and technology. (Davidson Institute of Talent Development, 2009).

These are the types of jobs that are emerging and the demand will continue to rise. Students who can fill these positions are still young while those who respond well to technology are an investment in tomorrow. We must prepare them to meet future challenges through using technology that will open up new ways of learning. Even with a slowing economy, there is a push to make technology-based programs for young children a high priority.

## **Implications for Gifted Students**

Digital technologies are shaping the way our children are educated, and their online presence can begin when parents publish ultrasound prenatal images. By the age of two, children can have an online profile and email accounts in their names. Parents are promoting an awareness that carries into everyday activities and into the classroom. This early passion for the computer leads many young gifted children to learn on their own, and they are coming to school ready to use the computer.

Teachers are integrating more technology into their curriculum and differentiating their lessons accordingly. Most of all, software developers and researchers are adjusting their programming to reflect how children learn best. Interactive software that allows students to exchange ideas and content with other young users provides the best of all worlds.

Recognizing the needs of gifted children, the Lifelong Kindergarten Research Group at the Massachusetts Institute of Technology Media Lab has created a new programming environment. It introduces students to multi-media projects like animation, games and the interactive arts. Primarily designed for gifted students in grades two through eight, students learn how to exchange and share ideas with their peers. This new computer programming language is available through "Scratch." (<a href="http://www.scratch.mit.edu">http://www.scratch.mit.edu</a>) (Young-Jin, 2011).

"There's a quote from a book printed in 1928 called **The Art of Thinking**," said Tamara Wendel, "that says children have to be educated, but they have also to be left to educate themselves." It's over 80 years later, and technology only makes that statement more fitting when you think of experiential learning. It means you're learning by doing, and that's exactly what technology can help provide when used correctly.

## References

Ash, K. (2011). Classroom-Tested Tech Tools Used to Boost Literacy. *Education Week: Digital Directions, 4,* 22-24. Augustine, N.R., Vagelos, R.P. & Wulf, W.A., *Rising Above the Gathering Storm: Energizing and Employing America for a Brighter Economic Future.* National Academies statements on Science, Technology and Global Economic competitiveness to the 109<sup>th</sup> Congress (First Session) 10/25/2005.

- AVG Digital Diaries (2010). <a href="http://avg.typepad.com/files/digital-diaries-half-term-report.pdf">http://avg.typepad.com/files/avg-digital-skills-study-full-briefing.pdf</a>. <a href="http://avg.typepad.com/files/avg-digital-skills-study-full-briefing.pdf">http://avg.typepad.com/files/avg-digital-skills-study-full-briefing.pdf</a>.
- Chandler, M. (2008). Advocates say Early Education is a Good Investment. The Washington Post. Retrieved May 2, 2011 from: <a href="http://www.washingtonpost.com">http://www.washingtonpost.com</a>.
- Davidson Institute for Talent Development. National Statistics Why our Nation Needs to Educate our Gifted and Talented Youth (2009). Retrieved July 5, 2011 from: http://www.davidsongifted.org/db/Articles id 10398.aspx.
- McKinsey & Company (2009, April 23). *The Economic Impact of the Achievement Gap in America's Schools*. Retrieved June 2, 2011 from: <a href="http://www.mckinsey.com/app">http://www.mckinsey.com/app</a> media/images/page images/offices/socialsector/pdf/achievement gap report.pdf.
- NAYEC (April, 1996). Technology and Young Children Ages 3 8, A position statement of the National Association for the Education of Young Children. Retrieved May 8, 2011 from: <a href="http://www.naeyc.org">http://www.naeyc.org</a>.
- NAEYC (forthcoming or 2011). Position statement (draft), *Technology in Early Childhood Programs Serving children from Birth through Age 8*. Retrieved April 16, 2011 from:

