



## TRAINING COURSE

08.23.2015 - 29.08.2015, Bulgaria

**"Gifted (for) you"**

2014-1 - RO01 - KA201- 002,957

### 1. Course name: Children in the 21st Century: gifts, abilities, talents

**Abstract:** The main aim of the course is to comment different ways of recognizing, developing and encouraging gifts, skills and talents of children and students of different ages, including twice-exceptional students who are both gifted and disabled. A brief definitions and theoretical parameters to the problem of giftedness are presented. A common characteristics of gifted youth are presented. A key role is given to the individuality of the child and student (the problem of different areas of giftedness). The Different types of intelligence are also characterized in detail.

### 2. Course contents:

- ✓ Gifts, skills, talents. What is different in 21<sup>st</sup> century?
- ✓ Establishing gifts – a common characteristics of gifted youth.
- ✓ Types of intelligence and tools for developing individual skills: linguistic intelligence, spatial intelligence, logical intelligence, physical intelligence; musical intelligence, social intelligence, self intelligence.
- ✓ Practice

### 3. Course compendium

#### 0. Introduction

##### Old vs Revised Bloom's Taxonomy

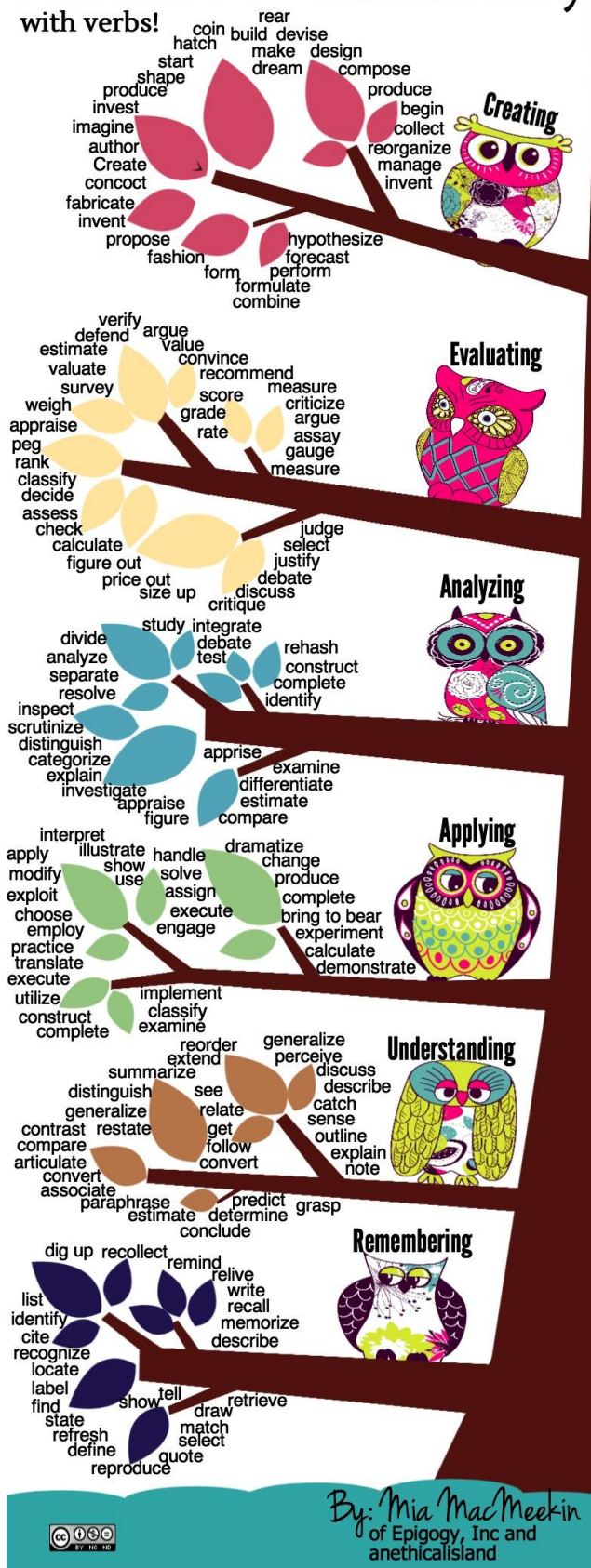
Bloom's Taxonomy was created in 1956 under the leadership of educational psychologist Dr Benjamin Bloom in order to promote higher forms of thinking in education, such as analyzing and evaluating concepts, processes, procedures, and principles, rather than just remembering facts (rote learning). It is most often used when designing educational, training, and learning processes. Bloom identified three *domains* of educational activities or learning (Bloom, et al. 1956):

