



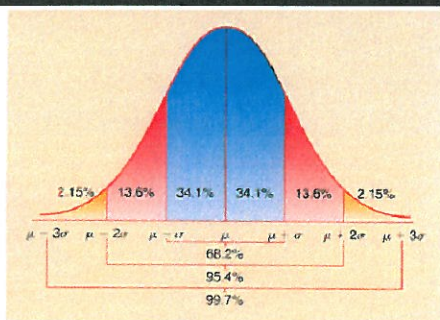
Understanding & Differentiating for the Gifted Learner

January 25th, 2012
 Gifted Network Event, IU 8
 Linda Cubbison, School Psychologist

Giftedness Defined . . .

- Outstanding intellectual and creative ability the development of which requires specially designed programs or support services, or both, not ordinarily provided in the regular education program.

Who are the gifted?



Statistics

- 40% of the top 5% of high school grads fail to finish college
- U.S. schools spend \$8 billion on the mentally deficient and just 10% of that on the gifted.
- Same drop-out rate as non-gifted students (5%). Later in life, up to one-fifth of drop-outs test in the gifted range, according to the Handbook of Gifted Education.

Statistics (cont.)

- About one-third of all jobs in the US require science or technology competency, but currently only 17 percent of Americans graduate with science or technology majors. In China 52% of college degrees are awarded in science and technology
- Four-fifths of teachers believe that our advanced students need special attention—they are the future leaders of this country, and their talents will enable us to compete in a global economy
- Gifted people may make up as much as 20% of the prison population.

Bright Child or Gifted Child?

Bright Child: Knows the answer
 Gifted Child: Asks the questions
 Bright Child: Is interested
 Gifted Child: Is highly curious
 Bright Child: Is attentive
 Gifted Child: Is mentally/physically involved
 Bright Child: Has good ideas
 Gifted Child: Has wild, silly ideas
 Bright Child: Enjoys school
 Gifted Child: Enjoys learning, may hate school

Complex is Simple, Simple is Complex

- http://www.youtube.com/watch?v=ZPwGTV_Cneek&feature=related



Concomitant Problems

- *Unreasonable teacher/parent expectations—to be good/perfect at everything*
- *Gaps in learning—"you should know this"*
- *Boredom is stressful*
- *Emotional stress from feeling marginalized if needs aren't being met; not feeling valued by school culture*
- *Asynchronous development*
- *Executive function deficits (i.e., attentional regulation, organization, time management)*
- *Dabrowski's Overexcitabilities*

Concomitant Problems

- Due to ability to see relationships and love of truth, they often have difficulty accepting the illogical
- Due to creativeness and inventiveness, they have a liking for new ways of doing things and therefore, can reject the known and have need to invent oneself.
- Due to high energy, alertness, eagerness, they may have frustration with inactivity and absence of progress

On Being Gifted

- <http://www.youtube.com/watch?v=xVQBxR2l8Zs&feature=related>



Profiles of the Gifted/Talented

Type I: The Successful

- *90% of identified gifted students*
- *Learned the system & discover what "sells"*
- *Learn well and score high on achievement tests and tests of intelligence*
- *Behavior problems are rare-they are eager for approval from teachers, parents, and other adults*
- *Get by with as little effort as possible*

School Support for Type 1:

- *Acceleration/Enrichment*
- *Time for personal interests*
- *Compacted learning*
- *Opportunities to be with intellectual peers*
- *Development of independent learning skills*
- *In-depth studies*
- *Mentorships*
- *College & Career Counseling*

Type 2: The Challenging



- *Divergently gifted, high degree of creativity*
- *May appear obstinate, tactless, or sarcastic*
- *Often question authority and may challenge the teacher in front of the class*
- *Do not conform to the system, and have not learned to use it to their advantage*
- *Receive little recognition and few rewards*
- *Often feel frustrated because the school system has not affirmed their abilities/talents*

Type 2, The Challenging (cont.)

