In the spring of 2009 I attended the Annual Congressional Luncheon hosted by the Center for Excellence in Education on Capitol Hill. CEE was founded twenty-five years ago by Admiral Hyman Rickover, and is currently under the direction of Joann DiGennaro. I will briefly describe some of the major programs of this outstanding science education organization because they can provide educators of the gifted with ideas about improving current national and state gifted associations. First, CEE does not receive federal grants or contracts. Private corporations and a few departments of the federal government donate funds to support staff positions and national programs. For example, Booz Allen Hamilton, Genentech, Inc. and General Dynamics Corporation give financial assistance, as well as foundations and foreign governments such as the Davidson Foundation, the Singapore Ministry of Education and the Swedish Federation of Young Scientists.

CEE organizes and manages effective science education programs for gifted high school students. Most notable are: (1) Research Science Institute (RSI) which provides 80 outstanding science students from the United States and foreign countries with a six-week summer program at the Massachusetts Institute of Technology (MIT) that is free to all attendees; (2) managing the USA Biology Olympiad (USABO) which screens thousands of high school students and selects twenty finalists who receive extensive training in different science areas at George Mason University. The top four finalists are selected by rigorous examinations for participation as Team USA in the International Biology Olympiad (IBO); and (3) holding a National Laboratory Skills Symposium which concentrates upon elevating the low state of science laboratory instruction and facilities in high schools. The quality of CEE’s programs is best demonstrated by the accomplishments of participating students. Eric Larson, the first place winner in the 2009 Intel Science Talent Search, is an alumnus of CEE’s Research Science Institute. He was awarded a $100,000 scholarship from the Intel Corporation for his work in mathematics, and he also received a $50,000 second place scholarship in the Siemens Competition. CEE has a remarkable record of helping many young science scholars to develop and advance their careers.

I have provided these details about the Center for Excellence in Education because they provide clues to what is lacking in the gifted education field. Today the public school education of gifted students needs a boost from new national and state associations. We need new people with new ideas. Since the federal government’s Javits Program funding was almost lost (a relatively small but important sum of $7.5 million), and key states such as Michigan and Illinois have severely reduced gifted program funding, I propose that educators and parents of the gifted create new organizations which emphasize strong advocacy functions based upon political action models. The National Association for Gifted Children has made significant contributions to educating parents and teachers about the gifted, but their political efforts in the last few years have been weak. A new national organization composed of three major stakeholders – public school educators, parents and academics – needs to be formed to stem the serious decline of gifted education. Equal sharing of top administrative and elective positions would help to make a more representative and politically effective national organization whose primary function would be to advocate for strong gifted programs in each state and at the national level.

The Fall 2009 issue contains interesting articles by authors who have previously written for GEPoQ. Joan Smutny (The Center for Gifted, National-Louis University) addresses the issue of educating young gifted children in the arts – clearly an underdeveloped area in public school gifted programs. Sanford Aranoff (Rider University) has composed an essay on teaching gifted students how to think and reason in a logical manner. His writing is based upon his many years of teaching science in high school and college. Hanna David (Ben Gurion University at Eliat, Israel) presents a detailed study of educating gifted Arab students, excerpted from her book manuscript. She discusses the problems encountered and progress made by Israel’s Ministry of Education in developing effective programs for these children. Michael Walters concludes with an essay on one of his Heroes of Giftedness, Ernest Hemingway.  

Maurice Fisher, Publisher
Preserving the “Sense of Wonder”: An Arts Approach to Engaging Young Gifted Learners

Joan Franklin Smutny, Director  The Center for Gifted
National-Louis University

Rachel Carson once wrote that if she had influence with a good fairy, she would ask that her gift to all children be “a sense of wonder so indestructible that it would last throughout life, as an unflinching antidote against the boredom and disenchantments of later years” (1998). What brings this “sense of wonder” becomes clear as we follow Carson and her grandson through the Maine woods encountering the splendor of the natural world. There is something profound in this kind of encounter—immediately triggering the child’s awe, curiosity and intense desire to know. As Carson points out, she never directly taught Roger about the plants and animals they discovered together in their meanderings. He learned the species he found, as well as their habits and ecology, as he poked around and inquired about them.

I mention this anecdote because the arts, with their rich and diverse materials, their potential for exploration, abstract reasoning, and original thinking, provide young gifted students with the same kind of encounter. They create the fertile ground from which the seeds of learning grow and flourish over a lifetime. One notable scholar has envisioned the arts as the “fourth R” in education (Goertz, 2003) due to their capacity to advance cognitive thinking in young learners.

The artist visualizes and sets goals to find and define the problem, chooses techniques to collect data, and then evaluates and revises the problem solution with imagination in order to create…. The artist, in his or her creative process, requires a higher-order thought process (p. 460).

Young gifted children who come from homes that feed their curiosity and creative gifts often have highly developed skills and imaginations. You may find a young child who uses his mother’s software for architectural design to show how he would create plans for a new kind of living space, or a child who makes clay models of dinosaurs and then describes their physiology in relation to their habitats. For these young learners, the art of making and doing is learning at its deepest and most satisfying level.

The following benefits of an arts-infused curriculum are particularly worth noting:

- **Enhances sensing/intuiting abilities.** The arts provide ample stimulus for the especially keen and discriminating senses of young gifted children. A child examines paintings on the wall and asks about pointillism, wonders about the V formation of the Canada geese flying south, takes time to smell a small violet flower he just spotted near the door, or spends hours fiddling with loose pieces of metal, wire and other gadgets to create sculptures.

- **Inspires the imagination.** The arts demand imagination, the ability to think beyond the box. Young gifted children make easy leaps into the imagination, assuming the identity of other people, animals, and even inanimate objects. A child may choreograph dances of the sea, with herself as a wave, act out (or write) stories, rig up an ocean liner in her bedroom with sheets, poles and cardboard.

