

Debunking the Myths of Gifted Students



Cathy Fischer and Mark Millar
ESCLC Gifted Supervisors

Cue the video!

- What were your “take-aways”?
- Were any comments surprising to you?
- Can you think of any immediate needs for your children/students in the district, based upon the students’ commentaries?

Book Study: How the Gifted Brain Learns, by David Sousa

Rationale behind the book study:

- To meet the ODE requirements for gifted professional development for general education teachers
- To examine the nature and needs of gifted students
- To uncover brain research
- To suggest strategies and programs to assist our gifted population in meeting their full potential

What is Giftedness?

The state of Ohio defines a gifted student as one who:

“performs or shows potential for performing at remarkably high levels of accomplishment when compared to others of their age, experience, or environment.”

David Sousa, “Ask 50 people what is meant by giftedness and you will likely get 50 different definitions.”

Researchers in Gifted Education, “Giftedness derives from a well above-average level of intelligence in one or more observable behaviors.”

Areas of Giftedness

The Ohio Department of Education recognizes and defines specific criteria for gifted identification in the areas of:

- Cognitive
- Reading
- Math
- Science
- Social Studies
- Creative Thinking
- Visual/Performing Arts

How do you define giftedness vs. high-achieving vs. creative thinking? *

What is a Gifted Brain?

MYTH: Little is really known about how we learn, including how the gifted brain learns.

REALITY: Research is providing deeper understanding of how the brain learns, including the gifted brain.

GENETIC MAKEUP	BRAIN STRUCTURE
Genetic markers for intelligence may be evident, but research continues....	Measurable intelligence (IQ) is relate to the way in which the cortex matures
Environment affects the expression of genes, positively and negatively	Environment affects the development of the cortex

Hmmm.....do you notice a common thread?

Theories of Intelligence

MYTH: Giftedness is inborn OR entirely the result of hard work.

REALITY: True giftedness results from both genetic predisposition AND hard work.

- Renzulli: General Abilities + Commitment to Tasks + Creativity = Giftedness
- Gardner's MI: Humans possess 7 Intelligences, and individuals are predisposed to develop these at different levels of competence, based on genetics and environment *
- Gagne: Giftedness is innate in multiple areas; talent is a skill in a single area that has been developed
- And so many more.....**Take the online Multiple Intelligences Quiz to see where you stand:**

<http://www.literacynet.org/mi/assessment/findyourstrengths.html>

IQ Tests and Giftedness

MYTH: Giftedness in all areas requires a high IQ

REALITY: There is little evidence that giftedness in music or art require an exceptional IQ. Actually, IQ tests measure a narrow range of ability

- Pre-1950: High IQ = Giftedness
- A bit later: Creativity and motivation = other qualities of giftedness
- 1951+: IQ tests may have cultural and socioeconomic bias, assess primarily verbal and analytical skills, and do not measure creativity or other capabilities.
- Today: Relying on one quantitative criteria (IQ score) is not adequate in assessing giftedness; however, many schools rely on criteria, such as IQ scores, for entrance into gifted programs.
- Use of a Gifted Attributes checklist, as well as achievement and aptitude data provide a more complete picture of potential giftedness for use with referrals.*

Other Characteristics of Giftedness: Overexcitabilities

MYTH: All gifted people are hypersensitive and quirky.

REALITY: Not all gifted people exhibit overexcitabilities (OE); however, there are more gifted people with OE than in the general population (Dabrowski/Piechowski)

- OE are innate and reveal a heightened response to stimuli and increased sensitivity and intensity.
- OE can have a positive or negative impact on an individual's life experiences
- Five areas of OE: Psychomotor, Sensual, Intellectual, Imaginational, Emotional.

Types of Overexcitabilities

- **Psychomotor:** Excessive energy, love of movement, restlessness, animated gestures, “workaholic”.
- **Sensual:** Sensitivity to stimuli, such as bright lights, loud noises, textures of clothing.
- **Intellectual:** Avid desire for knowledge and truth, acute analysis and observation, and the capacity for extended concentration.
- **Imaginational:** Active fantasy life, inventiveness, “daydreamers”, may experience overwhelming fears.
- **Emotional:** Empathetic, over-reactive, sometimes exhibits extreme worry, develop strong attachments, may be self-critical.

Are YOU ready to complete the Overexcitability Checklist? *

Strategies for Coping with Overexcitabilities

- **Psychomotor:** Set aside time for movement, open-ended spontaneous group work and hands-on discovery. Arrange the classroom in an unconventional way with bean bag chairs and large cushions. Engage in self-monitoring and relaxation techniques.
- **Sensual:** Create a calm environment with limited stimuli, such as using table lamps and soft seating. Set aside time for absorption into art, music, nature. Allow for dramatic expression, creativity, and tactile activities.