- *Struggle with their self-esteem*
- *Interactions at school & home often involve conflict*
- *May or may not feel included in social group*
- *Some challenge their peers and often not welcomed in activities or group projects*
- *Some have a sense of humor and creativity that is very appealing to peers*
- *At risk for dropout, drug addiction, delinquency if no intervention by jr. high*

School Support-Challenging Type

- *Tolerance*
- *Placement with appropriate teacher*
- *Cognitive and social skills development*
- *Direct and clear communication with child*
- *Give permission for feelings*
- *In-depth studies*
- *Mentorships to build self-esteem*
- *Behavioral contracting*



Type 3: The Underground

- *Typically middle school females although males may also want to hide their giftedness*
- *If boy, it tends to happen later (hs), and typically in response to the pressure to participate in athletics*
- *With girls increase in belonging needs in ms, they begin to deny their talent in order to feel more included in non-gifted peer group*
- *Frequently insecure and anxious*

School Support-Underground Type

- *Give permission to take time out of gifted classes*
- *Provide same sex models*
- *Continue to give college & career information*
- *Recognize and properly place*



Type IV: The Drop-Outs

- *Angry b/c system has not met their needs for many years and they feel rejected*
- *May express anger by acting depressed and withdraw by acting out and responding defensively*
- *Have interests that lie outside the realm of the regular school curriculum and they fail to receive support and affirmation for their talent and interest in these unusual areas*

Dropout

- *School seems irrelevant and perhaps hostile to them*
- *For the most part, high school students*
- *Often identified very late and are bitter and resentful as a result of feeling rejected and neglected*
- *Low self-esteem*
- *Require a close working relationship with an adult they can trust*

School Support-Dropout

- Group counseling for young students
- Diagnostic testing
- Nontraditional study skills
- In-depth studies
- Mentorships
- Alternative out of classroom learning experiences
- G.E.D

Type V: Double-Labeled

- *Physically/emotionally handicapped in some way, or have learning disabilities*
- *Often not identified; giftedness is masked*
- *Often do not exhibit behaviors that schools look for in gifted—may have slopping handwriting or disruptive behaviors that make it difficult for them to complete work*
- *Unhappy about not living up to their own expectations*
- *Deny difficulties, claim tasks are stupid/boring*

School Support-Dbl. Labeled

- *Placement in gifted program*
- *Provide needed resources*
- *Provide alternative learning experiences*
- *Individual counseling*
- *Give time to be with peers*



Type VI: Autonomous Learner

- *Learned to work effectively in the school system*
- *Unlike Type 1's, Type VI's have learned to use the system to create new opportunities for themselves*
- *They do not work for the system, they make the system work for them*
- *Strong, positive self concepts b/c their needs are being met*

The Autonomous Learner (cont.)

- *Receive positive attention and support for their accomplishments as well as for who they are*
- *Respected by adults and peers and frequently serve in some leadership capacity at school/community*
- *Independent/self-directed, accept selves and take risks, strong sense of personal power*
- *Express feelings/needs/goals appropriately*

School Support-Autonomous

- *Allow development of long-term integrated plan of study*
- *Acceleration/Enrichment in curriculum*
- *Remove time and space restrictions*
- *Compacted learning*
- *In-depth studies*
- *Mentorships*
- *Dual enrollment/early admission*
- *Waive traditional school policy/regulations*

Five Minute Sharing Time

Talk about someone you know who fits one of the six gifted profiles. Describe them to your partner for 3 minutes.

10 Myths-Gifted Students

- http://www.youtube.com/watch?v=MDJst-y_ptl



Dabrowski's Overexcitabilities

- **Psychomotor**-movement, restlessness, drivenness, an augmented capacity for being active and energetic
- **Sensual**-enhanced refinement and aliveness of sensual experience
- **Intellectual**-thirst for knowledge, discovery, questioning, love of ideas and theoretical analysis, search for truth

Overexcitabilities, cont.

- **Imaginational**-vividness of imagery, richness of association, facility for dreams, fantasies, and inventions, preference for the unusual and unique
- **Emotional**-great depth and intensity of emotional life expressed in a wide range of feelings, great happiness to profound sadness or despair, compassion, responsibility, self-examination

Perfectionism

- Positive when focused on "high personal standards" and "a realistic striving for excellence."
- Negative/Unhealthy when it "focuses on a rigid adherence to personal high demands, as well as a preoccupation with the avoidance of mistakes." (Chan, 2007)

Perfectionism (cont.)