- **Explores patterns, rhythms, shapes.** The visual and performing arts provide new ways to explore shape and pattern, to discover new structures or designs. A child creates an art piece based on the shapes of beaks, claws and teeth, explores rhythms by tapping out the different patterns in a favorite song, notes the design and rhythm of a choreographed dance, writes a response to the pattern of color and light in a painting.

- **Encourages self-expression.** The arts affirm the emerging sense of self and encourage young gifted children to discover their own special strengths, styles and preferences. Young gifted children concern themselves less with the “right way” to do a task. They follow hunches, act on new ideas, and delight in the strange and unusual. A child draws a minute, detailed cartoon of a new bug he saw; another does an impersonation of a politician; another makes up stories based on a book of prints belonging to her father.

- **Stimulates higher-level thinking.** The arts remove the ceiling on a range of higher level thinking abilities. For a young gifted child, engaging in the arts involves any or all of the following: observation, awareness of relationships, kinetic sensibility, mimicry, linguistic ability, improvisational skill, divergent thinking, problem awareness, problem analysis, synthesis of elements, and imagination.
Nurturing Creativity in Young Gifted Learners

Creating an environment where this kind of learning can happen clearly requires that teachers model creative freedom and nurture it in their young students. Here are some general practices (Smutny, Walker & Meckstroth, 2007, pp. 40-41) to consider while attempting to awaken the creative force in young learners.

Preparing the soil---

- Openly share your own creative passions with your students.
- Fill the classroom with art, music, and a rich variety of enticing supplies.
- Design work spaces that beckon the creative muse in your students.
- Applaud originality, whenever and wherever expressed.
- Protect students from saboteurs: criticism, censure, premature judgment.
- Celebrate risk-taking and bold endeavor.

Planting the seeds---

- Awaken imagination and artistic sensibilities through example and exposure to creative people and their works.
- Create open time for creative exploration.
- Share jewels of wisdom about the creative process.
- Point out the hidden, less traveled paths; warn against set patterns.
- Celebrate the beginning steps of children’s own creative process.

Watering and feeding---

- Design activities that engage the whole child: touching, feeling, imagining, listening, sensing, composing, combining, writing, improvising, constructing, molding, shaping.
- Provide for advanced learning in a variety of fields.
- Assign work that requires creative and imaginative thinking.
- Nurture boldness in vision and endeavor.

Weeding and growing---

- Teach strategies for constructive criticism and evaluation.
- Impart coping skills to deal with peer judgment.
- Support students’ trust in their own creative power.
- Give them opportunities to correct errors, refine visions, re-write, re-create, improve, and elaborate.
- Find venues for students to show/demonstrate/perform/exhibit for real audiences in the community.

A Final Note

I would like to conclude this article with a poem from a second grader. The joy and satisfaction on the face of a child who feels released from restrictions, nurtured and even emboldened to step into the world in a way not possible before is unmistakable. For a gifted child, this freedom opens the door to extraordinary achievement and the anticipation of adventures yet to be made.

The beautiful dream

I have a dream.
It is a dream of trees that smell like peppermint
and a sky of violet blue,
where the leaves of trees fill up with blueberries
and the walls of houses touch the sky.
I am as light as a fly.
And I fly everywhere….
up, up to the top of a house
or the tallest tree,
or down, down to a pool
as still as a mirror.
I could fly anywhere….
to another land
or up again
into the sunlight of the violet sky.

---Alyssa, second grade

Sources


**How is A Teacher of the Gifted Supposed to Teach?**

Sanford Aranoff   Adjunct Associate Professor of Mathematics and Science
Rider University   Lawrenceville, New Jersey

I. The Conventional Way Teachers are Supposed to Teach

*How is a teacher supposed to teach?* Future teachers learn in university education programs many techniques and activities. The teacher’s approach is to plan the day, specifying different activities. The teacher will consider herself (or himself – for brevity I write herself) successful, and so will others, if she follows the plans, students behave, do their work, and do well on tests. The teacher’s goal is to follow the procedures as experts have laid out for the course. Students are kept busy, listening, writing, or being engaged in some activity. When the teacher asks a question to a student, if the student does not immediately know the answer – teachers demand quick responses – the teacher immediately asks another student. The philosophy is that by repetition of short clear ideas, students will learn. Before learning new material, students write “vocab,” which is to copy vocabulary words and their definitions from the book. The teacher repeats the ideas by example after example, through telling stories, class discussion, homework, and tests. All this looks clear, good, and organized. The department chairperson approves the lesson plans prior to lessons, and monitors the teaching in accordance with the plans. If students misbehave, teachers mete out various types of punishments, such as having to stay after school. The administration is pleased at the smooth running of the machine. The administration should be pleased at the smooth operation of the school because of the huge salaries they get. Basically, school is a well-oiled machine.

II. Substitute Teachers, Gifted Students

Unfortunately, things are not perfect. Teachers are absent occasionally for good or not so good reasons. In this case, a substitute teacher manages the classes for the day. Suppose the sub is a retired university professor, in the same area as the teacher. The sub will follow the plans the teacher left, if the teacher left plans. The sub will talk to the students about the material while the students are working in answer to questions, or after they completed the assignment. The sub is a professor who dedicated his life to the subject, loves it intensely, is enthusiastic about teaching, and talks to students – helping them understand the material and how to approach
studying and taking tests. The sub will say things different from the teacher, for another intelligent person invariably has another slant. The next day students will tell the teacher that the sub, who was a professor, said … The teacher did not plan to discuss the material that way. The teacher may not be aware of some of the things the sub said. It may be that the teacher said wrong things that the sub corrected, for a responsible sub cannot let a student say something wrong without clarifying it to the student.