Coping with Overexcitabilities, continued

- **Intellectual:** Allot time for research into social/moral/ethical issues. Teach etiquette and model discussion expectations/constructive criticism. Enable students to use skills to promote change, solve problems, test theories.
- **Imaginational:** Provide time for dramatic and visual arts; engage in storytelling, journaling, and creative writing. Enter art, writing, drama, and poetry contests.
- **Emotional:** Explore positive outlets for emotions, such as activism, volunteerism, letter-writing. Teach acceptance; role-play and model appropriate emotional responses. Teach stress-management and relaxation techniques.

Other Characteristics of Giftedness: Cognition and Metacognition

- **Cognition:** Problem-solving. Gifted students acquire information and solve problems faster, better, or at earlier stages than their same-age peers.
- **Metacognition:** Thinking about thinking (strategies and processing). Gifted students know more about thinking strategies and are able to use them more easily in new contexts, in comparison to their same-age peers.

Social Characteristics of Giftedness

MYTH: Gifted students are socially awkward and often loners.

REALITY: Studies have shown that gifted preadolescent and adolescent students were at least as popular as others their age and most felt good about themselves and their relationships with peers; however, many highly gifted students adopted social coping strategies.

GENDER DIFFERENCES IN SOCIAL COPING STRATEGIES

MALES	FEMALES
Use humor Minimize importance of popularity	Help others Deny giftedness Value acceptance Conformity

Emotional Characteristics of Giftedness:

MYTH: Gifted children are like little adults.

REALITY: Asynchronous Development is common among gifted children, and is characterized by development progressing at different rates. Advanced intellectual ability, for example, does not enable a gifted child to manage emotions better than any other child.

	Child A: Age 3	Child B: Age 3	Child C: Age 3
Intellectual Ability	Age 6	Age 7	Age 6
Physical Ability	Age 3	Age 3	Age 4
Emotional Maturity	Age 2	Age 4	Age 3

Supporting Social-Emotional Health in Gifted Students

- Creating a positive learning environment which includes elements of safety and acceptance.
- Emphasize every student's strengths, helping students to recognize and appreciate their own strengths, and those of others
- Model respect and care
- Be mindful of perfectionism, teaching "Mindset" theories (mistakes are an important part of learning!)
- Parents can provide continued support, outside counseling, participation in activities that promote strengths and provide support in areas that need strengthening
- Assist with formulating friendships with like-minded peers
- Talk to your child about being gifted ([The Gifted Kids Survival Guide](#) and other books can help!)

Challenging the Gifted Brain

MYTH: Teaching gifted students in the regular classroom with a wide variety of student abilities allows them to be well-rounded. Accelerating students is harmful.

REALITY: Recent studies have shown that gifted students receive greater academic benefits from being grouped with other gifted students, if only for a short period each day. Acceleration has proven to be one of the most effective types of gifted service, if carefully considered using qualitative/quantitative data via the IAS.

- Differentiate curriculum: Move beyond grade-level standards or connect what is currently being taught to personal interests/learning styles.
- Tiering/Compacting: Faster-paced, greater depth and complexity using higher-order thinking.
- Acceleration: Skipping ahead by grade or subject area(s).
- Advanced Learning: CCP, AP, Honors courses.
- Innovative learning environments: Distance learning, mentorships, internships, Learn Labs, stations, resource rooms, flexible grouping/clustering, independent study, PBL.

Underachievement

MYTH: All gifted students do well in school and in their adult life.

REALITY: Gifted students underachieve when they acquire complex behaviors that erode academic performance. These are affected by:

- Academic self-concept (internal and external)
- Attitudes toward school
- Attitudes toward teachers and classes
- Motivation and self-regulation
- Goal valuation

Adjusting to Giftedness

MYTH: Gifted students are confident about their abilities.

REALITY: Some gifted students between the ages of 11-15 may underachieve because they cannot adjust to their giftedness. Some obstacles that may interfere with adjusting to giftedness include:

- Ownership of talents
- Giving of themselves
- Risk-Taking/Perfectionism
- Competition
- Impatience
- Premature identity

How Can We Help Students Adjust to Giftedness?

Assist students in developing a sense of identity. The Gifted Identity Formation Model (Mahoney) is based on the following constructs:

- Validation: Acknowledging one's giftedness and validating it through participation in a gifted program, corroboration by a significant other, or realizing it oneself through exceptional accomplishments.
- Affirmation: Acknowledgement of giftedness from many supportive individuals or processes, such as learning, experiences, parents, teachers.
- Affiliation: Associating with others of similar intensities, passions, desires, abilities.
- Affinity: Connecting oneself to the world, thinking about what nourishes self, and exploring/realizing one's "calling".