  <a href="http://www.naeyc.org/files/naeyc/file/positions/Draft%20Technology%20in%20Early%20Childhood%20Programs%204-29-2011.pdf">http://www.naeyc.org/files/naeyc/file/positions/Draft%20Technology%20in%20Early%20Childhood%20Programs%204-29-2011.pdf</a>.
- Verizon (videoproducer) (2011). Verizon Small Business Lemonade Commercial. Retrieved April 6, 2011 from: <a href="http://clvr.tv/verizon-small-business-lemonade-stand-commercial/">http://clvr.tv/verizon-small-business-lemonade-stand-commercial/</a>.
- Wesch, M. (videoproducer). (2010). *Teaching Tech-Savvy Kids: Bringing Digital Media into the Classroom*. Retrieved from: http://teachingtechsavvykids.com/video/a-vision-of-students-today.
- Witt, D. (Spring 2010). *Promoting the Child with Technology Talent*. Retrieved June 20, 2011 from: <a href="http://www.giftededpress.com/ILLINOISGIFTEDJOURNAL03292010.pdf">http://www.giftededpress.com/ILLINOISGIFTEDJOURNAL03292010.pdf</a>.
- Young-Jin, L. (2011). Scratch: Multi-Media Programming Environments for Young Gifted Learners. *Gifted Child Today*, 34(2), 26-31.

## Bring the Educational Power of Steve Jobs into Your Gifted Classroom

# Harry T. Roman Technology and Engineering Educator

Management experts are forever wrangling over what defines leadership, with books abounding on the subject, and speakers earning lucrative fees at national conventions and seminars. Some would say folks are born leaders, others that leadership emerges from unique lifetime circumstances. One thing is clear in all these arguments and ruminations...leaders are people who connect people to a vision, viscerally and philosophically. Steve Jobs was such a man, an internationally recognized agent of profound change.

These leaders are often missed most after they pass from this world, for while they are here their work seems to come naturally, expected if you will. Success follows success, as folks tend to wait for the next great thing. We tend to forget the intense discipline and process based thinking those leaders go through to bring about the new products. It is hard work indeed to make it all look easy in hindsight.

As I think about process and discipline, my educationally oriented mind envisions the STEM and gifted classrooms of our nation – where young minds struggle to gain comfort in constantly questioning and looking for the links between subject matter to blend the science, technology, engineering and math...along with the social, environmental, and cultural aspects of problem solving...into an integrated solution that satisfies a multitude of concerns. Steve Jobs would appreciate this, because another universal truth about great leaders is they know that all problem solutions require the open minds of inter-disciplinary teams and imaginative, fearless approaches to multi-dimensional problem solving. Leadership is about building bridges to the future vision and connecting people to that vision. Leaders see the forest and the trees at the same time, i.e., the whole problem and its individual major components.

History will judge Steve Jobs as a true entrepreneur, someone who invented the future, and brought it into being via his business acumen. Rare material he was to be able to function adeptly in both worlds. Often we find talented men and women who can do either, but not both equally well. Witness how often bright-eyed inventors must surrender their technological prowess to those that can raise the money and manage the new start-up that will actually make the products. Rare is a guy like Steve Jobs – in such vaunted company as Thomas Edison, Dean Kamen, and Henry Ford.

Were Steve involved in education, he would undoubtedly encourage young folks to experiment with new ideas, never give up, constantly pushing their vision toward a conclusion. He most certainly would challenge schools to more completely teach students about how the economy, markets, and business work. Like Thomas Edison, he appreciated that success demands you constantly improve your products, just like he constantly revised and updated his products, and stretched his dreams just a little bit further each year. He re-imagined the future continuously; then worked hard to understand what form his products must take to bring all of us on his exciting journey forward in time. Steve Jobs was the conductor and engineer on the train we call "progress." He laid and rode the rails for that journey, fresh every day.

There is much to bring to your STEM and gifted classroom from the life of Steve Jobs. Here are some activities to consider:

