



Strategies for Supporting Gifted Learners: Ideas for all Ages

Back ground Image taken from: <http://www.stgeorgeutah.com/wp-content/uploads/2013/05/gifted-children-association-604x272.jpg>

Resource Package of Collated Materials

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Includes:

Overview of “What to Look for”,
Key words and Ideas for Further Research and Study,
Supports for Identifying Gifted Learners,
Resource Links and Charts

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Definition

A gifted learner is one who has great potential, outstanding abilities and high sensitivity in one or more of 3 typical domains: intellect, creativity and talent with large variations in personality and motivation.

Howard Gardner

Joseph Renzulli

Changing Definitions:

The idea of “Giftedness” is not a straight definition, but a growing definition and a social construct, because the definition incorporates societal values. Depending on how “Giftedness” is defined, the number of learners who may be defined as gifted varies widely.

Incidence:

Identification is a problem, as gifted and talented children cannot be systematically assessed and “perceptions of giftedness vary” (BC Ministry of Ed)³. 2-3% of all children are assumed to be exceptionally gifted (1 out of 30), with a much higher incidence of “moderately” gifted or children who demonstrate outstanding abilities in some/not all areas.⁴ However, studies have shown that teachers identify only 1 in 5 children who are gifted in order to provide them with additional supports (Martinson, 1975).⁴

IQ Testing: Where we were

The idea of being "gifted" first related only to IQ testing, but we are still affected by this idea. IQ testing is still a hot-topic. IQ testing relates in particular to the Stanford-Binet test created by Lewis Terman in the early 20th century. Terman used this test to look for precocious children who tested well/high on the intelligence scale for linguistic, mathematical and spatial intelligences. He used this information in the first long-term study to prove that early potential made a difference over the long term.

Two key ideas are linked to use the use of IQ testing ALONE to determine giftedness: the idea that giftedness shows up early (the idea of the precocious “genius child”) and the idea that gifted potential remains fixed (this is often now referred to as a “fixed mindset”).



Lewis Terman (1950s)

Image found at:

<http://www.nndb.com/people/478/000165980/lewis-terman-1-sized.jpg>

Use of IQ testing only, and the belief that children had fixed potential led to the following:

- The creation of gifted programs
- The separation of children into streams
- The acceleration of children through grades

Whereas studies have shown that IQ testing is still valid when trying to determine gifted potential, it is very important that this is only one tool used to look for and define giftedness. Studies have also shown that acceleration can be a valid and important tool in helping gifted children develop their learning potential, however considerable concern over the years has also developed through studies that demonstrate that gifted children may struggle emotionally or have difficulty relating to their peers. This has led to a more moderate approach. Before a decision is made to drastically accelerate a child, multiple avenues for support need to be explored. A decision such as this involves the larger school administrative team, parents, child and teacher. It is not a decision that can be entered into by the teacher alone.

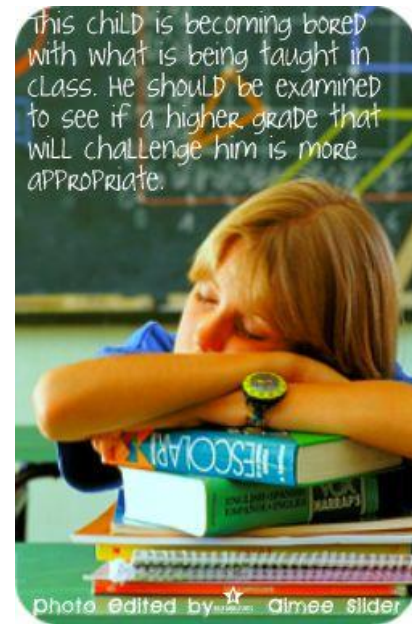


Image Found At:

http://ed346.wikispaces.com/file/view/child_sleeping.jpg/89586649/child_sleeping.jpg

Studies have also shown that the belief that IQ or the mind had fixed potential had very negative consequences for economically disadvantaged or minority children whose environment had a significant role in the range of their perceived potential. The idea of the fixed mindset also had a very negative effect on learning itself, particularly on motivation and perseverance. Those who subscribed to this belief were significantly baffled by children who tested well early on and did not then grow into their potential due to a multiplicity of factors.

Where we are now: Multiple Intelligences, Growth Potential and Inclusion

When the definition of intelligence grew to incorporate different types of intelligence, and talents, this led to the need to find different methods of assessing and supporting giftedness:

Key ideas: multiple intelligences, formative assessment and differentiation within the classroom instead of ability grouping or grade-skipping

Two Key figures: Howard Gardner (8 Intelligences) and Joe Renzulli (3 Defining Circles: Intelligence, Creativity and Commitment to Task)

With changing ideas to the definition of "gifted" there began to be a deeper understanding of how children were being misdiagnosed and underserved who were, in fact, gifted: (the underachiever, the twice exceptional...)

IQ Testing

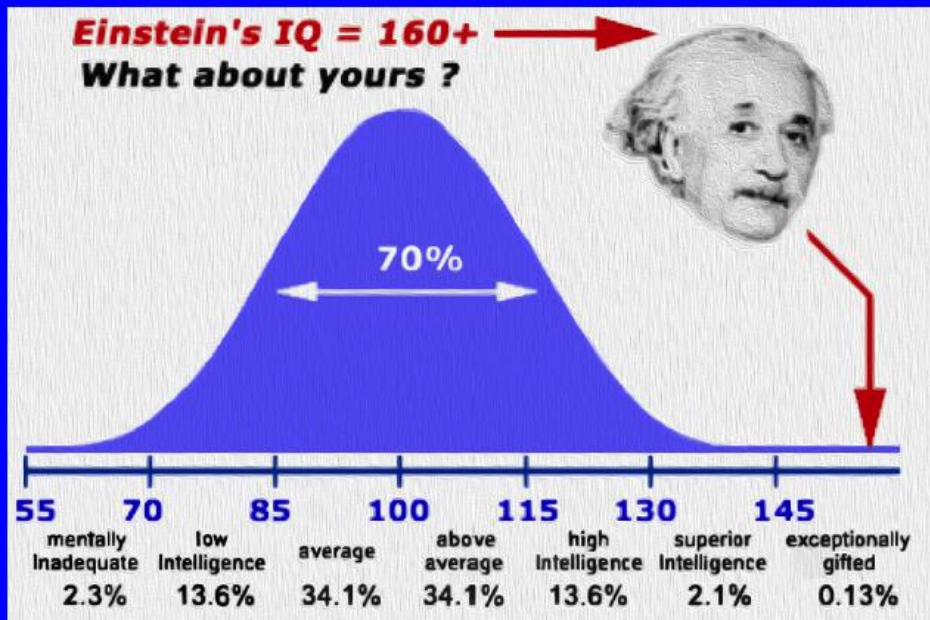
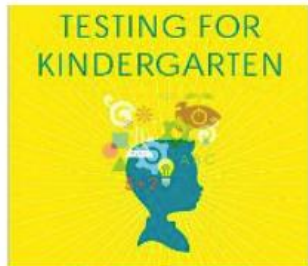


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Challenges

Challenges



Young children being trained for tests: http://ecx.images-amazon.com/images/I/51TM1CUdfeL_BO2,204,203,200_Pisitb-sticker-arrow-click,TopRight,35,-76_AA300_SH20_OU15_.jpg

Picture illustrating one of the 10 youngest doctors (the face of grade skipping) [12 year old begins Medical School in Chicago](http://images.usatoday.com/news/photos/2003/08/24-yano-inside.jpg) USA Today, 2003, Sho Yano: <http://images.usatoday.com/news/photos/2003/08/24-yano-inside.jpg>

Picture of a student experiencing frustration with “fixed idea” of intelligence from his DNA and testing relating to his IQ: <http://sitemaker.umich.edu/356.loh/files/iq.gif>

Twice Exceptional



What are the issues here?

Gifted students are often exposed to high rate of repetition in material they already know and understand. Gifted students that are twice-exceptional (have a learning disability, physical disability, behavioral difficulty, etc. as well as being exceptionally gifted in creativity and intelligence) will experience additional levels of frustration because their challenges will often hide their strengths.

Teachers need to be detectives for the strengths of their students! A shift in focus from weaknesses to strengths can give teachers that crucial edge to see a gifted student who is cloaked in a layer of invisibility and frustration.