- Parker (1997)-investigation of 400 gifted sixth graders. Three groups emerged:
 - 32.8% were nonperfectionistic
 - 41.7% were healthy perfectionists
 - 25.5% were "dysfunctional" perfectionists

Healthy-accepted mistakes, positive ways of coping with their perfectionism, strong need for order/organization, had adults who modeled doing their best

Dysfunctional-anxious about making mistakes, held extremely high standards for themselves, perceived that others held excessive expectations for them, internalized negative remarks from others, questioned own judgement

Gifted Education: Let's Do It

- <http://www.youtube.com/watch?v=pBEkigH6Jl4&NR=1&feature=endscreen>

Classroom Support

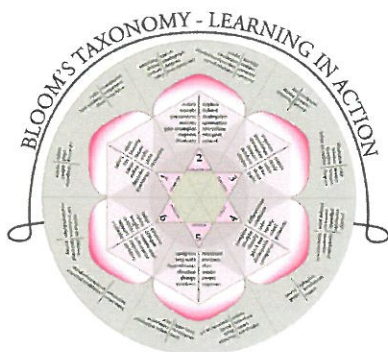
To challenge and nurture gifted learners:

- Independent Projects
- Academic Competitions
- Learning Centers
- Multiple Intelligences
- Acceleration (pretesting units)
- Enrichment Activities (Bloom's Taxonomy)
- Change approach from expert to facilitator
- Leveling assignments/learning outcomes

Classroom Support

Acceleration and Enrichment:

Good acceleration contains some enrichment, while good enrichment is accelerative. Proper pacing and the opportunity to study the subject in depth are both needed for the curriculum to be matched to students' abilities.



Knowledge

- **Useful verbs include:** tell, list, describe, relate, locate, write, find, state, name
- **Question Stems include:**
 - What happened after...?
 - How many...?
 - Who was it that...?
 - Can you name the...?
 - Can you tell why...?

Knowledge--Activities

- Make of list of the main events
- Make a timeline of events
- Make a facts chart
- Write a list of any pieces of information you can remember
- List all the . . . in the story
- Make a chart showing. .
- Recite a poem

Comprehension

- **Useful verbs:** explain, interpret, outline, discuss, distinguish, predict, restate, translate, compare, describe
- **Sample question stems:**
Can you write in your own words. . . ?
Can you write a brief outline. . . ?
Who do you think. . . ?
Can you distinguish between. . . ?
What differences exist between. . . ?

Comprehension Activities/Products

- Cut out or draw pictures to show a particular event
- Illustrate what you think the main idea was
- Make a cartoon strip showing the sequence of events
- Write and perform a play based on the story
- Retell the story in your own words
- Prepare a flow chart to illustrate the sequence of events

Application

- **Useful verbs:** solve, show, use, illustrate, construct, complete, examine, classify
- **Sample question stems:**
What factors would you change if. . . ?
What questions would you ask of. . . ?
From the information given, can you develop a set of instructions about. . . ?
Would this information be useful if you had a. . . ?

Application Activities/Products

- Take a collection of photographs to demonstrate a particular point
- Make a clay model of an item in the material
- Paint a mural using the same materials
- Write a textbook about. . . for others
- Design a market strategy for your product using a known strategy as a model
- Dress a doll in a national costume
- Make a diorama to illustrate an important event

Analysis

- **Useful verbs:** analyze, distinguish, examine, compare, contrast, investigate, categorize, identify, explain, separate, advertise
- **Question stems:**
Which events could have happened. . . ?
If....happened, what might the ending have been?
How was this similar to. . . ?
Why did. . . changes occur?
What are some of the problems of. . . ?
What do you see as other possible outcomes?

Analysis: Activities & Products

- Design a questionnaire to gather information
- Write a commercial to sell a new product
- Conduct an investigation to . . .
- Make a flow chart to show critical stages
- Construct a graph to illustrate selected info
- Put on a play about a study area
- Write a biography of the study person
- Make a jigsaw puzzle
- Make a family tree showing relationships

Synthesis

- Useful Verbs: create, invent, compose, predict, plan, construct, design, imagine, propose, devise, formulate
- Question Stems:
Can you design a....to.?
Why not compose a song about. ...?
Can you see a possible solution to. ...?
How many ways can you. ...?
Can you write a new recipe for a tasty dish?