- **Cognitive:** mental skills (*knowledge*)
- **Affective:** growth in feelings or emotional areas (*attitude or self*)
- **Psychomotor:** manual or physical skills (*skills*)

(Clark, D.R. (2014). *Bloom's Taxonomy of Learning Domains*. Retrieved from [http://www.nwlink.com/~donclark/hrd/Bloom/knowledge\\_matrix.html](http://www.nwlink.com/~donclark/hrd/Bloom/knowledge_matrix.html))

# Bloom's <sup>revised</sup> Taxonomy

with verbs!



This new taxonomy reflects a more active form of thinking and is perhaps more accurate. The new version of Bloom's Taxonomy, with examples and keywords is shown below, while the old version may be found [here](#)

**Table of the Revised Cognitive Domain**

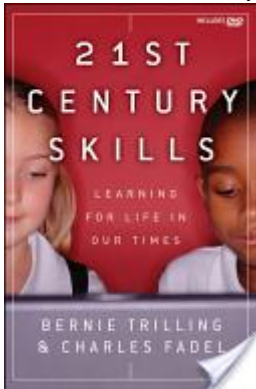
<b>Category</b>	<b><i>Examples, key words (verbs), and technologies for learning (activities)</i></b>
<b>Remembering:</b> Recall or retrieve previous learned information.	<p><b>Examples:</b> Recite a policy. Quote prices from memory to a customer. Recite the safety rules.</p> <p><b>Key Words:</b> defines, describes, identifies, knows, labels, lists, matches, names, outlines, recalls, recognizes, reproduces, selects, states</p> <p><b>Technologies:</b> book marking, flash cards, rote learning based on repetition, reading</p>
<b>Understanding:</b> Comprehending the meaning, translation, interpolation, and interpretation of instructions and problems. State a problem in one's own words.	<p><b>Examples:</b> Rewrite the principles of test writing. Explain in one's own words the steps for performing a complex task. Translate an equation into a computer spreadsheet.</p> <p><b>Key Words:</b> comprehends, converts, defends, distinguishes, estimates, explains, extends, generalizes, gives an example, infers, interprets, paraphrases, predicts, rewrites, summarizes, translates</p> <p><b>Technologies:</b> create an analogy, participating in <a href="#">cooperative learning</a>, taking notes, storytelling, Internet search</p>
<b>Applying:</b> Use a concept in a new situation or unprompted use of an abstraction. Applies what was learned in the classroom into novel situations in the work place.	<p><b>Examples:</b> Use a manual to calculate an employee's vacation time. Apply laws of statistics to evaluate the reliability of a written test.</p> <p><b>Key Words:</b> applies, changes, computes, constructs, demonstrates, discovers, manipulates, modifies, operates, predicts, prepares, produces, relates, shows, solves, uses</p> <p><b>Technologies:</b> <a href="#">collaborative learning</a>, create a process, blog, practice</p>