- 1) Study the life-forming experiences of the man his trials and tribulations, and have your gifted students discuss what they might have done with the cards this man had been dealt in his early years.
- 2) Examine how his work with Steve Wozniak in designing and building one of the first PCs would have influenced his ideas about making and selling these devices on a large scale.
- 3) Both Jobs and Edison invented things that radically changed the way we communicate with one another Edison with his major improvements to telegraphy, improvements to the telephone, and the inventions of recorded sound and motion pictures...and Jobs with his PCs, and now ubiquitous hand-held communication devices. Compare and contrast the two men and their visions of the future. How did their devices bring the world together? What were the good and bad aspects of these technologies?
- 4) As your gifted students work in teams, have them discuss how it feels to participate in such an activity. Can they identify the vision they are all working towards in the conduct of the activity you have assigned? Is there a natural team leader who emerges in each team?
- 5) Planning and organization skills are so very important in solving problems, as are documenting progress and making necessary changes along the way to success. Try using notebooks, or diaries of how your student teams are moving toward achieving their vision...like scientists and inventors keep lab books or invention notebooks. I can guarantee Steve Jobs kept such records, and I certainly know that Edison did as well. We all learn from experience; and what better way to document both success and failure and profit by it. This is also a great communications skills builder for your gifted charges.
- 6) Watch some of the videos of Steve as he introduced his products, and sold the audience on his dreams and visions. He was a great communicator. Have your project teams make oral presentations to discuss their work. Good oral communication is a hugely important skill in the workplace. It is the door to opening up resources, respect, and opportunity. The world belongs to those who can speak and write well.
- 7) Challenge your special pupils to take up where Steve Jobs left off. Examine the latest technology he created and try extending it further into the future. Are there natural extensions your G&T students can see? Are there imaginative leaps some would rather take to move the technology into new directions? Unlock the imaginative side of your students!
- 8) Wozniak and Jobs prove the modern day brain-based research findings that we are all wired differently, seeing problems from different perspectives. Your students have this capability as well, and you can exploit this in class by doing lots of creative, openended, student team-design challenges. Working with fellow students who differ in their approaches to problem solving will allow them to learn from each other. When someone in your class solves a problem so very much differently from the others, ask them to explain their line of reasoning so everyone can learn.

### Conclusion

There is another very important universal aspect of leadership – the ability to teach. Leaders teach as much as they manage the road to their vision. Education is a leadership thing, even though with all the paperwork that goes along with the academic day, that leadership ethic can sometimes get lost. Be imaginative in how you challenge your gifted students. Be Socratic, leading them toward problem solutions, but not directing or favoring a specific one...encourage divergent thinking, for a possible future can take many different forms, not necessarily a unique one. It all depends upon the questions your student teams ask at the outset of their work, how they see the problem and its solution. This was the Steve Jobs magic – asking very interesting questions at the outset of his journeys, and thinking deeply about possible futures to pursue.

Do this and you will understand the challenge and joy of Steve's vision(s). Strive to make your students excited about their potential to change the world. Dare them to dream and imagine. Encourage them to be agents of change. Teach them about process and the power of STEM to make a difference in the world, for the endpoint of education is not to make scholars or academic wizards. It is about moving humanity forward, curing sickness, improving standards of living, and bringing us together. In application we achieve the glory of education, the flowering of our visions, and the true meaning of leadership. All of you teachers have the power to keep the spirit of Jobs and Edison alive and vibrant. Nothing speaks louder than role models.

## Interview with Michael E. Walters, Ed.D.

Dr. Michael E. Walters has been writing essays for *Gifted Education Press Quarterly* since we started this publication twenty-five years ago. He has written numerous articles on the humanities and literature during this time. He taught in the New York City Public Schools for twenty-five years and has been teaching for the last ten years at Touro College in New York City. Walters' specialty is humanities education for the gifted.

**Maurice D. Fisher**: You currently teach many high ability pre-medical students in your English class at Touro College. What are some of the attributes of giftedness that you look for in these students?

**Michael E. Walters**: They should stay focused on the task, and go beyond mere factoids by engaging in contextual discussions of issues using different concepts and ideas. Many of them are autodidacts – they're self-learners who seek knowledge for knowledge's sake. They enjoy learning and problem-solving, and have wide ranging interests from popular culture to academic topics. They're constantly looking for the extraordinary in the ordinary, have a sense of the mysterious, and see connections between ideas, e.g., they view evolution as a developmental process rather than a controversial issue.

**Fisher**: What are some of the most effective methods you have used in teaching the gifted?

Walters: First, I endeavor to establish I-Thou rapport, and become more of a mentor rather than a pedagogue. I also encourage them to build upon their own knowledge and experiences, and engage in a great deal of dialogue and analysis. I enjoy introducing information to students that first seems unconnected to the current topic, but which they eventually see as being connected. For example, I'm teaching another course on American Cultural History which uses Diane Ravitch's book, *An American Reader: Words That Moved a Nation* (2000), a collection of writings from the Pilgrims to the 1960s. I also take selections from the novel, *The Group* (1963) by Mary McCarthy, a fictional account of the lives of six women who graduated from Vassar College in the 1930s. I give the students information about how McCarthy's life influenced her writing this novel, and this stimulates their understanding of the Depression in America during the 1930s.

Another effective approach is to use information from popular culture such as the cinema and television that relates to their current studies. For example, on October 2, 2011, Ken Burns presented the first of a three-part PBS documentary on the Temperance Movement and Prohibition. Burns' documentary will help gifted students to understand why many feminist leaders were involved in this movement.