Some teachers will take offense to hearing such things from students and file a complaint. The result is that the sub will not be able to substitute for this teacher. Complaining about the sub allows the teacher to continue with the course according to plans, removing distraction and confusion. Removing the substitute, who is more knowledgeable than the teacher, allows the teacher to focus on her primary goal to organize the class in accordance with her plans based upon her training and guidance.

Now let us consider a teacher with a gifted student in class. The student is well behaved, but does ask questions and makes comments. The student makes the comments by politely raising his hand, or talking to other students during or after class. This will disrupt the teacher in her goal for smooth classes following plans. However, she will not be able to remove the student as she was able to remove the sub. She cannot complain to the administration as she was able to complain about the sub. What is important, and sad, is that the teacher will not be able to focus the proper necessary attention upon this student’s development. Often the teacher will ask the gifted student to stop asking questions. This means she is treating the student the same way she treated the professor who is a sub, namely, getting rid of what she considers a distraction.

III. Teachers are Professionals

These two examples, the substitute who is a professor, and the gifted student, show the failure of the model, according to which the teacher organizes the class totally based upon prior plans. This model is the basic idea of socialism, whereby the government makes all the plans for the economy, and then people do what they are required to do. Americans believe that socialism is not a good way to run an economy. Capitalism and individual freedom will result in increased wealth to more people than socialism. If teachers wish to follow capitalism, and be truly American, they should plan basic goals but not precise details. Teachers must let the students have the freedom to alter the progress of the course. It is interesting that teachers tend to support socialistic candidates. Teachers need to encourage student initiative, and not to feel threatened by gifted students or administrators who will scold them for not following plans rigorously.

The current attitude is that the primary task of the teacher is to control the class and to insure students get good grades on tests. A person hired for a job must do a good job in order to stay employed. Teachers’ employers expect decorum and good grades. Are the goals of decorum and grades the proper goals for teachers?

A professional person must have as a primary goal the values of the profession. A medical doctor must have as his primary goal improving health. A doctor who prescribes antibiotics to a demanding patient with a virus infection is acting contrary to the primary goal of the medical profession. The reason doctors actually do this is to satisfy their secondary goal, that of having a good income. We consider this immoral as it is contrary to the primary goal. The secondary goal is important, but must not conflict with the primary goal.

Teachers are professional people. The primary goal is important understanding of the material and the development of good study habits. Teachers who focus so much on decorum and good grades at the expense of imparting understanding are acting as immorally as the doctor prescribing antibiotics for patients ill with viruses.

IV. Challenges

A good teacher should expect to be challenged by some questions. When this happens, the teacher should not brush off the student. The teacher can say that she will think about it, and then discuss it the next day.

Here is an example. The chemistry class was about solutions and mixtures. An example of a solution is salt water, which is clear. A mixture is water and soil, which is cloudy. The bright student goes home and experiments for himself. He puts in a tablespoon of salt in a glass of water, stirs, and notices that it is a mixture. The water is cloudy and white, and there is some salt on the bottom. The next day he asks the teacher.
The teacher may be stumped, for the textbook clearly states that salt water is a solution. Suppose the bright student went home, and asked his dad, who was a physics professor. The next day he said to class that the salt is a mixture for a minute, and then becomes a solution. The student did not notice the change, as he did not wait. After a minute, the cloudy water becomes clear.

The point is that salt dissolves into water as a solution only after equilibrium is attained. Furthermore, we can dissolve only a certain amount of salt; more will not dissolve. The issue is that the teacher wanted to discuss solutions and mixtures at equilibrium. Equilibrium itself is an advanced concept, as the speed of equilibrium varies enormously. Unfortunately, once someone brings up the subject, the teacher has the responsibility to clarify the issue. Professionalism demands flexibility.

The issue is that unfortunately many teachers are inflexible, and discourage inquisitive questions to the detriment of not only the gifted, but also all students. Teachers must keep the focus on the primary goal of education which is understanding.

Our society today does not understand this, and so is failing to do the best to help the gifted – the hope and future of society. Our focus is on No Child Left Behind (NCLB) tests and task accomplishments. We like to look at “objective” evidence of progress. Creativity is not objective! Our focus on objectivity is counterproductive to our social need for the cultivation of creatively gifted individuals who are successful. Educators must face up to responsibilities to society to develop students to the maximum. This means principals and politicians must focus on understanding the reality of the need for creativity in education at the expense of objective measurements. We need to be creative to accomplish this goal.

V. Thinking

*Teachers must not parrot lessons,* but be engaged in thinking while talking to students. If she is actively thinking, she will necessarily deviate somewhat from lesson plans. Conversely, if she meticulously follows the plans, she is parroting, not thinking; i.e., she is not teaching. When people talk, they must think while talking, in order to properly communicate.

This seems obvious. Why then do teachers stand in front of a class and act out a role rather than think? What are the reasons for this unacceptable lack of thinking? We must understand these reasons if we wish to address the issue.

One reason is the very nature of education training. This training is so extensive, with a large number of goals, objectives, procedures, methodologies, actions, and such, so that the teacher may give all her attention to this plethora of items, crowding out the essential activity of thinking about the subject and the students’ understanding. Teachers get the impression that thinking is just one task out of many.

I was a mentor for a new teacher, where I sat and observed the teacher for 20 days. I then wrote up detailed comments for the teacher. I showed the comments to other teachers. One teacher said, “I’m not going to read all this!” This shows that they are overwhelmed and not able to focus on their primary task which is thinking. To summarize, teachers must understand that thinking has the highest priority of all tasks. This is not meant as a critique of teacher training, but a plea for teachers to always remember that teachers and students must prioritize thinking. This simple truism must be reiterated and emphasized.