<p><b>Analyzing:</b> Separates material or concepts into component parts so that its organizational structure may be understood. Distinguishes between facts and inferences.</p>	<p><b>Examples:</b> Troubleshoot a piece of equipment by using logical deduction. Recognize logical fallacies in reasoning. Gathers information from a department and selects the required tasks for training.</p> <p><b>Key Words:</b> analyzes, breaks down, compares, contrasts, diagrams, deconstructs, differentiates, discriminates, distinguishes, identifies, illustrates, infers, outlines, relates, selects, separates</p> <p><b>Technologies:</b> <a href="#">Fishbowls</a>, debating, questioning what happened, run a test</p>
<p><b>Evaluating:</b> Make judgments about the value of ideas or materials.</p>	<p><b>Examples:</b> Select the most effective solution. Hire the most qualified candidate. Explain and justify a new budget.</p> <p><b>Key Words:</b> appraises, compares, concludes, contrasts, criticizes, critiques, defends, describes, discriminates, evaluates, explains, interprets, justifies, relates, summarizes, supports</p> <p><b>Technologies:</b> survey, blogging</p>
<p><b>Creating:</b> Builds a structure or pattern from diverse elements. Put parts together to form a whole, with emphasis on creating a new meaning or structure.</p>	<p><b>Examples:</b> Write a company operations or process manual. Design a machine to perform a specific task. Integrates training from several sources to solve a problem. Revises and process to improve the outcome.</p> <p><b>Key Words:</b> categorizes, combines, compiles, composes, creates, devises, designs, explains, generates, modifies, organizes, plans, rearranges, reconstructs, relates, reorganizes, revises, rewrites, summarizes, tells, writes</p> <p><b>Technologies:</b> Create a new model, write an essay, network with others</p>

Clark, D.R. (2014). *Bloom's Taxonomy of Learning Domains*. Retrieved from [http://www.nwlink.com/~donclark/hrd/Bloom/knowledge\\_matrix.html](http://www.nwlink.com/~donclark/hrd/Bloom/knowledge_matrix.html)

## The New Education Paradigm

### ➤ 21<sup>st</sup> Century Skills: Learning for Life in Our Times



[Bernie Trilling](#), [Charles Fadel](#)

John Wiley & Sons, 7.02.2012 r. - 256 p

#### **The new building blocks for learning in a complex world**

This important resource introduces a framework for 21st Century learning that maps out the skills needed to survive and thrive in a complex and connected world. 21st Century content includes the basic core subjects of reading, writing, and arithmetic-but also emphasizes global awareness, financial/economic literacy, and health issues. The skills fall into three categories: learning and innovations skills; digital literacy skills; and life and career skills. This book is filled with vignettes, international examples, and classroom samples that help illustrate the framework and provide an exciting view of twenty-first century teaching and learning.

- Explores the three main categories of 21st Century Skills: learning and innovations skills; digital literacy skills; and life and career skills
- Addresses timely issues such as the rapid advance of technology and increased economic competition
- Based on a framework developed by the Partnership for 21st Century Skills (P21)

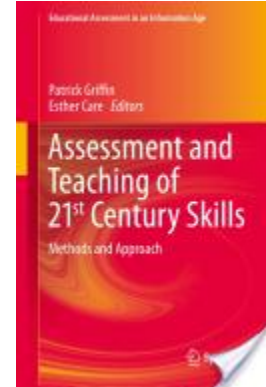
The book contains a DVD with video clips of classroom teaching. For more information on the book visit [www.21stcenturyskillsbook.com](http://www.21stcenturyskillsbook.com)

### ➤ Assessment and Teaching of 21st Century Skills: Methods and Approach

Patrick Griffin, Esther Care

Springer, 21.10.2014. - 310 p

This second volume of papers from the ATC21STM project deals with the development of an assessment and teaching system of 21st century skills. Readers are guided through a detailed description of the methods used in this process. The first volume was published by Springer in 2012 (Griffin, P., McGaw, B. & Care, E., Eds., Assessment and Teaching of 21st Century Skills, Dordrecht: Springer). The major elements of this new volume are the identification and description of two 21st century skills that are amenable to teaching and learning: collaborative problem solving, and learning in digital networks. Features of the skills that need to be mirrored in their assessment are identified so that they can be reflected in assessment tasks. The tasks are formulated so that reporting of student performance can guide implementation in the classroom for use in teaching and learning. How simple tasks can act as platforms for development of 21st century skills is demonstrated, with the concurrent technical infrastructure required for its support. How countries with different languages and cultures participated and contributed to the development process is described. The psychometric qualities of the online tasks developed are reported, in the context of the robustness of the automated scoring processes. Finally, technical and educational issues to be resolved in global projects of this nature are outlined.