**Fisher**: What significant works should the gifted study at the high school and college levels?

Walters: This is just a sample -- Will Durant's *The Story of Philosophy*; Will and Ariel Durant's *The Story of Civilization* (eleven volumes); Bertrand Russell's *A History of Western Philosophy*; Paul de Kruif's *Microbe Hunters*; Martin Buber's *I and Thou*; the writings and journals of Albert Camus and Andre Gide; James Baldwin's *Go Tell It on the Mountain*; John Steinbeck's *Travels with Charley: In Search of America*; Hannah Arendt's *The Origins of Totalitarianism*; Sinclair Lewis's *Arrowsmith*; and Oliver Sacks' *Awakenings*. These books are examples of inspiring and stimulating knowledge. They provide role models for human thought and feeling. Well-prepared gifted students at both the high school and college levels should read these or similar books.

**Fisher**: Your ideas on Sensibility have been the foundation of your writings on gifted education. Why do you think that Sensibility is so important in understanding and teaching the gifted?

Walters: Great thinkers are gifted people who can serve as perpetual role models. I'll give some examples but this list is not exclusive, rather it is ongoing and inclusive: Dante Alighieri, Johann von Goethe, Wolfgang Amadeus Mozart, William Shakespeare, Ludwig van Beethoven, Walt Whitman, Mary McCarthy, Reverend Martin Luther King Jr., Charles Darwin, Albert Einstein, Isaac Newton, Louis Pasteur, Marie Curie, Ben Carson, Emily Dickinson, Ralph Waldo Emerson, Henry David Thoreau, Thomas Jefferson, and Abraham Lincoln. All of these people had high levels of Sensibility as expressed through their creativity, courage and intellectual integrity. The classic result of Gifted Sensibility is to create new paradigms for thought and action.

**Fisher**: You have expressed the idea that Synergy is very important for gifted students' education. What do you mean by Synergy?

Walters: It is the ability to contribute individual talents and genius to group efforts by individuals of similar high ability levels. Some examples are: (1) the New York Philharmonic and great symphony orchestras include the conductor, musicians, composers, and the technicians who work together to achieve artistic excellence; (2) Benny Goodman, Artie Shaw, John Coltrane, Duke Ellington, and Louis Armstrong all represented Synergy that resulted in a major form of American music, Jazz; (3) baseball teams involve the pitcher, catcher, infielders, outfielders, managers and coaches, trainers, central office personnel and the general manager combining their efforts to achieve a winning team; and (4) the Manhattan Project included scientists, engineers and technicians working together to develop the Atomic Bomb and nuclear energy. All of these examples not only show that individual accomplishments are amplified when gifted people work in a unified effort, but there is no conflict between individual achievement and group outcomes. Synergy is also an example of what true Multiple Intelligences are about. i.e., people who have different types of intelligences can do great things for humanity by working together on complex tasks. Therefore, Synergy is one of the essential elements in the successful gifted education classroom.

Fisher: You have emphasized for many years that gifted students should study Shakespeare. Why?

Walters: Shakespeare is a good example of the Sensibility of Giftedness. For example, there isn't one item on the Fisher Comprehensive Assessment of Giftedness (2009) that Shakespeare didn't display in his works. In addition, his plays are essential examples of Synergy in Action involving the playwright, actors, technical crew, producer, and director. Perhaps one of the major reasons for the controversy over the authorship of his plays is due to a lack of understanding the essential traits of giftedness – Sensibility and Synergy. Also, Shakespeare is a wonderful role model for gifted students who aren't usually identified by standard forms of assessment. I wrote *Teaching Shakespeare to Gifted Students* (1990) over twenty years ago to emphasize the importance of studying this great genius.

Fisher: What additional comments do you have?

Walters: Recently Steve Jobs, the former CEO of Apple Inc., passed away. In **The New York Times** obituary (October 6, 2012), many of the elements I have discussed in this interview were described. He grew up and matured in an environment that stimulated his ideas and accomplishments. A good example of this stimulation is that even though he dropped out of Reed College for financial reasons, he stayed there an additional eighteen months to audit courses that eventually contributed to his success. One of these was on calligraphy which he later used to develop fonts for the Macintosh computer. He also understood that taste and excellent product design were his key marketing tools, and an important part of his and his customers' Sensibility. Additionally, we can see that the Synergy of high powered teamwork was an important part of his company's contribution to the digital age. As Jobs said to John Sculley, whom he brought in from Pepsi-Cola to be the Apple CEO, "Do you want to spend the rest of your life selling sugared water, or do you want a chance to change the world?"