Other issues:

- Lack of opportunities/ resources to pursue areas of high interest
- Affective needs need to be considered (emotional well-being suffers) along with the lack of age-appropriate activities often encountered when there is huge variety of levels of understanding within the same child. Gifted children may sound and act older, but they have a high need for acceptance, and a high need to “just be a kid”

If there are so many children who are “Gifted” why can’t we see them?

- Research has shown that the highest number of children who are gifted fit into the category of “Gifted Underachiever”
(intellectually gifted students especially at risk for learning difficulties in school)
--Whitmore, 1988

These are children that achieve at grade level or less under their tested potential

Why?

What Are the Factors Involved Here?

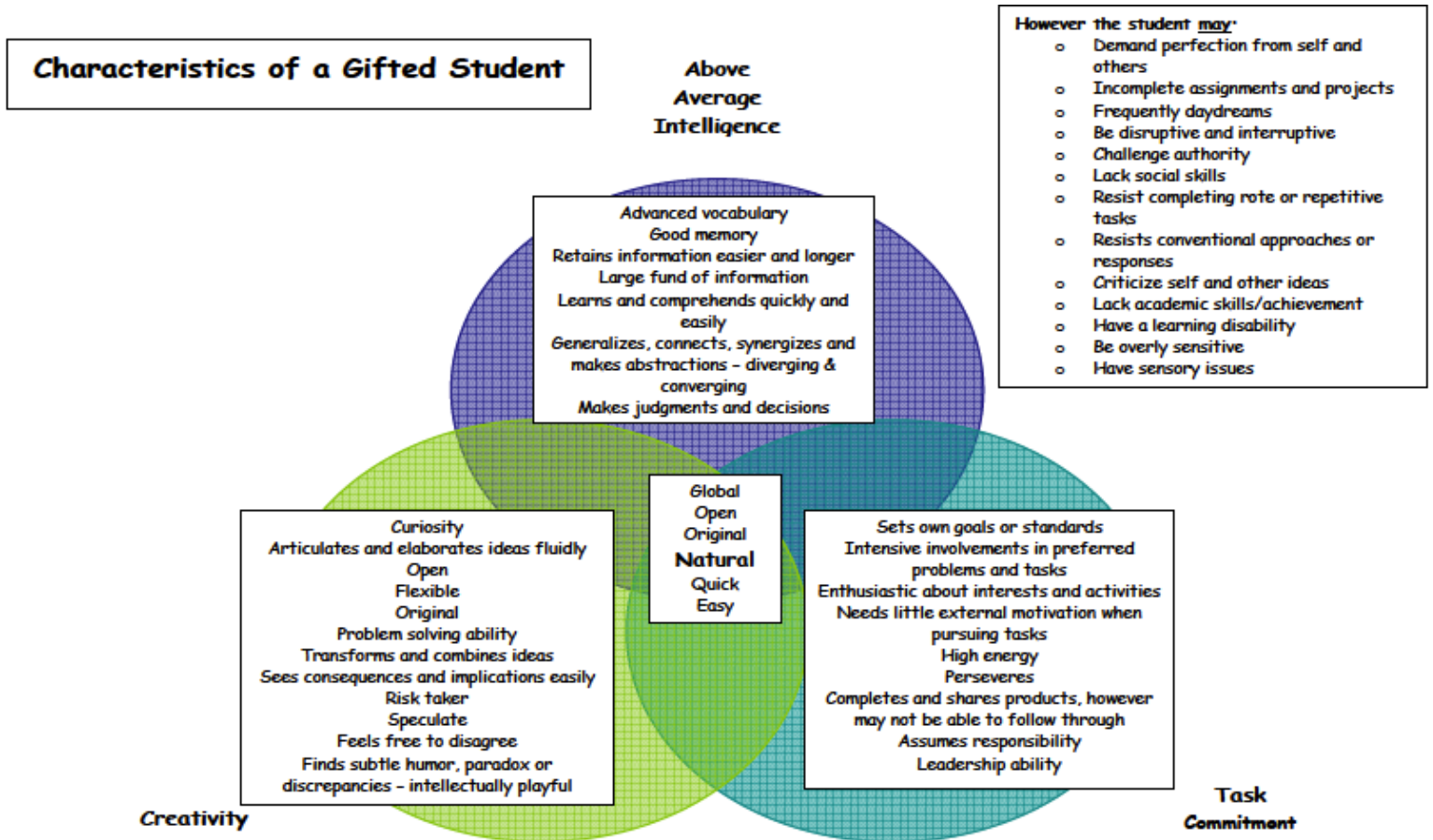
- Impossible/inappropriate expectations (demand more effort and tolerate less imperfection, expect more mature behaviour beyond age-level and forget childishness necessarily present in children)
- Conflict of giftedness/creativity with traditional rigid classroom structures (conformity, repetition, uniformity of assignments, lack of opportunity to pursue interests and work independently)
- Learning not to learn: little effort needed to make good grades (lack of effort, lack of confidence when challenge met, poor study habits and inconsistent work)
- Social and emotional factors (socially safe to underachieve, don’t want to be singled out as different)

Characteristics

What are some characteristics you might expect to see in gifted students as a teacher when you are looking at an inclusive classroom with differentiated learning?

Consider Renzulli's model. This model suggests that giftedness involves the interaction of 3 clusters of human traits:

1. Above average abilities – top 15% of intellectual aptitude
2. High levels of task commitment – a learner's ability to take energy and concentrate it on a specific task
3. High levels of creativity – person's ability to produce original, novel and unique ideas or products



Based on Renzulli's model for educating the gifted, now called the Schoolwide Enrichment Model, is based on his 1978 Three Ring Conception of Giftedness

Add to this Gardner's 8 Multiple Intelligences to consider learning styles and Sternberg's pentagonal implicit theory of giftedness, which states that a gifted person meets five criteria:

Excellence (relative to peers)

Rarity (skill/attribute rare among peers)

Productivity (must produce something)

Demonstrability (through assessments)

Value (performance superior in a dimension valued by Society)

Sternberg



Image Found At: <http://www.diva-portal.org/smash/get/diva2:391500/FULLTEXT01.pdf>

Common Traits of Children Who Exhibit High Levels of “Gifted”/ Talent / or Creativity

Common Traits for “Gifted”	Common Traits for “Talented”	Common Traits for “Creative”
<ul style="list-style-type: none"> • Wide range of ability • High academic achievement • High curiosity • Excellent observational skills • Ask lots of questions • High task commitment/ high motivation to specific goal-directed behavior • Long attention span for self-directed tasks • Intense concentration • Innovative, divergent responses • Ability to grasp and retain knowledge • Ability to convey ideas effectively • Avid hobbies • Advanced ethical thinking • Task and contribution oriented vs. Recognition oriented 	<ul style="list-style-type: none"> • Persistent goal-directed behavior • High task commitment • Imaginative and inventive (acute observation skills) • Perceptive and imaginative in interpretation • Pronounced intuitive sense with high degree of artistic integrity • Ability to interpret and interconnect to refined degree • Attack drawing, painting or sculpting in non-prescribed (un-taught) ways • Use of technical ability as foundation for reinterpretation, chiefly for personal satisfaction • Ability to detach from surroundings and focus intently on task (eg. Auditory attention in musicians) 	<ul style="list-style-type: none"> • Ask challenging, embarrassing or controversial questions • Production containing humor and playfulness • Preference for talking about ideas and problems (boredom with repetition) • Good problem-solving ability • Keen sense of the absurd/wild and silly/ironic • Skill in abstract thinking • Uses wide variety of resources • Lots of energy • Unexpected answers • Pleasure in working alone • Apparent lack of hard work coupled with good performance on exams • Playfulness in experimentation <p style="text-align: center;">Imagination and inventiveness</p>

Taken from: Children with Exceptionalities in Canadian Classrooms, Fifth Edition. Margaret Winzer, (1999). Prentice-Hall Canada Inc., Scarborough Ontario