See: <https://www.coursera.org/course/atc21s>

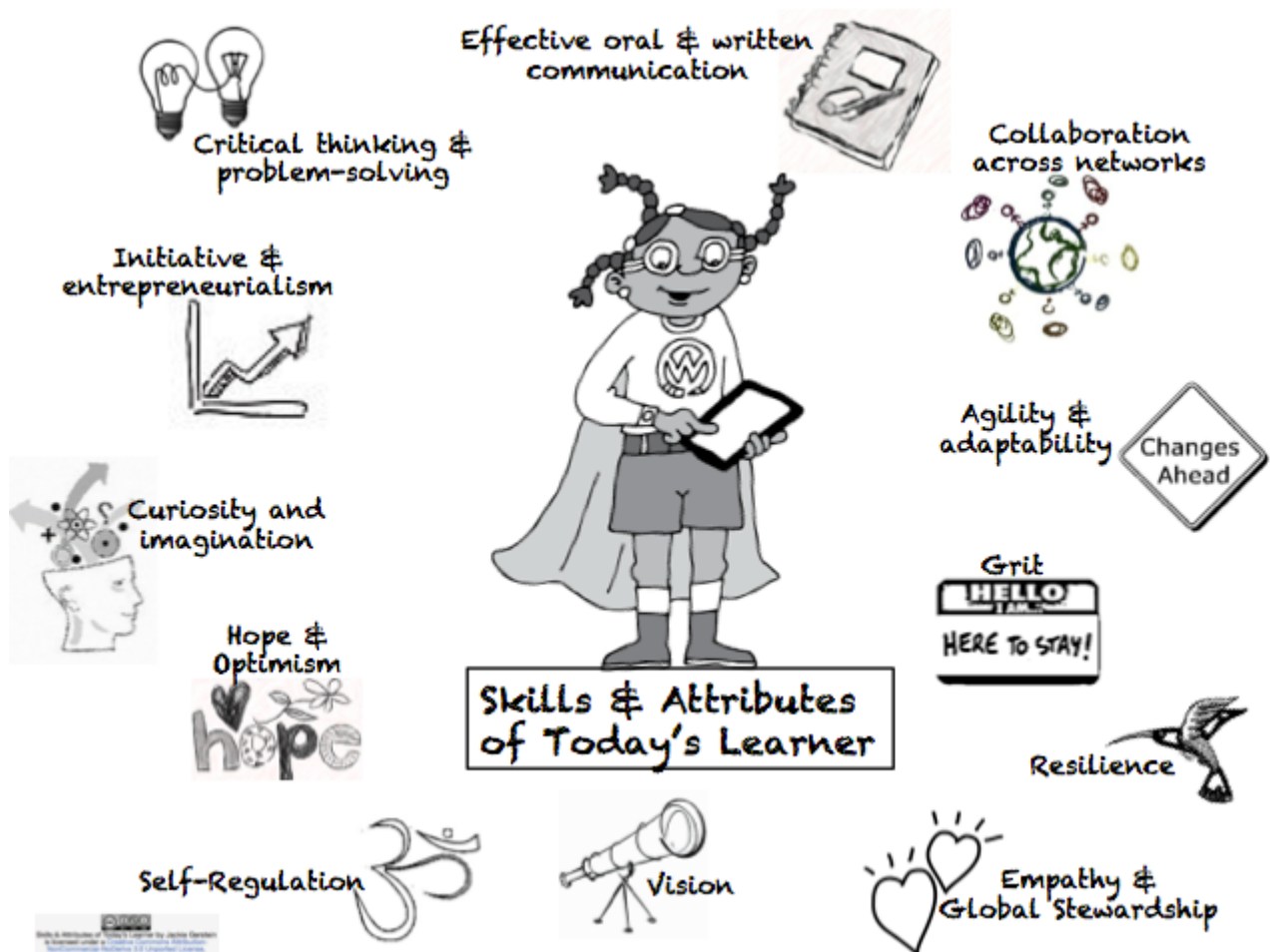
### **The Other 21st Century Skills**

Many have attempted to identify the skills important for a learner today in this era of the 21st century. Do you have an affinity towards the skills identified by Tony Wagner?