Synthesis: Activities/Products

- Invent a machine to do a specific task
- Design a building to house your study
- Create a new product. Give it a name.
- Write a TV show, play, puppet show, role play, song or pantomime about. . .
- Design a record, book, or magazine cover for..
- Sell an idea
- Devise a way to....
- Compose a rhythm or put new word to a known melody

Evaluation

- Useful Verbs: judge, select, choose, decide, justify, debate, verify, argue, recommend, assess, discuss, rate
- Question Probes:
Is there a better solution to. . .
Judge the value of. . .
Can you defend your position about. . . ?
What changes would you recommend?
Do you think. . is a good or bad thing?

Evaluation: Activities/Products

- Prepare a list of criteria to judge a. . .
- Conduct a debate about an issue of special interest
- Make a booklet about 5 rules you see as important. Convince others.
- Form a panel to discuss views
- Write a half yearly report
- Write a letter to. . Advising on changes needed at. . .

Five Minute Partner Activity

Tell your neighbor about an activity you use or would like to use to extend a learning objective using Bloom's Taxonomy, Evaluation Level.



No matter what the initial characteristics (or gifts) of the individuals, unless there is a long and intensive process of encouragement, nurturance, education, and training, the individuals will not attain the extreme levels of capability.

Benjamin Bloom

How do you want your classroom?



How To Teach Gifted Kids

- <http://www.youtube.com/watch?v=gCCxzc6n2nw&feature=endscreen&NR=1>

Good Curriculum & Instruction

- Learning experiences organized by key concepts and principles of discipline rather than by facts
- Content that is relevant to their lives
- Activities that cause them to process important ideas at a high level
- Products that cause them to grapple with meaningful problems and pose defensible solutions
- Rich learning experiences
- They need classrooms that are respectful to them, provide both structure and choice, and help them achieve more than they thought they could.

Paced in response to the student's individual needs

- More rapid instructional pace
- It's often the case that advanced learners need a slower pace of instruction than many other students their age, so they can achieve a depth or breadth of understanding needed to satisfy a big appetite for knowing.

Higher Degree of Difficulty

- A high "degree of difficulty" for gifted learners in their talent areas implies that their content, processes and products should be more complex, more abstract, more open-ended, more multifaceted than would be appropriate for many peers.
- Fuzzier problems, will often need less teacher-imposed structure, and (in comparison to the norm) should have to make greater leaps of insight and transfer than would be appropriate for many their age.



The Gifted Classroom

- <http://www.youtube.com/watch?v=eln1Wq7NEg4&NR=1&feature=endscreen>

Understanding Supported Risk

- Succeed without "normal" encounters with failure. Then, when a teacher presents a high-challenge task, the student feels threatened.
- **Not only has he or she likely not learned to study hard, take risks and strive, but the student's image is threatened as well.**
- A good teacher of gifted students understands that dynamic, and thus invites, cajoles and insists on risk-but in a way that supports success. Provides scaffolding.



Provide Opportunities for Creativity

- Open-ended tasks
- Bloom's Synthesis level questioning/ activities
- Flexibility
- Give student freedom to select alternate activity



Inappropriate Instruction

- Do not ask them to do things they already know how to do, and then to wait for others to learn how
- Do not have them do more of the same stuff faster
- Do not isolate from peers and teacher
- Do not give activities to fill time
- Do not have them peer tutor
- Inappropriate instruction is rooted in novel, "enriching" or piecemeal learning experiences