## <u>Latest Books from Gifted Education Press – See Our Web Site for Details. Please Order Our Books!</u>

Click the Link: Now Order Selected Versions of Our Books in PDF Format by Using PayPal

- 1. STEM—Science, Technology, Engineering and Mathematics Education for Gifted Students: Designing a Powerful Approach to Real-World Problem Solving for Gifted Students in Middle and High School Grades (ISBN 0-910609-60-8) by Harry T. Roman Technology/Engineering Educator East Orange, New Jersey. COST: \$22.00 Including P&H. <a href="http://bit.ly/hQIqa0">http://bit.ly/hQIqa0</a>
- **2.** Energizing Your Gifted Students' Creative Thinking & Imagination: Using Design Principles, Team Activities, and Invention Strategies: A Complete Lesson Guide for Upper Elementary and Middle School Levels (ISBN 0-910609-57-8) by Harry T. Roman Technology/Engineering Educator East Orange, New Jersey. COST: \$22.00 Including P&H. <a href="http://bit.ly/bb20R2">http://bit.ly/bb20R2</a>
- 3. Solar Power, Fuel Cells, Wind Power and Other Important Environmental Studies for Upper Elementary and Middle School Gifted Students and Their Teachers: A Technology, Problem-Solving and Invention Guide (ISBN 0-910609-54-3) by Harry T. Roman Technology/Engineering Educator East Orange, New Jersey. COST: \$22.00 Including P&H. <a href="http://bit.ly/ahUdi0">http://bit.ly/ahUdi0</a>
- **4.** Exploring Energy & Alternative Energy Technologies and Issues: Resource Guide for the Gifted Middle and High School Classroom (ISBN 0-910609-37-3) by Harry T. Roman Technology/Engineering Educator East Orange, New Jersey. COST: \$22.00 Including P&H. <a href="http://bit.ly/9ht0hu">http://bit.ly/9ht0hu</a>
- **5.** Golden Quills: Creative Thinking and Writing Lessons for Middle-School Gifted Students (ISBN 0-910609-56-X) by R. E. Myers, Ed.D. Creative Learning Consultant Healdsburg, California. COST: \$22.00 Including P&H. <a href="http://bit.ly/c6XboL">http://bit.ly/c6XboL</a>
- **6.** HOMESCHOOLING GIFTED STUDENTS: Stimulating High Levels of Creative Thinking and Problem Solving in the Home Upper Elementary through Middle School (ISBN 0-910609-59-4) by R. E. Myers, Ed.D. Creative Learning Consultant Healdsburg, California. COST: \$22.00 Including P&H. http://bit.ly/btgkFj
- **7.** SNIBBLES: REALLY Creative Problem Solving Lessons and Mind-Stimulating Exercises for Gifted Students and Their Teachers, Ages 5 through Really Old! (ISBN 0-910609-50-0) by Judy Micheletti Teacher of Gifted Students Berwick, Pennsylvania. COST: \$19.80 Including P&H. http://bit.ly/9mCe3C
- **8.** *MORE SNIBBLES:* Serendipitous Seasons Sharing a seasonal spectrum of splendidly sensational stuff to stimulate super spontaneous sessions and share some simply stupendous solutions. Served with a smidgen of squiggly sketches. (ISBN 0-910609-55-1) by Judy Micheletti Teacher of Gifted Students Berwick, Pennsylvania. COST: \$22.00 Including P&H. <a href="http://bit.ly/90ganz">http://bit.ly/90ganz</a>

Send Your Check or Purchase Order To: Gifted Education Press; 10201 Yuma Court; P.O. Box 1586; Manassas, VA 20108. Telephone – 703-369-5017. Email: <a href="mailto:gifted@giftededpress.com">gifted@giftededpress.com</a>. All orders under \$50.00 must be Prepaid. THANKS! (Order directly from GEP or through Amazon.com. See all of our books listed on <a href="https://www.GiftedEdPress.com">www.GiftedEdPress.com</a> and <a href="www.GiftedEdPress.com">www.GiftedEdPress.com</a> and <a href="www.GiftedEdPress.com">www.GiftedEdPress.com</a>.