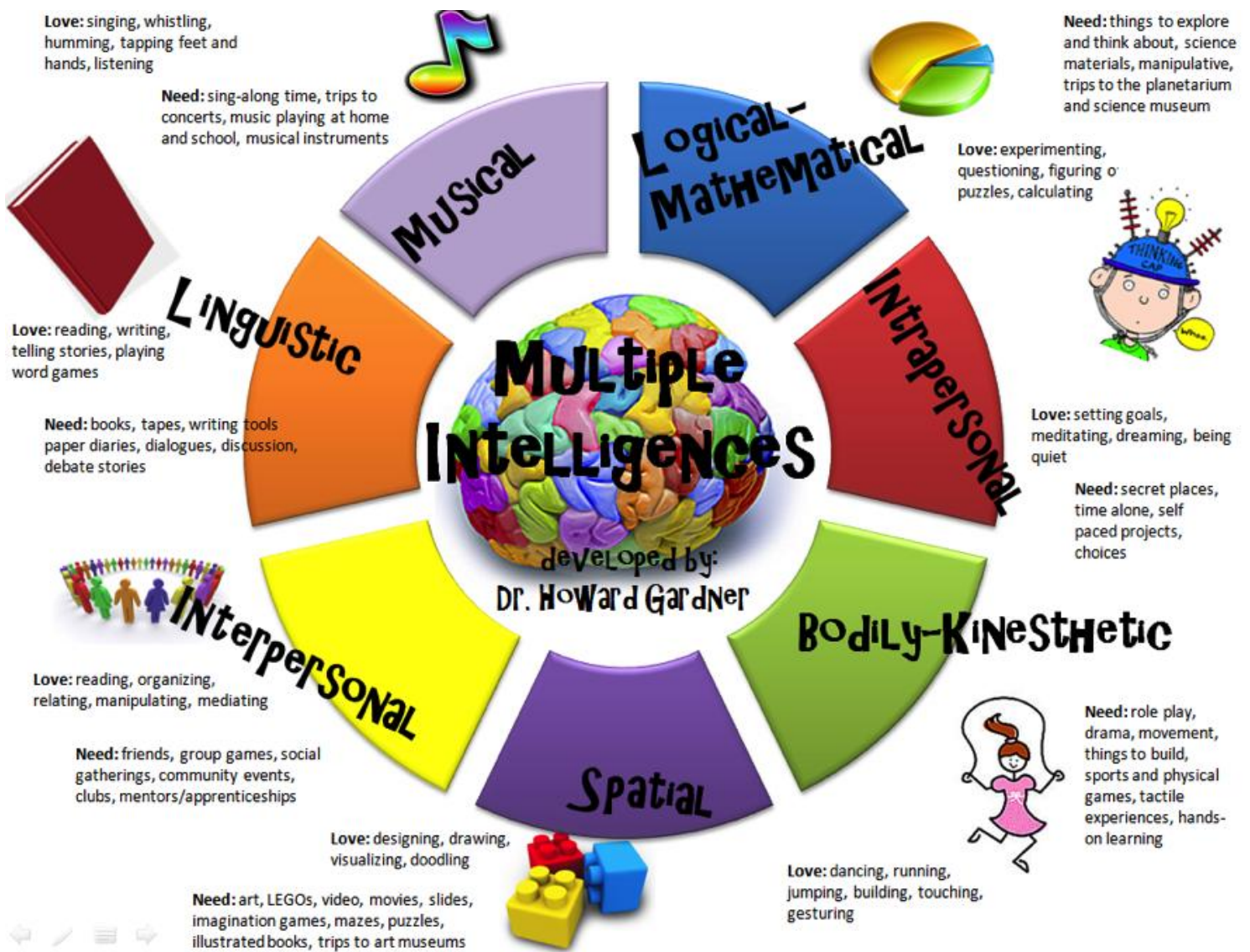


Image Found At: http://amfreund.info/wp-content/uploads/2012/02/Multiple_Intelligences.png

IDENTIFICATION AND SUPPORT CHART

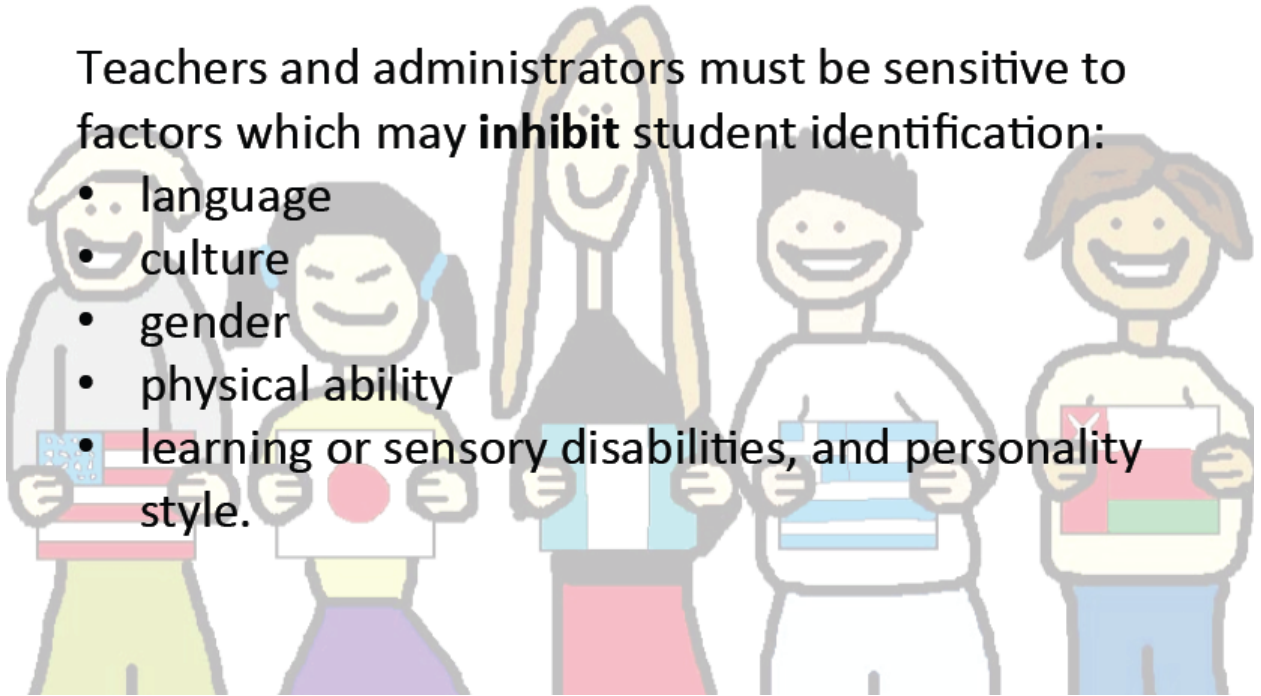
FEELINGS AND ATTITUDES	BEHAVIORS	NEEDS	ADULTS & PEERS PERCEPTIONS OF TYPE	IDENTIFICATION	HOME SUPPORT	SCHOOL SUPPORT
<ul style="list-style-type: none"> -Boredom -Dependent -Positive self-concept -Anxious -Guilty about failure -Extrinsic motivation -Responsible for others -Diminish feelings of self and rights to their emotion -Self critical 	<ul style="list-style-type: none"> -Perfectionist -High Achiever -Seeks teacher approval and structure -Non-risk taking -Does well academically -Accepts & conforms -Dependent 	<ul style="list-style-type: none"> -To see deficiencies -To be challenged -Assertiveness skills -Autonomy -Help with boredom -Appropriate curriculum 	<ul style="list-style-type: none"> -Loved by teachers -Admired by peers -Loved and accepted by parents 	<ul style="list-style-type: none"> -Grade point average -IQ Tests -Teacher nominations 	<ul style="list-style-type: none"> - Independence -Ownership -Freedom to make choices -Time for personal interests -Risk taking experiences 	<ul style="list-style-type: none"> -Accelerated and enriched curriculum -Time for personal interests -Compacted learning experiences -Opportunities to be with intellectual peers -Development of independent learning skills -In-depth studies -Mentorships -College & career counseling
<ul style="list-style-type: none"> -Boredom -Frustration -Low self-esteem -Impatient -Defensive -Heightened sensitivity -Uncertain about social roles 	<ul style="list-style-type: none"> -Corrects teacher -Questions rules, policies -Is honest, direct -Has mood swings -Demonstrates inconsistent work habits -Has poor self control -Is creative -Prefers highly active & questioning approach -Stands up for convictions -Is competitive 	<ul style="list-style-type: none"> -To be connected with others -To learn tact, flexibility, self-awareness, self control, acceptance -Support for creativity -Contractual systems 	<ul style="list-style-type: none"> -Find them irritating -Rebellious -Engaged in power struggle -See them as creative -Discipline problem -Peers see them as entertaining -Want to change them -Don't view as gifted 	<ul style="list-style-type: none"> -Peer Recommendations -Parent nomination -Interviews -Performance -Recommendation from a significant, non-related adult -Creativity Testing -Teacher advocate 	<ul style="list-style-type: none"> -Acceptance and understanding -Allow them to pursue interest -Advocate for them at school -Modeling appropriate behavior -Family projects 	<ul style="list-style-type: none"> -Tolerance -Placement with appropriate teacher -Cognitive & social skill development -Direct and clear communication with child -Give permission for feelings -Studies in-depth -Mentorships build self-esteem -Behavioral contracting
<ul style="list-style-type: none"> -Unsure -Pressured -Confused -Guilty -Insecure -Diminished feelings of self and right to their emotions 	<ul style="list-style-type: none"> -Denies talent -Drops out of G/T and advanced classes -Resists challenges -Wants to belong socially -Changes friends 	<ul style="list-style-type: none"> -Freedom to make choices -To be aware of conflicts -Awareness of feelings -Support for abilities -Involvement with gifted peers -Career/college info -Self-acceptance 	<ul style="list-style-type: none"> -Viewed as leaders or unrecognized -Seen as average and successful -Perceived to be compliant -Seen as quiet/shy -Adults see them as unwilling to risk -Viewed as resistive 	<ul style="list-style-type: none"> -Gifted peer nomination -Home nomination -Community nomination -Achievement testing -IQ Tests -Performance -Teacher advocate 	<ul style="list-style-type: none"> -Acceptance of underground -Provide college & career planning experiences -Time to be with same age peers -Provide gifted role models -Model life-long learning -Give freedom to make choice 	<ul style="list-style-type: none"> -Recognize & properly place -Give permission to take time out from G/T classes -Provide same sex role models -Continue to give college & career information
<ul style="list-style-type: none"> -Resentment -Angry -Depressed -Explosive -Poor self-concept -Defensive 	<ul style="list-style-type: none"> -Has intermittent attendance -Doesn't complete tasks -Pursues 	<ul style="list-style-type: none"> -An individualized program -Intense support -Alternatives (separate, new 	<ul style="list-style-type: none"> -Adults are angry with them -Peers are judgmental -Seen as loners, dropouts, 	<ul style="list-style-type: none"> -Review cumulative folder -Interview earlier teachers -Discrepancy between IQ and 	<ul style="list-style-type: none"> -Seek counseling for family 	<ul style="list-style-type: none"> -Diagnostic testing -Group counseling for young students -Nontraditional study skills -In-depth studies -Mentorships