Gifted to Brilliant

- <http://www.youtube.com/watch?v=ZuBsM4vKOSI>





Resources-

- *Reforming Gifted Education* by K. Rogers
 - Carol Tomlinson's books on differentiating instruction
 - *Improving Differentiated Curricula for the Gifted/Talented* (California Assoc. for the Gifted)
 - Sandra Kaplan's work on *Depth and Complexity*
 - *Living With Intensity*-Daniels/Piechowski
 - *Teaching Gifted Kids in the Regular Classroom* by S. Winebrenner
 - *Differentiation: Simplified, Realistic, and Effective* by Bertie Kingore
 - *How the Gifted Brain Learns* by David Sousa
 - *Upside Down Brilliance* by Linda Silverman
 - *In the Mind's Eye* by Thomas West
- Websites:
- Byrdseed.com
 - NAGC.org
 - Teachersfirst.com
 - Gifted Development Center
 - SENG (Social & Emotional Needs of the Gifted)

Contact Information

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Figure 4.2:
HIGH ACHIEVER, GIFTED LEARNER, CREATIVE THINKER

<i>A High Achiever...</i>	<i>A Gifted Learner...</i>	<i>A Creative Thinker...</i>
Remembers the answers.	Poses unforeseen questions.	Sees exceptions.
Is interested.	Is curious.	Wonders.
Is attentive.	Is selectively mentally engaged	Daydreams; may seem off task.
Generates advanced ideas.	Generates complex, abstract ideas.	Overflows with ideas, many of which will never be developed.
Works hard to achieve.	Knows without working hard.	Plays with ideas and concepts
Answers the questions in detail.	Ponders with depth and multiple perspectives.	Injects new possibilities.
Performs at the top of the group.	Is beyond the group.	Is in own group.
Responds with interest and opinions.	Exhibits feelings and opinions from multiple perspectives.	Shares bizarre, sometimes conflicting opinions.
Learns with ease.	Already knows.	Questions: What if...
Needs 6 to 8 repetitions to master.	Needs 1 to 3 repetitions to master.	Questions the need for mastery.
Comprehends at a high level.	Comprehends in-depth, complex ideas.	Comprehends in-depth, complex ideas.
Enjoys the company of age peers.	Prefers the company of intellectual peers.	Prefers the company of creative peers but often works alone.
Understands complex, abstract humor.	Creates complex, abstract humor.	Relishes wild, off-the-wall humor.
Grasps the meaning.	Infers and connects concepts.	Makes mental leaps: Aha!
Completes assignments on time.	Initiates projects and extensions of assignments.	Initiates more projects than will ever be completed.
Is receptive.	Is intense.	Is independent and unconventional.
Is accurate and complete.	Is original and continually developing.	Is original and continually developing.
Enjoys school often.	Enjoys self-directed learning.	Enjoys creating.
Absorbs information.	Manipulates information.	Improvises.
Is a technician with expertise in a field.	Is an expert, abstracting beyond the field.	Is an inventor and idea generator.
Memorizes well.	Guesses and infers well.	Creates and brainstorms well.
Is highly alert and observant.	Anticipates and relates observations.	Is intuitive.
Is pleased with own learning.	Is self-critical.	Is never finished with possibilities.
Gets A's.	May not be motivated by grades.	May not be motivated by grades.
Is able.	Is intellectual.	Is idiosyncratic.

Kingore, B. (2004). *Differentiation: Simplified, Realistic, and Effective*. Austin: Professional Associates Publishing.

Figure 8.8:
SCIENCE TASK BOARD

<p>1. CRITIQUE--</p> <p>1</p> <p>Critique how the scientific method was applied during a specific experiment conducted in class.</p>	<p>2. ACROSTIC--</p> <p>2</p> <p>Using a key term from the topic of study, write sentences related to the topic that begins with each letter of the key term.</p>	<p>3. FLOW CHART--</p> <p>3</p> <p>Use a flow chart to illustrate and explain a cyclical process in nature.</p>
<p>4. DEBATE--</p> <p>4</p> <p>Debate the issues of using animals for research studies.</p>	<p>5. CHORAL READING/ READERS THEATER--</p> <p>5</p> <p>Use the format of <u>Joyful Noise: Poems for Two Voices</u>* to write, organize, and compare significant facts about specific animals, plants, or two biomes.</p>	<p>6. COLLECTION COLLAGE--</p> <p>6</p> <p>Use a digital camera to complete a collage of photographs of scientific principles found at home.</p>
<p>7. VENN DIAGRAM--</p> <p>7</p> <p>Overlap three circles to create a three-way Venn that compares the similarities and differences of the forms of matter.</p>	<p>8. GRAPH--</p> <p>8</p> <p>Graph the weather in your area for one month. Compare it to a Farmer's Almanac from 100 years earlier. Record three observations or conclusions.</p>	<p>9. DEMONSTRATION--</p> <p>9</p> <p>Demonstrate how to use a piece of scientific equipment.</p>

*Fleischman, P. (1988). *Joyful Noise: Poems for Two Voices*. New York: Harper & Row.