*Lack of understanding.* Another reason why teachers do not think clearly and in depth in class is that they do not fully understand the material. A teacher is not a professor. A professor dedicates his/her life to research and teaching, trying to understand the material and to broaden human understanding of the subject. A professor engages in original research. A teacher learns the material sufficiently to be able to teach it, but does not probe and question. A teacher learns to ignore confusing ideas, as she does not have time to go into everything. A teacher tries her best during her very busy schedule. Schools do not give a lot of time for teacher education, for a teacher to spend time reading and attending seminars throughout the academic year. It would be very nice if teachers had more time for ongoing education, but this is not likely to happen. What then can a teacher do?

As a professor, when I stand in front of my students, I encourage questions. I tell students that questions are essential to learning, and not asking questions will interfere with learning. Teachers should also ask questions. They should write the questions down. They may then ask others, ask professors at a local university, ask on the Internet, or not ask at all, but at least they have a record of the question. If they do not know how to answer a student’s question, they should be honest in their replies.
**Level of the class.** Another reason why teachers talk without thinking is the fear that the correct explanations would be beyond the level of most of the students in the class. This is an issue. The answer is that the teacher must think, but, of course, not discuss all her thoughts if she feels they are too advanced. She must think how to present advanced concepts to beginners. Just because a concept is very advanced does not justify the teacher not thinking.

One of the goals of teaching is to have students get better grades. If teachers can teach students how to think and avoid the societal obstacles, the teacher will accomplish the goal of better student grades.

**VI. Thinking and Contemplation**

Thinking is a slow, contemplative, deliberate process that cannot and must not be rushed. Our society stresses the very opposite with the sad and dangerous result that people do not think. Teachers must be aware of these societal influences, and confront them directly. The result will be not only better teachers who think during class, but also better students, who think during class while completing homework and taking tests.

Society stresses short rapid responses. Look at football and basketball, two very popular sports. Parents and coaches encourage youngsters to respond quickly and accurately. Teachers fall into the same trap. For example, the teacher had a list of questions she was asking the class. She asked a student. “Wrong!” she said as a student replied. She then asked another student. The correct way (Aranoff 2007) is to try to find out the student’s wrong way of thinking and to correct it, not merely to look for the answer.

Our national debates are short discussions, which must fit into time segments interrupted by commercials. Contrast this with the Lincoln-Douglas debates (Lincoln, 2004). Schoolchildren read things like the brief Gettysburg Address, not the lengthy debates during the Lincoln presidential campaign. Everything is quick, designed for emotional impact – not calm, rational analysis. Commercial interruptions on television prevent leisurely absorption and thought about the show. People falsely assume they can think about complex ideas while suffering frequent interruptions.

People substitute emotions for thinking. The yelling and cheering at sports games and political rallies are examples. People assume one can win arguments by emotions and popularity which is, of course, wrong. The correct way to decide between conflicting ideas is rational thinking.

Many high school coaches are teachers. They tend to apply coaching principles to classroom teaching instead of thinking.

Iserbyt (1999) states that many programs and curricula for schoolchildren depend upon immediate rewards which she calls a “Skinnerian method.” The very notion of an immediate reward contradicts fundamental thinking. She states, “…recycle students and teachers when necessary in order for them to exhibit ‘correct’ behaviors.” When the emphasis is on behavior, thinking about the ideas of the subject gets pushed back. We need to stress the priority of thinking, not behavior. The focus on behavior harms all students, and especially the gifted.

Gerry R. Coleman said as a comment in Amazon.com’s review of Iserbyt’s book, “For over 50 years the public school system has been controlled by psychologists and social planners out to create a non thinking reacting high school graduate. What child can actually think and reason in these schools today?”

**VII. Confidence and Certainty**

One serious intellectual flaw many teachers, parents, and indeed citizens in general, exhibit is an attitude of certainty. Students learn to trust and depend upon the teacher for support and confirmation. When a student does a problem and gets an answer agreeing with the “back of the book,” the student feels the issue is closed. This attitude is wrong, as one can never be certain. Gödel (1931) proved this.

Gödel was a mathematician from Princeton University, a colleague of Albert Einstein. Gödel proved that in any logical system, such as the system of numbers, there would always be a true statement that one cannot prove from the axioms. We cannot know all things about a subject. If we feel confident about a conclusion we reached, we must always entertain the possibility of error. Furthermore, we must understand that all scientific knowledge is based upon probabilities.
An example of faulty thinking based upon the false notion of certainty and inability to understand statistics is the recent Madoff scandal. Large numbers of our country’s leaders believed his fraudulent recommendations and lost vast sums of money. Confidence led to huge losses. The herd instinct overcame rational analysis – starting from basic principles and entertaining doubt. Madoff was successful because of people’s ignorance concerning how to think properly. The talk concerning the need for additional regulation ignores the need for educators to teach correct thinking procedures. Madoff’s success is modern education’s failure. Clear thinking requires discipline. Educators must teach students how to think.

Teachers must instruct students to guard against blithely accepting statements made with confidence. People tend to follow leaders who express confidence. We must understand this natural reaction and not permit our thinking to be incorrectly influenced. Confident thinking is prevalent in television commercials because business knows that a confident attitude will sell merchandise. Teachers must clarify this to students. We all need an attitude of humility.

To summarize, teachers must not only focus on the subject, but also how to think about the subject. Teachers must teach how to verify conclusions and not to be overconfident. Students must not only verify the conclusions, but also summarize the conclusions and the process of verification. Summarization is critical to education. As an example, this paragraph is a summary of the section.

VIII. Hope for the Future

In the past, people spent time discussing ideas at great length. With the advent of television and widespread newspapers, people expressed ideas very briefly. Letters to the editor must be short. The hope is with the Internet, which gives the opportunity to discuss ideas at length. This process is in its very beginnings with, for example, blogs.