-Burn-out	outside interests -"Spaced out" in class -Is self-abusive -Isolates self -Is creative -Criticizes self & others -Does inconsistent work -Is disruptive, acts out -Seems average or below -Is defensive	opportunities) -Counseling (individual, group, and family) -Remedial help with skills	dopers, or air heads -Reject them and ridicule -Seen as dangerous and rebellious	demonstrated achievement incongruities and inconsistencies in performance -Creativity testing -Gifted peer recommendation -Demonstrated performance in non-school areas		-Alternative out of classroom learning experiences -G.E.D.
-Powerless -Frustrated -Low self-esteem -Unaware -Angry	-Demonstrates inconsistent work -Seems average or below -May be disruptive or acts out	-Emphasis on strengths -Coping skills -G/T support group -Counseling -Skill development	-Seen as "weird" -Seen as "dumb" -Viewed as helpless -Avoided by peers -Seen as average or below in ability -Perceived to require a great deal of imposed structure -Seen only for the disability	-Scatter of 11 points or more on WISC or WAIS -Recommendation of significant others -Recommendation from informed special ed. teacher -Interview -Performance -Teacher Advocate	-Recognize gifted abilities -Challenge them -Provide risk-taking opportunities -Advocate for child at school -Do family projects -Seek counseling for family	-Placement in gifted program -Provide needed resources -Provide alternative learning experiences -Begin investigations and explorations -Give time to be with peers -Give individual counseling
-Self confident -Self accepting -Enthusiastic -Accepted by others -Supported -Desire to know & learn -Accepts failure -Intrinsic motivation -Personal power -Accepts others	-Has appropriate social skill -Works independently -Develops own goals -Follows through -Works without approval -Follows strong areas of passion -Is creative -Stands up for convictions -Takes risks	-Advocacy -Feedback -Facilitation -Support for risks -Appropriate opportunities	-Accepted by peers and adults -Admired for abilities -Seen as capable and responsible by parents -Positive influences -Successful -Psychologically healthy	-Grade point average -Demonstrated performance -Products -Achievement Testing -Interviews -Teacher/Peer/Parent self nominations -IQ tests -Creativity Testing	-Advocate for child at school and in community -Provide opportunities related to passions -Allow friends of all ages -Remove time and space restrictions -Do family projects -Include child in parent's passion	-Allow development of long-term integrated plan of study -Accelerated and enriched curriculum -Remove time and space restrictions -Compacted learning experiences with pretesting -In-depth studies -Mentorships -College & career counseling and opportunities -Dual enrollment or early admission -Waive traditional school policy and regulations

Identifying Gifted Students

Teachers and administrators must be sensitive to factors which may **inhibit** student identification:

- language
- culture
- gender
- physical ability
- learning or sensory disabilities, and personality style.



Keeping in mind that “giftedness” is a social construct, how do you deal with this in the classroom?

Research Studies

Models for working with gifted learners:

*Taken from: Special Education Desk Reference "Methods for the Gifted" J. Christine Gould, Ph.D. 51-62.

- Comprehensive-thinking models (emphasis on process of learning with tendencies to explore concepts more deeply with a focus on subject mastery, student designing and evaluation of own work)
- Autonomous Learner Model (George T. Belts) 1985 : develop, plan and implement own courses of study to enable to pursue area of strong interest with use of seminars (guided into researching and presenting info in small groups)
- Interactive Education Model (IEM) (Barbara Clark) 1992: using brain-research to enhance knowledge acquisition through holistic teaching through an organizing framework for all program content (emphasis on creating a rich, holistic environment for gifted learner to flourish)
- Individualized Teaching (Hazel J. Feldhusen) 1993 : Students plan their own courses with guidance from teachers after being taught core subjects. Problems : complex classroom management to transition from teacher to student directed program
- P.E.M. Purdue 3-Stage Enrichment Model (John Feldhusen & Penny Kolloff) 1986 : Provide enrichment by pulling students out of classes for activities in divergent/convergent thinking, creative-problem solving activities and development of independent learning abilities. Focuses on the following skills : fluency, flexibility, originality, elaboration, decision making, forecasting . Problem : needs administrative support for pulling students (widens concept of giftedness from 3-5% to 50% of students, therefore doesn't encourage additional funding)
- The Grid (Sandra Kaplan) 1986 : differentiated curriculum in an integrated way (differentiated, intentionally designed, well-defined and planned) organized around topics/themed study units for creating umbrella conceptualizations under with several subject areas can be covered
*Differentiation is seen as the key to addressing the needs of gifted students
"individualization follows differentiation and both need to occur"

- The Enrichment Triad/Revolving Door Model (Joseph Renzulli) 1995 : broad based enrichment model identifying gifted learners as interaction between above-average ability, task commitment and creativity (3 behaviors not always present but that can be developed through stimulating experiences) Uses pull-outs and resource rooms for students to revolve in/out of from a talent pool based on performance assessment, includes enrichment experiences for exploring real problems in small group investigations
- Multiple Talent Approach/Talents Unlimited (Calvin Taylor and Carolyn Schlicter) 1967 : framework for teaching thinking skills with understanding that all students potentially gifted in one area, purposed to help develop in multi-areas, suggestion that all students function at different levels, students have varied profiles of talent development
- IPPM Individualized Programming Planning Model (Donald Treffinger) 1995: promotes independent learning for varying stenths/talents in an inclusive classroom, designed to ensure students don't focus on the process of learning to the exclusion of content ... content mastery is important. (Students and teachers are taught to create an environment that fosters independent, self-directed learning)

Myths that Research has “Debunked”:

Taken from* Children with Exceptionalities in Canadian Classrooms, Fifth Edition. Margaret Winzer, (1999).

1) The myth of the gifted child genius rising above all circumstances and difficulties: This myth has a popular catch phrase which may still be heard within our vocabulary “the cream will rise.” This myth originates from the 1800s with Sir Francis Galton who coined the idea of giftedness.

Debunked: Research has shown that although gifted potential knows no boundaries of “race”, culture, socio-economic structures, religion or gender (IQ tests and other forms of testing show the same percentage of gifted potential across all these lines), the difficult fact still exists that children from lower economic backgrounds, minority cultures and girls tend to be under-represented in gifted education programs. They go over-looked and un-supported because the supportive structures around gifted education are a cultural construct.