Kingore, B. (2004). *Differentiation: Simplified, Realistic, and Effective*. Austin: Professional Associates Publishing.

Figure 8.9:
MATH TASK BOARD

<p>TEST (ORIGINAL)-- Instead of taking a test, write the test items for the math process or concept of study.</p>	<p>REVERSE CROSS-WORD PUZZLE-- Provide the completed puzzle grid of numbers. Others write the formulas or math facts that resulted in those numbers.</p>	<p>COLLAGE--Organize a collage showing fractions in daily life.</p>	<p>ACROSTIC--Using a concept or topic word, such as <i>factorial</i>, write a sentence beginning with each letter that is significantly related to the topic.</p>	<p>TANGRAMS--Use tangrams to create the ten digits and all the letters of the alphabet.</p>
<p>VENN DIAGRAM-- Overlap four circles to create a four-way Venn that compares the similarities and differences of math operations.</p>	<p>BIO POEM--Create a bio poem for <i>integer</i> or another key math term.</p>	<p>FLOW CHART--Draw and label a flow chart that illustrates how to apply a specific math strategy or geometric proof.</p>	<p>DEMONSTRATION-- Use manipulatives to demonstrate division to a younger student.</p>	<p>CONTENT PUZZLES-- Write key math facts on a shape. Cut it into puzzle pieces for others to put back together by correctly matching the problem and the solution.</p>
<p>BULLETIN BOARD-- Complete a bulletin board to demonstrate mathematical applications, such as: <i>Ways to Make 78</i>.</p>	<p>CHILDREN'S STORY (ILLUSTRATED)-- Create a story to explain a math concept. As examples, read books by C. Neuschwander about Sir Cumference¹.</p>	<p>STUDENT'S CHOICE</p>	<p>LETTER (MATH PROCESS)-- Complete one math problem. Then, write a letter to someone explaining step-by-step how you completed that problem.</p>	<p>ERROR ANALYSIS-- Analyze a problem that is flawed. Write what is wrong and how to correct it.</p>
<p>RATIO RESEARCH-- Read <i>If You Hopped Like a Frog</i>². Research other attributes of animals and humans and express your findings as intriguing ratios.</p>	<p>GAME--Create a stock market game or math fact rodeo.</p>	<p>METAPHOR/SIMILE-- Express a mathematical concept through a metaphor or simile, such as: <i>Addition is like compound words, and subtraction is like contractions.</i></p>	<p>SCAVENGER HUNT-- Provide a list of math terms to find examples of in the real world.</p>	<p>RIDDLE--Develop simple or more complex riddles, such as: <i>I am a prime number larger than 13 and smaller than the square root of 324.</i></p>
<p>QUESTIONNAIRE-- Conduct a questionnaire asking adults how math is needed in their jobs, and graph the results.</p>	<p>NEWSPAPER ADVERTISEMENTS--Use the ads to buy a balanced meal for four people that totals less than \$20.00. List your items, quantity, and total, including tax.</p>	<p>COMPUTER GAME-- Create a computer game that uses algebra.</p>	<p>WRITTEN REPORT-- Write a report with diagrams illustrating how geometry applies to baseball or some other sport.</p>	<p>TEN WAYS-- Determine at least 10 different math applications required when designing or manufacturing a car.</p>

¹Neuschwander, Cindy. (2001). *Sir Cumference and the Great Knight of Angleland*. (1999). *Sir Cumference and the Dragon of Pi*. (1997). *Sir Cumference and the First Round Table*. Watertown, MA: Charlesbridge.

²Schwartz, D. (1999). *If You Hopped Like a Frog*. New York: Scholastic.