People tend to write lengthy things in blogs. Most blogs are rambling thoughts, with many words but few clear ideas and logical points. However, there is hope. Universities are beginning to use blogs as part of classroom instruction. Rider University, for example, encourages the use of blogs, and assists professors in using them. Students can fully express ideas, and the professor will evaluate the material for clarity of content. The blog is for use of the class only, or group of classes. High school teachers may want to have blogs for groups of teachers to exchange ideas. Teachers may wish to create blogs for their students.

Blogs may encourage people to fully express ideas. The fact that others can comment on the ideas means the writer must be clear and rational. The grade the student receives is based on both the student’s writings as well as the comments.

The greater use of blogs gives an additional opportunity for teachers to encourage gifted students to think and express themselves more, without interfering with the classroom routine.

References


Quotations

To think great thoughts you must be heroes as well as idealists. Oliver Wendell Holmes, Jr., Lecture, Harvard University, 1886.

Logic, n. The art of thinking and reasoning in strict accordance with the limitations and incapacities of the human misunderstanding. Ambrose Bierce, The Devil’s Dictionary, 1911.
The Gifted Arab Child in Israel: Book Summary

Hanna David
Ben Gurion University at Eilat, Israel

The State of Israel does not purposely discriminate against any sub-population – especially not in education. Unfortunately, reality is somewhat different. Until three to four years ago the data regarding the investment level in education showed a large gap between Arabs and Jews (David, 2008). The reasons were partially because budgets going to Arabs were not equal to those given to the Jewish population, and partially because of the HAMULA (expanded family) system occurring among Arabs: without governmental supervision, a substantial amount of the money given to educational purposes found its way into the wrong pockets.

Starting in the time of the late Yitzhak Rabin, the Israeli prime minister, until he was murdered in 1995 and especially in the last three years, there has been affirmative action regarding budget entitlement to Arabs aimed at closing educational gaps (Jabareen, 2006, 2008; Zureik, 2001). However, the educational gap is too large; there is also an intelligence gap between Arabs and Jews (e.g., children in gifted Arab programs are chosen as a percentage of the Arab population rather than as a part of the Israeli population in general). In some places, most notably in Jerusalem, there are enough school buildings only for about 50% of the children! So it is going to take a long time until the State of Israel succeeds in closing educational gaps.

Since the needs of gifted children are greater than the general population, they suffer more from the above problems. My book shows the situation until 2008, so I'm afraid it cannot demonstrate that there is no discrimination against Arabs. Indeed, things are changing slowly. But we Israelis do not get credit for our wish to improve things.

The main achievement of Arabs in my country is that their level of education has increased enormously: there is no other population in the world where illiterate grandmothers have daughters with 8 years of schooling, and granddaughters have 12+ years of education. In addition, anybody who is really good academically receives access to faculties in the best universities. For example, one single Arab school in Haifa "contributed" the largest number of new female students at the Technion – (the Israeli institute of technology) last year. This has nothing to do with our policy regarding giftedness, but with those Arab parents who want their children to be "the Jews of Israel" – to develop their intellectual abilities, as Jews have in the Diaspora for generations.

The subject of gifted Arab females will not be presented here due to space limitations. However, if the reader wishes to have just a taste of this 100+ page part of the book, here it is:

Since Israel's independence in 1948, Arab females were the main beneficiaries of the law of mandatory education. Arab women ages 65+ have, on average, less than one year of formal education. Their granddaughters, ages 18-24, have about 12.5 years of schooling – a number that increases each year. As in many Arab countries, Arab girls in Israel tend to enhance their education while observing the rules of tradition and acting within the socially accepted norms. In Arab society in Israel – Muslim, Druze and certainly Christian – educational aspirations are not perceived as contradicting religion. Thus, a young educated Arab woman has no restrictions on her education per se. If she is judged by significant others, it is only her behaviour that is criticized. As long as she does not behave against the strict laws of "family honour," she is encouraged to excel, even in co-educational programs. Her achievements, high intellectual abilities, good grades and higher degrees make her family proud (Abed-el-Kader Yichya, 1995; David, 2002, 2007). This paper examines a few areas where Arab girls excel, e.g., in school, in the professions and in social achievements. Also included is an analysis of their hardships and suggestions regarding potential ways to overcome or partially overcome these hardships (David, 2009).

The book also includes six case studies, where data were collected by interviewing highly gifted Arabs, two women and four men, who have overcome all obstacles and became heads of university departments (one male and one female), a judge (female), a world renowned mathematician (male), a chief of a major Israeli hospital (male), and a headmaster (male) of a successful program for the gifted. Though their stories cannot give us a "pattern of success," they still can be generalized with the help of many common traits in their upbringing, academic tracks, level of dedication, ambition and inner motivation, and persistence (Evers & Wu, 2006).

The gifted Arab child in Israel has been the subject of very few studies. Until 2009 only one MA published thesis studied this subject (Abed-el-Kader Yichya, 1995), and there were a few related articles (David, 2002, 2003, 2006, 2007, 2009a, 2009b). Furthermore, in spite of the fact that in the year 2008 no less than fourteen enrichment centers for gifted Arab students have opened (Centers for the
Gifted, 2008/9), no research has been conducted either on the children studying in these centers, or on their teachers, instructors and headmasters.