2) The myth of the sickly “mad genius”: This myth is also still around. It is the myth that people who grow up extremely gifted tend to be emotionally unstable, socially clueless and physically weak.

Debunked: Research has shown that gifted children and adults are highly diverse, and the tendency is actually towards the opposite: overall, they tend to develop strong communication and inter-personal skills, and often grow into strong physical attributes as well. The stereotype exists, but it is a stereotype, not the norm.

Identification Templates



The Process

1. Identification: Templates:
<http://www.bced.gov.bc.ca/specialed/gifted/>
2. Planning and Strategies
3. Goals, Evaluation, and Reviews

“The Process”

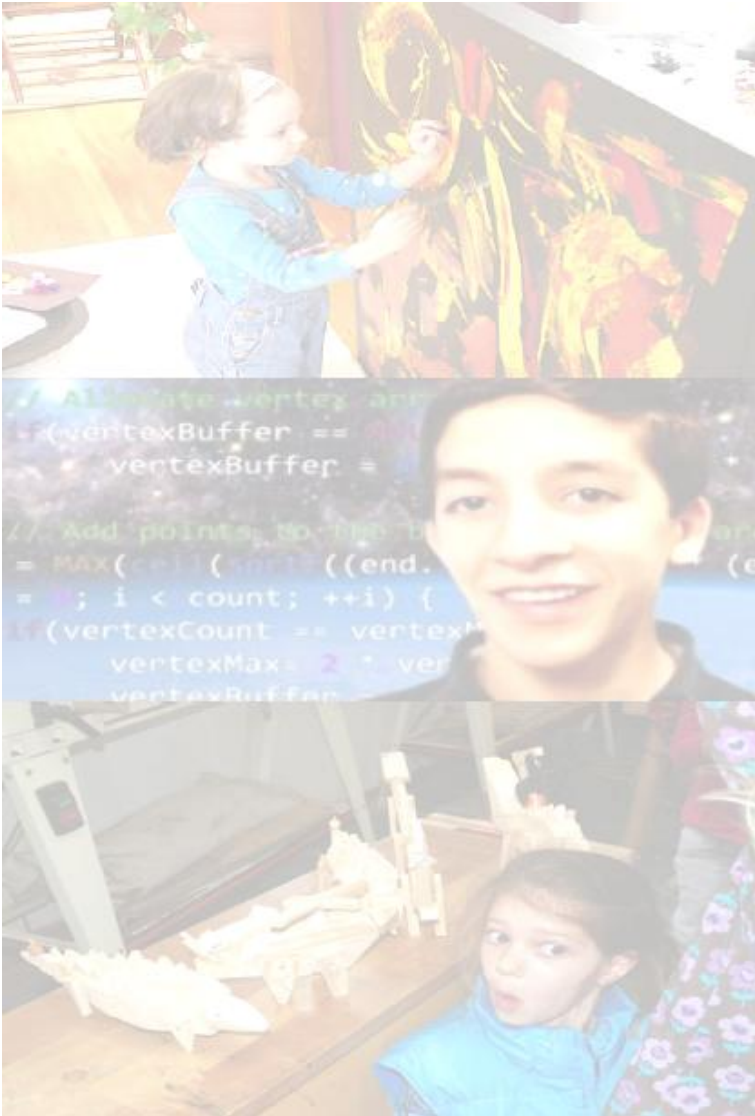
1. Identification: templates available at:
<http://studentservices.nesd.ca/1files/handbooks/Supporting%20Gifted%20Students.pdf>
And: ****BCEd Website**** <http://www.bced.gov.bc.ca/specialed/gifted/>

2. Planning

- Identify with the parents an understanding of their child
- plan for a continuum of abilities
- identify critical needs - strengths first then challenges
- connect to the PLO's
- design Individualized Education Plans (school based team)
- plan for differentiated learning instruction / create a supportive learning environment - incorporate higher level thinking opportunities (Bloom's taxonomy) including creative, critical thinking and problem solving. Tiered activities, independent study, learning centers, mentorship/apprenticeship projects within the school, connecting with other gifted students, reaching out to the community, provide extra-curricular activities in areas of interest
- plan for services - use a team approach to establishing appropriate curriculum: include teachers, parents, student, library resource teacher, school psychologist, administrator, mentors etc. (Think Sparks interviews)

Goals, Evaluation and Reviews

3. Set goals and evaluations/reviews (record adaptations for their records)



Exceptional potential can be missed when the learning environment does not offer the student an opportunity to demonstrate or develop a talent.

General Adaptations and Strategies

In general, how can teachers adapt to suit the needs of gifted learners?

Gifted students benefit from:

- Flexibility (teachers willing to leave lessons to explore topics that come up), choice, a rich resource environment, an integrated curriculum,⁹ built-in opportunities for independence and taught strategies for this, formative assessment, differentiated (extended) curriculum that alters the depth and breadth of the curriculum, and the use of collaborative work



Example Strategies and Adaptations for an Inclusive Classroom:

Curriculum Strategies, Organization Strategies, Environmental Strategies, Presentation and Assessment Strategies with Gardner's 8 Intelligences		
<p>Linguistic: These learners have highly developed auditory skills and often think in words. They like reading, playing word games, making up poetry or stories.</p> <p>2 strategies: Individualized programming (eg. book choice) and a range of resources (computers, games, multimedia, books, tape recorders...)</p> <p>Visual/Spatial: Very aware of their environments. Taught through drawings, verbal and physical imagery.</p> <p>Strategy: Use of more complex imagery that pose a question: visual puzzles, models, 3-D modeling, video, pictures/charts/graphs</p> <p>Interpersonal: able to recognize and understand the motivations and feelings of other people</p> <ul style="list-style-type: none"> - create group learning environments (cluster grouping/ability grouping) - use knowledge of others to create peer leadership and peer support activities - create real-world opportunities to explain what students have learned to people in the community - create opportunity for child to display sensitivity in response through alternative methods of assessment (observation/portfolio, open ended questions) ¹⁰ 	<p>Naturalist: These learners enjoy being in nature and want to protect it from pollution.</p> <ul style="list-style-type: none"> - Caring for plants/pets (real world opportunities) - Sorting and classifying natural objects, such as leaves and rocks. - Researching animal habitats. - Observing natural surroundings. - Organizing or participating in park/playground clean-ups, recycling drives, and beautification projects <p>Mathematical/Logical: These learners like to solve everyday or abstract problems using logically organized questions or by applying mathematical reasoning.</p> <p>2 strategies: teaching higher level thinking skills for solving real world problems and providing different hands on tools such as cuisenaire rods, puzzles, weights and computer "games"</p> <p>Resource: http://www.odysseybc.ca www.kahnacademy.org</p>	<p>Bodily-Kinesthetic: These learners use all or part of their body to create products or solve problems.</p> <ul style="list-style-type: none"> - bring in local elite athletes - coach their peers - play in community teams <p>Intrapersonal: have a deep awareness of their feelings, ideas, and goals.</p> <ul style="list-style-type: none"> - Writing reflective papers - Writing essays from the perspective of historical figures - Writing goals for the future and planning ways to achieve them. - Using software that allows them to work alone, such as Decisions, Decisions, a personal choice software, or the Perfect Career, a career choice software. - Keeping journals or logs throughout the year <p>Musical: Demonstrate high abilities in reading music, maintaining pitch and rhythm and skill in singing/playing complex musical patterns.</p> <p>Strategies: Use of individualized programming for composition of original works, and use of a community resources person (mentor)</p>
General/Other Strategies		
<ul style="list-style-type: none"> • Pacing/ Time Allotment • Higher level thinking skills (analysis, synthesis, evaluation) • Range of Resources (library card to college, university mentor) 	<ul style="list-style-type: none"> • Flexible scheduling • Use of community resources person at school • Alternative methods of Assessment (Observation/Portfolio, Open ended questions) 	<ul style="list-style-type: none"> • Compacting • Depth of study • Use of faster-paced, higher-level materials • Real world extensions • Use of community resources person at school • Risk taking/Independence