- Critical thinking and problem-solving
- Collaboration across networks and leading by influence
- Agility and adaptability
- Initiative and entrepreneurialism
- Effective oral and written communication
- Accessing and analyzing information
- Curiosity and imagination

See: Tony Wagner „Seven Survival Skills for Careers, College and Citizenship”  
<http://www.tonywagner.com/7-survival-skills>





## 1. Gifts, abilities, talents. Theoretical platforms and applications.

### 🌈 What is Giftedness?

Giftedness, intelligence, and talent are fluid concepts and may look different in different contexts and cultures. Even within schools you will find a range of beliefs about the word "gifted," which has become a term with multiple meanings and much nuance.

Gifted children may develop asynchronously: their minds are often ahead of their physical growth, and specific cognitive and social-emotional functions can develop unevenly. Some gifted children with exceptional aptitude may not demonstrate outstanding levels of achievement due to environmental circumstances such as limited opportunities to learn as a result of poverty, discrimination, or cultural barriers; due to physical or learning disabilities;

or due to motivational or emotional problems. This dichotomy between potential for and demonstrated achievement has implications for schools as they design programs and services for gifted students.

NAGC does not subscribe to any one theory of the nature of human abilities or their origins. We assert that there are children who demonstrate high performance, or who have the potential to do so, and that we have a responsibility to provide optimal educational experiences to fully develop talents in as many children as possible, for the benefit of the individual and the community.

### ➤ **Definitions of Giftedness**

Definitions provide the framework for gifted education programs and services, and guide key decisions such as which students will qualify for services, the areas of giftedness to be addressed in programming (e.g., intellectual giftedness generally, specific abilities in math), when the services will be offered, and even why they will be offered. **There is no universally accepted definition of giftedness.**

### ➤ **Definitions Describing Theories of Giftedness**

Among many theoretical conceptions of giftedness are those of Francoys Gagné and Joseph Renzulli. Others include Robert Sternberg's Theory of Successful Intelligence and Howard Gardner's Theory of Multiple Intelligences.

**Gagné:** The Differentiated Model of Giftedness and Talent proposes a clear distinction between giftedness and talent. In his model, the term giftedness designates the possession and use of untrained and spontaneously expressed natural abilities (called aptitudes or gifts) in at least one ability domain to a degree that places a child among the top 10% of his or her age peers. By contrast, the term talent designates the superior mastery of systematically developed abilities (or skills) and knowledge in at least one field of human activity to a degree that places a child's achievement within the upper 10% of age-peers who are active in that field or fields. His model presents five aptitude domains: intellectual, creative, socioaffective, sensorimotor and "others" (e.g. extrasensory perception). These natural abilities, which have a clear genetic substratum, can be observed in every task children are confronted with in the course of their schooling. (Gagné, F. (1985). Giftedness and talent: Reexamining a reexamination of the definitions. *Gifted Child Quarterly*, 29, 103-112.)



**Renzulli:** Gifted behavior occurs when there is an interaction among three basic clusters of human traits: above-average general and/or specific abilities, high levels of task commitment (motivation), and high levels of creativity. Gifted and talented children are those who possess or are capable of developing this composite of traits and applying them to any potentially valuable area of human performance. As noted in the Schoolwide Enrichment Model, gifted behaviors can be found "in certain people (not all people), at certain times (not all the time), and under certain circumstances (not all circumstances)."

(Renzulli, J. S. (1978). What makes giftedness? Re-examining a definition. *Phi Delta Kappa*, 60, 180-181.)