**What is special about the Gifted Arab Child in Israel?** These children, whether Muslim Druze or Christian, are different from Jewish children in many academic, cultural, emotional, social and familial aspects. These differences are rooted mainly in the conflict between the individualistic culture, typical in the West in general and in nurturing high ability children in particular, as compared to Arab culture which emphasizes group interests, the honor and respect of class and age over talent and high achievements, as well as gender. Thus, the main conflicts the Arab child has to deal with are:

1. **In society:**
   - Individualism versus cooperative culture. In a cooperative culture, the need of the gifted child to have her or his own way is perceived, in many cases, as vanity and pride rather than one of the gifted characteristics (Dwairy, 1999, 2002, 2003, 2004a, 2004b);
   - The average Arab family is larger than the average Jewish family: the average number of children per woman is 3.6 (3.9 among Muslims, 2.5 among Druze, 2.1 among Christians, compared with 2.8 among Jewish women. Among Arabs, 19.8% of households have seven persons or more, compared with only 4% of Jewish households, Habib, pp. 2-3).
   - The low socio-economic level of Arabs in Israel makes it difficult to serve them properly in the fields of education, health and welfare (Coursen-Neff, 2004). As gifted children need a lot of resources, gifted Arab children are in greater need but receive a lesser amount;
   - Insisting on my own rights, as well as my own truth and opinion versus obedience to the elder, both in the immediate and enlarged family (Hamula);
   - Unrealistic expectations for high achievements, and intolerance of failure (David, 2006);
   - The special status of a male first-born. When gifted – being indulged on the one hand and getting a lot of responsibility on the other, when still very young. When later-born – having to hide the special abilities if the first-born male is non-gifted; the necessity to obey him even when wrong, sometimes being forced to give up academic activities or even higher education for the sake of the older brother;

2. **In the family and society:**
   - The expectation from the child to have an accelerated emotional and cultural maturity;
   - Social conformity: having to obey the father or other older man in matters such as marriage or education, when knowing these people cannot understand the needs of the gifted youngster;
   - The inability to get help when emotional problems occur, due both to the lack of professionals in gifted education and psychology in the Arab sector, and the general resistance of many Arabs to seek psychological counseling.

3. **In the academic world:**
   - The necessity to be fluent in three languages: Arabic, Hebrew and English, which places extra pressure on gifted children who are not linguistically gifted;
   - To overcome prejudices and discrimination against Arabs which are not uncommon in Israel.
Education of the Gifted Arab Child

Education of the gifted in Israel is not a concern of most professionals in Hebrew education, let alone in Arab education. Until the year 2008 there has not been one university program for an advanced degree in gifted education. As a result, most of the instructors in the various enrichment programs are professionals in their fields who also love teaching, but are by no means professional educators. This works out quite well in the Jewish sector, but does not always work at all for Arab students because of the following reasons:

1. In all enrichment programs in the Arab sector, basic subjects such as mathematics, English, and even Arabic and Hebrew are studied. Thus, the lack of teachers trained and educated to teach gifted students influences the level of teaching, which is not always suitable for highly gifted students. Due to substantial gaps between didactics for regular and gifted students, the trained teachers use (in many cases), methods, styles, and means that are improper for the gifted.

2. The Arab teachers who participate in one of the four in-service training sessions for teachers of the gifted have no Arab mentors who are professors, and the subject matters they are exposed to have (in many cases) no relevance to Arab students.

There are many harmful consequences connected with this situation.

Participation in gifted programs

Let us look at Table 1 with the numbers of Arab participants in gifted student programs in the 2007/8 school-year.

<table>
<thead>
<tr>
<th>District</th>
<th>Grades 4-6</th>
<th>Grades 7-9</th>
<th>Grades 10-12</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern</td>
<td>528</td>
<td>256</td>
<td>0</td>
<td>784</td>
</tr>
<tr>
<td>Haifa</td>
<td>268</td>
<td>179</td>
<td>0</td>
<td>447</td>
</tr>
<tr>
<td>Jerusalem</td>
<td>69</td>
<td>37</td>
<td>0</td>
<td>106</td>
</tr>
<tr>
<td>Central</td>
<td>134</td>
<td>132</td>
<td>0</td>
<td>275</td>
</tr>
<tr>
<td>Southern</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>1008</td>
<td>604</td>
<td>0</td>
<td>1612</td>
</tr>
</tbody>
</table>

The information in this table was supplied in private correspondence with Mr. Abdallah Hatib (Supervisor of Arab Education, the Ministry of Education). As can be easily seen, it shows that:

A. In the Arab sector there are no gifted programs for grade 3 students;
B. In the transition from elementary to junior high school there is a substantial decrease in the participation of students in gifted programs;
C. There are no gifted programs for students in grades 10-12;
D. There are no gifted programs for Arab students living in the Southern district of Israel.

1. Among elementary school gifted Arab students

According to the Israeli Bureau of Statistics for the 2006/7 school year, 230,646 Arab students in grades 1-6 studied in Israeli schools (Statistics, Israel, 2007, Table 8.13). As programs for gifted students start in Israel in grade 3, the number of Arab students in grades 3-6 was about 153,760. As we see in Table 1, 1008 of them participated in gifted enrichment programs, which is 0.65%. According to the data of the Knesset, the Israeli Parliament (Vorgan, 2006), the rate of grades 3-6 Israeli children, Jews and Arabs, participating in gifted programs was 1.04%, which means the rate of Jewish children was higher than 1.2%. Thus, even though the rate of Arab elementary school students participating in gifted programs was higher than that of junior high school students, let alone of high school children (Table 1), their rate, 0.65%, was only about half than the rate of gifted Jewish children.
2. Among junior high school students

According to the Vorgan (2006) report, in the year 2006 only 0.62% of junior high school students participated in gifted programs, which is about 20% of those entitled to them. This includes both Arab and Jewish students. However, in the year 2006/7, 27.6% of junior high school students in Israel were Arabs (Statistics, Israel, Table 8.12, 8.13), while less than 20% of those participating in gifted programs have been Arab (Vorgan, 2006). In addition, while in the Jewish sector there were many gifted classes that operated six days a week, no such classes operated in the Arab sector (ibid).