Effects of Giftedness	Tips for Teachers
Independent with high locus of control	-individualize as much as possible -conformity in classroom reasonable and flexible (may not listen attentively but not allowed to divert attention of others) -assignments that allow choice
Self-motivated	-choice, self-selection of reading material -written expression for a variety of purposes (informative/persuasive, narrative) -movement from teacher to self-directed learning styles -provide time for students to do their own work at school
High-level skills	-introduce important ideas early (not as much lead-up) -teach to highest cognitive level possible -make explicit utilization of all thinking/learning processes
Needs rapid pacing	-present material with less practice in-built -present more advanced material -teach the basic structure of a discipline then try to have students approach it as a specialist
Needs competition	-individualistic learning styles needed, with opportunities for competition between peers of same level (ex. Contests, technology online for wider community of peers, etc.)
Needs research skills	-stress technical writing (how to phrase research questions) -teach methods by which students can discover knowledge for themselves -teach how to write proposals/ present research data -stress problem-solving
Needs interaction with intellectual peers	-teach through small group work and some ability-group learning activities
Varied Interests	-try to find mentors
Highly Creative	-allow learning by exploring, testing limits, searching, manipulating and playing
Needs Social Interaction	-have students regularly share with the class what they are doing
Underachievers	-support and respect for efforts -establish standards and provide guidance, support, encouragement and co-operation rather than competition -begin in early grades before resistance in underachievers too ingrained
Female Students	-provide early entry into challenging programs -provide against-type role models -provide info about scholastic requirements to career alternatives
Student with Disabilities	-nurturing environment that values individual differences -encourage strategies such as advance organisers, development of test-taking skills, special compensation for disability
Culturally Diverse Student	-gain parental involvement and support, develop program models/goals/objectives meaningful to their local culture

Resources:

Gifted Education: A Resource Guide for Teachers: <http://www.edu.gov.bc.ca/.specialed/www/gifted/title.html>

Curriculum Strategies

- **Compacting/ Telescoping**
 - A strategy designed to streamline the amount of time the student spends on the regular curriculum. This strategy allows students to demonstrate what they know, to do assignments in those areas where work is needed, and then to be freed to work on other curricular areas.
 - Reducing the amount of time a student takes to cover the curriculum.
 - i.e. Khan Academy

- **Time Allotment/Depth of study**
 - Not to be confused with pacing. Gifted students need extra time to delve into topics at depth that is necessary for the higher level thinking they are being challenged with.

- **Individualized programming**
 - Independence
 - Opportunities to take independent-directed studies.
 - Personal planning at all levels

Adaptations for ways to enhance the curriculum (for a gifted student)

- Present content that is related to broad-based issues, themes or problems.
- Integrate multiple disciplines into the area of study.
- Present comprehensive, related and mutually reinforcing experiences within an area of study.
- Allow for the in-depth learning of a self-selected topic within the area of study.
- Develop independent or self-directed study skills.
- Develop productive, complex, abstract and/or higher level thinking skills.
- Focus on open-ended tasks.
- Develop research skills and methods.
- Integrate basic skills and higher level thinking skills into the curriculum.
- Encourage the development of products that challenge existing ideas and produce "new" ideas.
- Encourage the development of products that use techniques, materials and forms.
- Encourage the development of self-understanding. For example, recognizing and using one's abilities, becoming self-directed, appreciating likenesses and differences between oneself and others.
- Evaluate student outcomes by using appropriate and specific criteria through self-appraisal, criterion-referenced and/or standardized instruments.

Organization Strategies

- **Within-Class Ability Grouping**
 - Students within one classroom are divided into two or more groups by achievement level in a subject or topic area. This is also known as "flexible grouping."
- **Flexible scheduling**
 - Allow students to follow their passion and if they're in "the zone", let them continue
- **Ability-grouped Classes (Tracking)**
 - Students at one grade level are assigned to a self-contained class based on ability or achievement.
 - A subset of this strategy would be special full-time classes for gifted students or magnet schools.
 - Dual or part-time participation in higher level courses
 - Grade level acceleration or multiple grade advancement
 - Extended work with mentors
- **Cluster grouping/Enrichment/Pullout**
 - Gifted students (usually five to eight students) are placed in one classroom with the remainder of the class composed of a normal distribution of ability levels. The "cluster" teacher is given appropriate training and spends proportionate time on curriculum differentiation and direct instruction for this cluster group.
- **Cross-Graded Classes**
 - Students are re-grouped by their achievement or performance level in one or two subject areas across grade lines. A subset of this strategy would be full-time cross-grading for all subject areas, as may occur in multi-age classrooms, non-graded classes, etc.

Environmental Strategies

- **Range of Resources (library card to college or university, mentor)**
 - Use of faster-paced, higher-level materials
 - Use of community resources person at school
 - Increased use of computer technology
 - Field trips

- **Sophistication of Product**
 - Models, diagrams, letters, videos, debates, displays, dramatizations, multimedia presentations, concept maps, stories, sculptures, paintings, songs, scripts, classification systems, advertisements and cookbooks.
 - Have total hands on lessons. If studying elections, have a mock election.
 - Use more videos, films and telecommunications.
 - The product that students develop to synthesize and communicate knowledge, concerns, findings, points of view, recommendations, and theories. It is the result of student interaction with content resembling, for gifted students, those developed by professionals in the discipline being studied. Snakes and Steve Erwin

- **Authentic Audience**
 - Presentation of student work/projects to outside audiences or community groups or in regular adult outlets
 - Letters to the editor and articles in the local newspaper,
 - Student works published in children's literary magazines,
 - Displays in public places -- malls, banks, shop windows, parks,
 - Presentations to appropriate local groups. For example: city council, historical society, naturalists society,
 - Artistic performances for the public or senior citizens,
 - Story telling in a library or bookstore,
 - Creation of oral history tapes for a library,
 - Invention convention for other students,
 - Mall display of outcomes from ecological studies,
 - Contribution of math puzzles to children's magazines,
 - Televised student panel discussion of a community problem,
 - Student business plans reviewed by business community, and
 - Dramatization of an issue for the community

Presentation Strategies

- **Deliberate Practice**
 - Provide ties to practice.
 - Make sure practice is deliberate. Challenging and complex tasks that require effort and mindfulness. Provide feedback so students understand what it takes to be successful. Make sure materials and facilities are available.
 - Help students feel motivated to engage in deliberate practice
 - Explain to students the importance of deliberate practice. Give examples through literature or personal examples.

- **Pacing**
 - The pace of your instruction should be paced rapidly to suit their learning style. When this happens gifted students become more alert and responsive as they pick it up quicker. Self-paced individualized instruction is less effective than fast-paced group instruction.

- **Risk taking**
 - Encourage divergent thinking and risk taking. Failure is part of the learning process. Girls in particular need encouragement to take risks in order to be successful.

- **Higher level thinking skills (analysis, synthesis, evaluation)**

Assessment Strategies

- **Alternative methods of Assessment**

- Observation/Portfolio
- Open ended questions

From: "Seeking Advanced Potentials: Developmentally Appropriate Procedures for Identification" –Bertie Kingore pp.31-51, Found In: The Young Gifted Child: Potential and Promise and Anthology (Ed. By Joan Franklin Smutny)

Observation Inventory:

- Use an observation inventory to note patterns of talents and strengths
 - note in observations what children may be trying to do
 - "frequently talk with the children" in analyzing behaviors because this provides a window to their thinking

Open ended Questions

- Instead of "what is that" ? (Directed)
Use Open-ended "Tell me about your picture... "
- Question thinking not just when incorrect, but specifically to notice strengths versus deficits

Use Language That Encourages Deep-Level Thinking:

- Phrases that prompt metacognitive reflection:
 - "Tell me about your picture"
 - "Tell me about your work"
 - "What did you do to figure that out?"
 - "What is another way you/I/we could do that"
 - "Tell me how... you did that/made that"
 - What do we need?
 - What should we do first/next?

Process over Product:

For young children it is not what they did right or wrong that matters, but how they went about developing these answers : ***"the process is frequently as significant as the product"***

- Eg. "Why is your name written upside down?" –"I thought it would be easier for you to read as you come by" (awareness of viewing work from the teacher's perspective, thus "error" clue to advanced thinking processes)

Multiple Opportunities for Observation over Time:

Provide multiple opportunities designed to elicit advanced potential and observe how students respond (ongoing opportunities while collecting info on strengths/potentials)

"identification should not be a process to end in a score or a decision regarding acceptance into a gifted program. Rather it should be a process to provide information helpful in making instructional decisions for all students. To identify gifted potentials, teachers do not wait to see if behaviors spontaneously occur. Instead they set up high-level activities to engage the entire class."