Twice-Exceptionality

MTYH: Students who are gifted cannot have learning disabilities.

REALITY: Many students with learning disabilities mask giftedness, and vice-versa. Students with dual exceptionalities can be placed into 3 groups:

- **Identified** gifted, and learning disabled
- No identification (abilities and disabilities mask each other)
- **Identified** learning disabled and gifted

Students in all three groups are at risk for social-emotional problems when either their potential or disabilities go unrecognized. Team efforts and documentation are paramount in appropriately identifying and serving these students.

Twice-Exceptionality, continued

Types of 2-E students include giftedness, plus:

- ADD/ADHD
- Classic Autism
- Asperger Syndrome (AS)
- Hyperlexia

Language Talent

Students who are gifted in Language Arts will demonstrate competencies in some or all of the following:

- **Awareness of Language:** Rhyme, accent, intonation, grammar, sounds and words of other languages.
- **Communication Skills:** Humorous or dramatic components of language. Talking and writing with creative flair, using poetry and metaphors. Ability to express ideas elegantly and succinctly, reflecting knowledge and interests.
- **Reasoning and Arguing:** Using reasoned arguments at an abstract or hypothetical level in spoken and written language. Justify opinions convincingly and use questioning strategies to challenge others' points.

Developing Language Talent

- Challenge with experiences involving sophisticated language
- Open-ended questions which force them to think, reread, formulate
- Rigorous school curriculum with higher-level reading materials and less redundancy
- Evaluate students' skills and success of programming through students' work, not by tests of mastery on lower-level skills (Application level!)
- Focus on the classics in intermediate grades and higher
- Participate in writing competitions, such as Power of the Pen and Young Authors, and encourage submissions to literature, such as Stone Soup

Mathematical Talent

MYTH: Number sense is innate.

REALITY: While research points to some aspects of number sense being innate, exposure to problem-solving and number manipulation supports talent

Students who are gifted in Math will demonstrate competencies in some or all of the following:

- Can understand and manipulate numbers with ease, early in life
- Display multiple strategies for problem-solving
- Tend to “talk through” problems
- Demonstrate tenacity in pursuing solutions
- Quickly recognize patterns, similarities, and differences
- Use charts, tables, and graphs to illustrate their points

Developing Mathematical Talent

- Pre-assess students, especially at the elementary level
- Differentiate instruction to evoke thinking processes associated with gifted learners of high mathematical ability
- Create a learning environment that encourages and nurtures the talents of mathematically gifted students
- Offer open-ended problems, cooperative learning groups, consisting of peers with similar abilities/interests
- Raise the level of complexity, allowing students to debate solutions and procedures for solving problems
- Participate in talent-searches sponsored by US universities, such as SAT
- Apply math to other content areas, such as science and writing

Visual Arts/Music/Dance/Drama Talent

MYTH: Talent in the arts is genetic - students are born with it.

REALITY: As with academic and cognitive aptitude, talent in the arts is both a nature and nurture environment, requiring exposure and practice

The Ohio Department of Education requires a “two-pronged approach” to identifying students in the Arts:

- Performance Rubric: Students must perform or submit a portfolio (visual arts) and are evaluated by trained professionals in the field
- Behavioral Checklist: Teachers familiar with students will complete a behavioral checklist, such as the GATES 2.

Developing Talent in the Arts

- Incorporate the arts into the regular classroom
- Further teacher training/exposure to arts integration in the classroom
- Participate in clubs, groups, events to support peer collaboration
- Enter competitions related to the arts
- Allow extensive time for practice, innovation, self-expression/discovery
- Shadow or intern careers in the arts
- Invite guest speakers to the classroom to share talents and career choices

Breathe.....

There is quite a lot to learn about our gifted populations, with research growing and changing every day!

Our students have unlimited potential; we, as a team of parents, teachers, gifted personnel, and administrators, need to ensure the proper resources, opportunities, and environments in which to unleash it!

TO LEARN & GROW

Gifted learners are not test scores.
They are not perfect.
They are not easier to teach.
They are kids.

With different learning needs.

Who will give up if they are not challenged.
Who rarely get a place in educational laws.
Who sometimes give up and drop out of school.
Who are waiting for change.

Who now sit hoping, wishing, to learn.
To grow. To think.
To climb out of the box.
To change the world.
To get something different.

Not because they are
privileged, elite, or want "better."

But because they want the one thing
that every kid, in every school,
in the world deserves.

To learn and grow.