Table 1 (p. 11) shows that the number of junior high school students participating in gifted education decreases substantially from that of elementary school students. This is common to three districts: the Northern, Haifa and Jerusalem. Only in the central district, namely, in the two programs of Taibe and Tira, does the number of students remain stable in the transition to junior high school.

It is indeed impossible to know why in these two programs the situation has been so much different than in all other ones. However, after interviewing Me. Wagi Bal’um, the head of the Taibe gifted program, as well as Dr. Fadia Naser, the Taibe-born head of the program on research, measurement, and evaluation methods at Tel Aviv University, we can assume that it is not easy to be an Arab student in Israel. However, if you live in a place where education is the first priority at home and in the community, the odds become much higher for being successful.

Mr. Wagi Bal’um, who received his MSc in genetic engineering at age 23, started teaching at the Taibe gifted program right after receiving his BSc in agricultural sciences at age 21. As headmaster, who is in charge of the subjects studied in the program, he insists on four main principles: 1. Knowledge and understanding are not enough; each learning process must end with the operational stage; 2. Fine motor skills, which are under-developed in the Arab sector due to lack of knowledge among kindergarten and lower-grade teachers, must be strengthened; 3. Emotional intelligence should be nurtured; 4. Creativity is a must in each and every field of knowledge. These principles, as well as many other ways of teaching, various social events, and high competitiveness contribute to the high prestige of the program, where the drop-out rate is only about one child per year!

Dr. Fadia Nasser, who was born in Tira and lived most of her life there, gives a clue about the value of education in her hometown. She was born in the late 1950s in a 10-child family that struggled hard to exist – first in a 2.5-room house. In spite of that, two of her brothers were sent to a Jewish agricultural high school in order to acquire both education in modern agriculture and Hebrew. She herself was encouraged to "go as far as she wished." When studying for her Ph.D., she left Israel for the United States – an unconventional behaviour for a young, unmarried Arab female. Though just one example, the story of Dr. Nasser gives quite a good idea about special standards for gifted children in general, and females in particular, in a comparatively small (21,800 citizens in September 2008; Statistics, Israel, 2008), Muslim town with a long tradition of focusing on education. Let us see the distribution of Arab children in gifted programs by specific location and gender, grades 4-6 and 7-9:

<table>
<thead>
<tr>
<th>Location</th>
<th>Elementary school (grades 4-6)*</th>
<th>Junior high school (grades 7-9)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
<td>Girls</td>
</tr>
<tr>
<td>Mar Elias</td>
<td>41</td>
<td>33</td>
</tr>
<tr>
<td>I'billin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tamra</td>
<td>57</td>
<td>59</td>
</tr>
<tr>
<td>Bu'eine Nujeidat</td>
<td>18</td>
<td>21</td>
</tr>
<tr>
<td>Reineh</td>
<td>39</td>
<td>35</td>
</tr>
<tr>
<td>Nahf</td>
<td>41</td>
<td>43</td>
</tr>
<tr>
<td>Shefa-'Amr, also Shfar'am</td>
<td>37</td>
<td>28</td>
</tr>
<tr>
<td>Arraba</td>
<td>29</td>
<td>33</td>
</tr>
<tr>
<td>Total: North</td>
<td>262</td>
<td>252</td>
</tr>
<tr>
<td>Jerusalem</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Um el-Fachm</td>
<td>22</td>
<td>23</td>
</tr>
<tr>
<td>Baqa al-Gharbiyye</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Including both boys and girls.
Table 2 (Continued): Arab boys and girls in elementary and junior high school gifted enrichment programs

<table>
<thead>
<tr>
<th>Location</th>
<th>Elementary school (grades 4-6)*</th>
<th>Junior high school (grades 7-9)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
<td>Girls</td>
</tr>
<tr>
<td>Haifa</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Kafir Qara or Kafir Qari</td>
<td>26</td>
<td>16</td>
</tr>
<tr>
<td>Taibe</td>
<td>41</td>
<td>37</td>
</tr>
<tr>
<td>Tira</td>
<td>29</td>
<td>33</td>
</tr>
<tr>
<td>Grand Total</td>
<td>511</td>
<td>497</td>
</tr>
</tbody>
</table>

*At the elementary level, some towns did not report their numbers, but the grand totals are correct and are based upon information supplied by the supervisor of gifted education in the Arab sector.

There have been more than 50 students in only five programs at the junior high school level. Such a small number is not enough to ensure the continuation of the program, as the minimal number of students in a government-financed program is twenty, and the average number of students in each of the remaining classes is less than seventeen. Furthermore, with the age increase, the areas that gifted children develop interests become more varied. A small program can usually offer but a limited variety of courses which might cause further drop outs from the program.

3. Among high school students

High school gifted students in the Arab sector do not receive gifted education. While in the Jewish sector there are about 80 high school classes for the gifted, there is not even one such public school class for Arabs (Vorgan, 2006). There is a huge need in the Arab sector for high level studies. Many thousands families – Muslims as well as Christian – send their children to private schools where the level of education is much higher than are the government-funded Arab schools (David, 2008a, 2008c). Clearly, this situation which blocks gifted Arab children from receiving a good public school education should be changed soon.

In addition to these problems, there are more obstacles the gifted Arab child faces when living in certain places.