Helpful Resource for Gifted Assessment:

Kingore Observation Inventory (KOI):

This is a set of open-ended questions and statements organised according to the 7 categories of the KOI (Kingore Observation Inventory) in order to generate/lift children's higher-level thinking related to any topic of study

How does an Observation Inventory help Lessen the work of a Busy Educator?

(From: Bertie Kingore "Seeking Advanced Potentials...")

- An observation inventory simplifies the teacher's paperwork and increases accuracy in process of identifying talent/promise (in order to get at "hidden talent") this is NOT filling out a checklist of characteristics (which is done in short time, involves extensive memory recall and analysis /evaluation, etc. in single moment)
- An observation inventory tallies behaviors over a longer period of time
- It is used in conjunction with the development and systematic selection of portfolio data and products useful for parent conferencing/ talent development

FIGURE 3.4 Open-ended Questions and Statements to Uplift Thinking

OPEN-ENDED QUESTIONS AND STATEMENTS TO UPLIFT THINKING: (p.41)

Advanced Language:

What are other words you can use instead of ____?

This ____ is like ____

How many different meanings can you think of for ____?

What is another way to say ____?

What could you say to ____ when there is a problem?

Explain ____ to someone who does not understand.

Analytical Thinking:

What might happen if..... ?

Name all the attributes you can think of for?

Get ideas from ... to improve...

How is ... different from... ? How are they similar?

What could be done to make... more effective?

How could we organize...?

What makes ____ ____ ?

Look at this ... and tell me all the things we would need to make one like it.

ETC.

Portfolios:

(From: Bertie Kingore "Seeking Advanced Potentials...")

- offer concrete record of development of student's talents and identification of gifted potentials (development of learning in context)
- increase inclusion (every student assembles a portfolio to reflect growth/achievement), increases awareness of abilities and gifted potential from "special populations"

How Do You Make a Portfolio Effective?

To BE EFFECTIVE:

1. Must be student-driven (children are the organizers and managers of own work, they have the right and responsibility to select what goes in the portfolio)
2. Must involve collection, selection and reflection. After collecting, students need to analyze what they have accomplished and establish criteria such as "a product that shows how much I have learned," or "a hard problem I figured out," or "something I have done well"... attach a reflective statement to the product telling why it was included
3. The process needs to be simple enough for over-worked teachers "Never do for students what they should be doing for themselves!"... figure out more and more ways to increase student ownership in the process
4. Requires Collaboration and Careful Planning for action/successs (work with colleagues to carefully plan goals, desired outcomes and management needs before implementation. Pilot the process with the intention to learn/build on what learn about creating best procedures for authentically assessing children's strengths) ... "give yourself permission to begin small and develop the process over time... do not be afraid of moving slowly. Be only afraid of standing still."
5. Plan to involve colleagues in professional conversation around your search
Plan to involve parents in order to promote understanding/enable to embrace change
6. Products: "only to the degree that portfolios include the highest levels of performance on a wide range of student selected contents and materials can the portfolio process support the search for multiple talents and multiple types of giftedness"

Crafting Learning Experiences that are Effective for Gifted Children:

(From: Bertie Kingore "Seeking Advanced Potentials...")

DEBUNKING THE MYTH: Learning experiences are not chosen because they are fun or because children enjoy them... they are chosen because they integrate well, they are engaging and therefore satisfying... *"enjoyment is the result of well-planned learning experiences, not the rationale for the choices"*

Criteria for Effective Learning Experiences for Advanced Talent Development:

- activities open-ended and less single-answer directed (encourages risk and build on each other's ideas)
- persistent high-level thinking promoted (meaningful and challenging problems)
- incorporate complexity and challenge into the task (so can expand learning in areas of interest to them to know more than simple concepts already know)
- non-threatening environment maintained
- integrated learning promoted (connect prior knowledge... no isolation of details), learning in context
- actively involved (need heads, hearts and bodies simultaneously involved)*** to react with senses, feelings and manipulate with small and large motor responses
- time for metacognition provided
- teacher preparation is minimized (select experiences that can maximize learning opportunities for children without overworking teachers ... eg. incorporating questioning strategies, experiences where children producers not just consumers)
- planned experiences (field experiences)

Forms and Links

Ministry of Education Resources:

<http://www.bced.gov.bc.ca/specialed/gifted/>

Very Helpful Toolkit of Forms from the BCED:

Resource Guide for Programming Options:

<http://www.bced.gov.bc.ca/specialed/gifted/app1.htm>

Teacher Planning Guide for Content, Etc:

<http://www.bced.gov.bc.ca/specialed/gifted/app2.htm>

Sample of Student Profile/IEP Form:

<http://www.bced.gov.bc.ca/specialed/gifted/app3.htm>

Table of “Brilliant Behaviors” to Look For:

<http://www.bced.gov.bc.ca/specialed/gifted/app4.htm>

Class Assessment Resource Table:

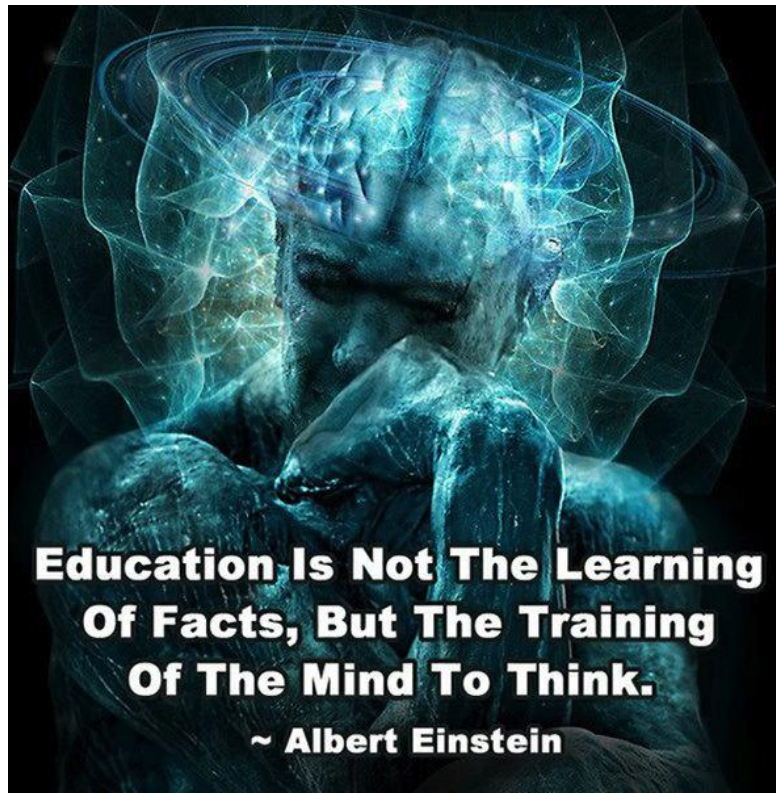
<http://www.bced.gov.bc.ca/specialed/gifted/app5.htm>

Statistics on the amount of gifted learners identified in 2005/2006 which shoes specific data in grades and skills:

<http://www.bced.gov.bc.ca/specialed/performance.pdf>

(See page 5)

Supportive Images and Videos



The need to teach explicit learning strategies, research strategies and problem solving strategies for independent ownership of learning for gifted students (and all students):

Image Location: <http://files.abovetopsecret.com/files/img/eg51831e0e.jpg>

One problem that comes up with gifted learners is that they “tend to make generalizations easily, they may learn content in a superficial manner.” * This is why both gifted and typical learners need to be taught to develop self-directed/ independent learning skills (A self-directed program cannot be used exclusively with gifted learners, although this tends to happen).

*From: Special Education Desk Reference “Methods for the Gifted” J. Christine Gould, Ph.D. 51-62.