See more at:

<http://www.nagc.org/resources-publications/resources/definitions-giftedness#sthash.K4YAl1Nb.dIrdOFZu.dpuf>

<http://www.nagc.org/resources-publications/resources/gifted-education-us/brief-history-gifted-and-talented-education>

## A Short Glossary of Terms

### *Achievement Tests*

*Tests designed to measure what students have already learned, mostly in specific content areas. An example of an achievement test is the Iowa Tests of Basic Skills (ITBS).*

### *Aptitude*

*An inclination to excel in the performance of a certain skill.*

### *Asynchrony*

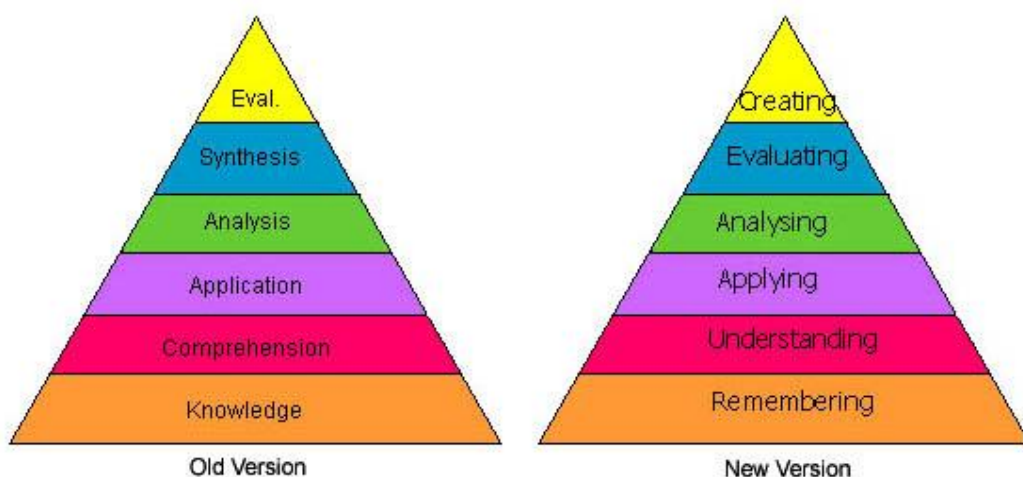
*A term used to describe disparate rates of intellectual, emotional, and physical rates of growth or development often displayed by gifted children. [Find more information here.](#)*

### *At-Risk*

*A term used to describe students whose economic, physical, emotional, or academic needs go unmet or serve as barriers to talent recognition or development, thus putting them in danger of underachieving or dropping out. [Read more information.](#)*

### *Bloom's Taxonomy*

*Developed in 1956 by Benjamin Bloom, the taxonomy is often used to develop curriculum for gifted children. There are six levels within the taxonomy that move from basic to high levels of thinking. The original levels included knowledge, comprehension, application, analysis, synthesis, and evaluation. The [taxonomy](#) was later updated to reflect [21st-century skills](#), with the levels changing to remembering, understanding, applying, analyzing, evaluating, and creating.*



## ***Brainstorming***

*Brainstorming is an activity used to generate many creative ideas that have no right or wrong answers and are accepted without criticism. Effective brainstorming is characterized by fluency and flexibility of thought.*

## ***Creativity***

*The process of developing new, uncommon, or unique ideas. The federal definition of giftedness identifies creativity as a specific component of giftedness.*

## ***Differentiation***

*Modifying curriculum and instruction according to content, pacing, and/or product to meet unique student needs in the classroom.*

## ***Gifted and Talented Students***

*The federal Elementary and Secondary Education Act defines gifted and talented students as “Students, children, or youth who give evidence of high achievement capability in areas such as intellectual, creative, artistic, or leadership capacity, or in specific academic fields, and who need services and activities not ordinarily provided by the school in order to fully develop those capabilities.” [Title IX, Part A, Definition 22. (2002)] Many states and districts follow the federal definition. [Find out more about how giftedness has been defined in the research](#)*

## ***Intelligence***

*The ability to learn, reason, and problem solve. Debate revolves around the nature of intelligence as to whether it is an innate quality or something that is developed as a result of interacting with the environment. Many researchers believe that it is a combination of the two.*