There is a lack of gifted enrichment programs for Arabs in large cities. There are four large Israeli cities with a substantial Arab population living in them or in their suburbs: Jerusalem, Tel-Aviv Jaffa, Haifa and Beer Sheva. Only in two of them, Jerusalem and Haifa, are there centers for gifted Arabs. However, the number of students eligible for gifted education in these cities has been comparatively large, due to the large Arab population. In the year 2007, the Arab population in Jerusalem consisted of 263,400 people (Statistics, Israel, 2007, Table 2.1), but only 106 Arab children participated in a gifted program. In Haifa only 59 gifted Arab children received education for the gifted in 2008, while the Arab population was 26,500 (Statistics, Israel, 2008, Table 2.16). The gifted Arab children living in Jaffa, the Arab part of Tel Aviv, as well as those living in the neighbouring cities, such as Ramat Gan and Holon, do not have access to gifted programs unless they study in Hebrew schools. In such cases, they are examined in Hebrew, which is not their mother tongue, and their prospects to do well on the "giftedness tests" while still seven years old are very small.

In the center of Israel there are only two programs for the gifted in Taibe and Tira. The gifted children of Kalansawa and Zimer participate in the gifted center of Taibe, and those of Jaljulia, Kafar Bara and Kafar Qasem participate in the Tira center for the gifted. However, the Arab children living in Ramla (about 20 km from Tel Aviv) and Lod (Lydda, 15 km from Tel Aviv), two towns with an Arab population of well over 30,000 including the sub-district of Ramla (Statistics, Israel, 2008, Table 2.7), do not have gifted programs.

In the Southern District, the situation regarding gifted education has been much worse. In 2007, 164,200 Arabs lived there, 163,200 in the sub-district of Beer Sheva (ibid). This number did not include "Bedouin tribes (28 tribes in 2007)" (ibid, footnote number 2). But in the 2008/9 school year, there was not even one single program for the gifted Arab children living in this district (for the list of the centers, see the Ministry of Education web site, 2008).

In Summa

Though there is no intentional discrimination against gifted Arab children in Israel, the present situation still requires many changes in order to allow them to achieve their full potential.
References


Ernest Hemingway: Prose Impressionist for the Gifted

Michael E. Walters

Center for the Study of the Humanities in the Schools

“All of a sudden everything was over,” Nick said. I don’t know why it was. I couldn’t help it. Just like when the three-day blows come now and rip all the leaves off the trees.”  

In Our Time by Ernest Hemingway (Scribner, 1925, p. 47).

Ernest Hemingway (1899-1961) was an American writer who received the Nobel Prize in Literature in 1954. During his teenage years, he lived in Oak Park, Illinois, a suburb of Chicago. In the summer he went with his physician father and uncle to northern Michigan. There he learned how to fish, hunt and camp in the wilderness. From these experiences, he wrote a series of short stories called The Nick Adams Stories which originally appeared in a book entitled In Our Time (1925). These emotional vignettes involved psychological issues that gifted adolescents deal with in their personal lives, e.g., sense of alienation, appreciation for ecology, avoiding violence, and disillusionment with love. Hemingway discussed these problems in an intense and honest manner. In the story, Indian Camp, Nick Adams saw that a Native American had committed suicide because of his wife’s difficult childbirth. Nick had gone with his father and uncle to an Ojibwa camp so that his father could perform a Caesarean delivery. What is so amazing about this story is that his father committed suicide three years after it was originally published. Indian Camp is about human despair and desperation – two factors which eventually resulted in Hemingway taking his life in 1961 at age sixty-one.

He was an autodidact, i.e., a self-taught individual whose personal interests were interconnected. For example, he was influenced by the 19th century Russia writer, Ivan Turgenev, and was particularly impressed with Turgenev’s hunting and outdoor stories. There was also the impact of painting – especially the French Impressionists. These painters went out into the streets and the woods to capture the light at certain moments. Their aim was for the viewer to experience the artists’ original impressions. The Nick Adams Stories represent impressionism in the form of prose. The reader experiences Nick Adams’ sensations as he is skiing, trout fishing, hiking and engaging in other outdoor activities.

Hemingway was the literary originator of what is now called minimalism. This is a technique by which an ordinary experience captures a universal condition such as the commitment of love. In The Three-Day Blow, Nick and his friend Bill are in a cottage discussing baseball, literature, and Nick’s sense of loss in a recent love affair. For many readers, these situations at first appear trivial. But through the magic of his prose, the reader is forced to deal with deeper feelings.

Gifted students find themselves constantly dealing with issues related to the particular and the universal. Hemingway was both a representative American and a worldwide wanderer, e.g., he travelled to such places as Italy, Spain, Africa and Cuba. He represents for the gifted a role model of multiculturalism based upon personal experiences rather than academic training. He was a world seeker who was at home whenever there were animals, natural settings, wars and human conflict. From all of these experiences, he developed his talent to write exceptional fiction.

Resources


Latest Books from Gifted Education Press – See Our Web Site for Details. Please Order Our Books!

Heroes of Giftedness: An Inspirational Guide for Gifted Students and Their Teachers — Presenting the Personal Heroes of Twelve Experts on Gifted Education


Maurice D. Fisher, Ph.D. & Eugenia M. Fisher, Ed.D., Editors
Michael E. Walters, Ed.D. & Harry T. Roman, M.S., Senior Writers

COST: $25.00 + $2.50 (10% P&H). Total = $27.50

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


Harry T. Roman Technology/Engineering Educator East Orange, New Jersey

COST: $22.00 including P&H.

Golden Quills: Creative Thinking and Writing Lessons for Middle-School Gifted Students (ISBN 0-910609-56-X)

R. E. Myers, Ed.D. Creative Learning Consultant Healdsburg, California

COST: $22.00 including P&H.


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.

Judy Micheletti Teacher of Gifted Students Berwick, Pennsylvania

COST: $22.00 including P&H.

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)

Harry T. Roman Technology/Engineering Educator East Orange, New Jersey

COST: $22.00 including P&H.

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: gifted@giftededpress.com. All orders under $50.00 must be Prepaid. THANKS! (Order directly from GEP or through Amazon.com. See all of our books listed on www.giftededpress.com).