Video Resources:

1. Euronews Documentary News story on “Gifted”: <http://www.youtube.com/watch?v=KTiww6I9vcU>
2. Video of Misdiagnosed Gifted Children: <http://www.youtube.com/watch?v=MUy5dcfclSs&sns=em>
3. Video of an Integrated Gifted Classroom: <http://www.youtube.com/watch?v=Swy7Pb13EB0&sns=em>

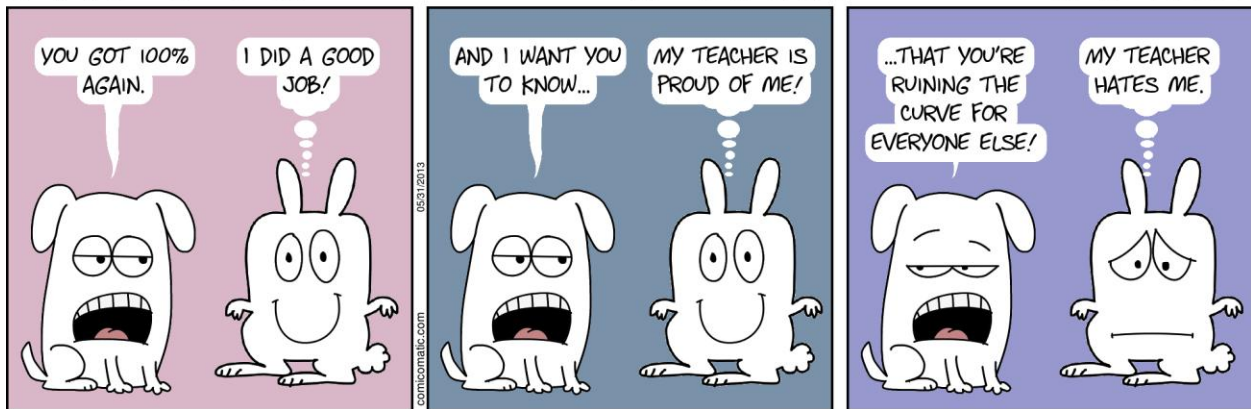


What it means to be singled out instead of included—the argument for an inclusive classroom:
 Picture found at: <http://www.learning-knowledge.com/prodigies/gifted.gif>

RUINING THE CURVE

WRITTEN BY CATHY A

ART BY NINA PALEY



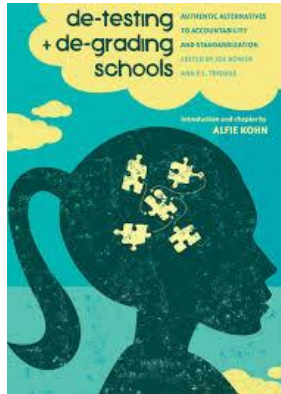
The need for formative assessment instead of evaluative grading that draws comparisons between students: the strategy that allows for both differentiation and inclusion in the classroom:

Picture found at: <http://microscopesareprudent.files.wordpress.com/2013/06/ruining-the-curve.png>

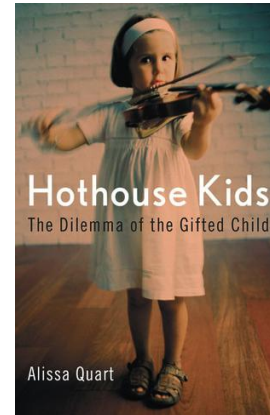
Supportive Societies and Resource Extensions

Books Exploring Current “Hot Topics” Related to Research in Gifted Education

1.
De-testing and De-grading Schools:
By Alfie Kohn



2.
Hothouse Kids: The Dilemma Of the Gifted Child
By Alissa Quart



“Hot Topic Articles”:

Feldhusen, Hazel. **Teaching Gifted, Creative, and Talented Students In an Individualized Classroom.** *Gifted Child Quarterly* 1981 25: 108

Mendleson, Rachel. **No Room For Gifted Kids.** *Maclean's*. Mar 02, 2009: 40-41

Additional Community Supports and Incentives:

From: [Special Education Desk Reference](#) “Methods for the Gifted” J. Christine Gould, Ph.D. 51-62.

- **Academic Competitions :**
Positives : intellectual achievement emphasised/recognised, student provided contact with similarly achieving peers (validates interest and achievement for sense of belonging), students allowed to pursue specific areas of interest, provides more objective/ larger assessment of self, many competitions require team participation/organization
Problems: time and resources limited, therefore careful selection and level of commitment required
- **Future Problem Solving Program (E. Paul Torrence):** Improve creativity through community problem solving and writing competitions, during participating year students given problem to solve (paired up with mentor teacher) identify problems, brainstorm solutions, evaluate solutions evaluated on applied research and creative strength
- **International Baccalaureate:** Designed around classical curriculum in which students earn college credits
- **Talent searches:** Identify high-scoring students on college entrance exams

How to Get Funding for Gifted Education

Funding in BC:

D.9 Funding Special Education Services - Update

*“The current funding system, introduced on March 1, 2002, moved into the student base allocation a significant portion of those resources that, in the past, formed part of the special education supplement. This includes funds that were previously identified as part of the special education “core” allocation: funds for learning assistance, special health services, identification assessment/planning and hospital/homebound services and supplementary funds for students who are identified as having severe learning disabilities, mild intellectual disabilities, students requiring moderate behaviour supports **and students who are gifted.**”*

Found in: http://www.bced.gov.bc.ca/specialed/special_ed_policy_manual.pdf

Funding checklist for gifted students:

http://www.bced.gov.bc.ca/independentschools/is_resources/se_cat_chklst.pdf

(page 13)

Career/ Life Transition Planning for Students with Diverse Needs:

http://www.bced.gov.bc.ca/specialed/docs/moe_clt_resource_rb0144.pdf

Conclusion



References & Additional Reading

1. Special Education Desk Reference "Methods for the Gifted" J. Christine Gould, Ph.D. 51-62.
2. Children with Exceptionalities in Canadian Classrooms, Fifth Edition. Margaret Winzer, (1999). "Chapter 7: Children Who Are Gifted, Creative and Talented" 221-259. Prentice-Hall Canada Inc., Scarborough Ontario
3. BC Ministry of Education.
4. Children with Exceptionalities in Canadian Classrooms, Fifth Edition. Margaret Winzer, (1999). "Chapter 7: Children Who Are Gifted, Creative and Talented" 221-259. Prentice-Hall Canada Inc., Scarborough Ontario (p.228, 235)
5. (Whitmore, 1988) Found in Children with Exceptionalities in Canadian Classrooms, Fifth Edition. Margaret Winzer, (1999). "Chapter 7: Children Who Are Gifted, Creative and Talented" 221-259. Prentice-Hall Canada Inc., Scarborough Ontario (p.231), Also found in Gordon and Thomas Study (1967)
6. www.studentservices.nesd.ca "Supporting gifted students in the North East School Division #200" Feb. 2008
7. <http://highered.mcgraw-hill.com/sites/dl/free/0070909695/120222/Chap06.pdf>
8. "A Sensibility Approach to Identifying and Assessing Young Gifted Children" Maurice D. Fisher pp. 52-61 The Young Gifted Child: Potential and Promise an Anthology (Ed. Joan Franklin Smutny) 1998.
9. "Educationally Dynamic Environments for Young Gifted Children" Beverly D. Shaklee pp. 358-367. The Young Gifted Child: Potential and Promise an Anthology (Ed. Joan Franklin Smutny) 1998.
10. "Seeking Advanced Potentials: Developmentally Appropriate Procedures for Identification" Bertie Kingore pp.31-51, The Young Gifted Child: Potential and Promise an Anthology (Ed. Joan Franklin Smutny) 1998.

Images from Presentation:

1. IQ Einstein Chart: https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcTINke7KuCg_wYe4defQoPUFzWsdmJcGkWWyxga4X6qhzA6bYAOOA
2. Kindergarten Testing Guide: http://ecx.images-amazon.com/images/I/51TM1CUdfel_BO2,204,203,200_Plsitb-sticker-arrow-click,TopRight,35,-76_AA300_SH20_OU15.jpg
3. "12 Year Old Attends Medical School": <http://images.usatoday.com/news/photos/2003/08/24-yano-inside.jpg>
4. Nature/Nurture Picture "Student Frustration": <http://sitemaker.umich.edu/356.loh/files/iq.gif>
5. Characteristics of a Gifted Learner (p.9): <http://studentservices.nesd.ca/1files/handbooks/Supporting%20Gifted%20Students.pdf>

Additional References & Resources:

Silverman, L. K. (1988). The gifted and talented. In E.L. Meyen & T. M. Skrtic (Eds.), *Exceptional children and youth* (3rd ed.). p 263-291. Denver, CO: Love Publishing.

Christi Crosby Bergin and David Allen Bergin. *Child and Adolescent Development in Your Classroom*. Wadsworth, 2012. Print.

Colvin, Geoffrey. *Talent is Overrated: What really Separates World-Class Performers from Everybody Else*. New York: Portfolio, 2008. Print.

Kreger Silverman, Linda. "Instructional Strategies for The Gifted" *The Gifted and Talented*