## ***Learning Styles/Learning Preferences***

*Preferred way(s) in which individuals interact or process new information across the three domains of learning identified in the taxonomy of education objectives: cognitive (knowledge), psychomotor (skills), and affective (attitude). An individual’s learning preference/learning style is how he or she learns best.*

### ***Next Generation Science Standards (NGSS)***

*A set of academic standards in science proposed in 2013 that outlines what a student should know and be able to do at the end of each grade. The standards place emphasis on helping students obtain skills and knowledge necessary to succeed in college and careers. Click [here](#) for an [NAGC position statement on the NGSS](#). View a list of [FAQs about standards and gifted education](#).*

### ***Overexcitability***

*A theory proposed by Kazimierz Dąbrowski, a Polish psychologist, psychiatrist, and physician, that suggests that some individuals have heightened sensitivities, awareness, and intensity in one or more of five areas: psychomotor, sensual, intellectual, imaginal, and emotional.*

### ***Social-Emotional Needs***

*Gifted and talented students may have affective needs that include heightened or unusual sensitivity to self-awareness, emotions, and expectations of themselves or others, and a sense of justice, moral judgment, or altruism. Counselors working in this area may address issues such as perfectionism, depression, low self-concept, bullying, or underachievement. View the [NAGC position paper on social-emotional needs of gifted children](#).*

### ***Talent Development***

*Programs, curricula, and services for gifted and talented students that can best meet their needs, promote their achievements in life, and contribute to the enhancement of our society when schools identify students' specific talent strengths and focus educational services on these talents.*

### ***Talent Search***

*A special program that uses out-of-level testing (commonly the SAT or ACT) to identify high-potential students and allow them to participate in a variety of out-of-school activities. These may occur in the form of Saturday or summer courses or distance learning programs. There are four major talent searches in the U.S.: [Duke University's Talent Identification Program \(TIP\)](#), [Northwestern University's Center for Talent Development \(CTD\)](#), [Johns Hopkins University's Center for Talented Youth \(CTY\)](#), and the [Center for Bright Kids \(formerly Rocky Mountain Talent Search\)](#) in Denver, CO.*

## ***Twice-Exceptional***

*A term used to describe a student who is both gifted and disabled. These students may also be referred to as having dual exceptionalities or as being gifted with learning disabilities (GT/LD). This also applies to students who are gifted with ADHD or gifted with autism. [View the NAGC position paper.](#)*

### **Establishing gifts**

**Common Characteristics of Gifted Youth**

Rapid learners	Abstract/complex logical/insightful thinking
Strong memory	Idealism and sense of justice
Large vocabulary	Intense feelings and reactions
Advanced comprehension of nuances	Long attention span and persistence
Largely self-taught	Interest of experimenting and doing things differently
Unusual emotional depth	Divergent thinking (putting things together in different or unusual ways)
Highly sensitive	Keen and unusual sense of humor
Preoccupied with own thoughts	Asks probing questions
Impatient with own and others' inabilities and slowness	Wide range of interests
Highly developed curiosity	

See: Common Characteristics of Gifted Youth, by Dr. Dan Peters, Summit Center  
<https://www.youtube.com/watch?v=eoN2iBDKZx>

## The Ups and Downs of Giftedness

Strength	Flip Side	Possible Consequences
Intense and focused on particular passions	Passions may be very different from those of other children.	Child finds it difficult to discuss interests with other children, who might consider the child's passions "weird." May find acceptance only among adults.
Comprehension is much greater than that of age-mates	Finds age-mates' reasoning and comprehension silly—and says so.	Other children avoid the child; adults find him or her "mouthy." The child loses friends.
Language abilities are advanced for age	Talks "above" age-mates, who don't understand what the child is talking about, or talks too much, not allowing others their turns.	Other children perceive the child as snooty and superior and exclude him or her. The child is lonely.
Creative in thinking	Solves problems his or her own way, rather than the way prescribed by the teacher.	Teacher can feel threatened, view the child as disrespectful of authority, and decide to "clamp down," which sets the stage for rebellion.
Quick in thinking	Easily bored with routine work and may not complete it. On the other hand, the child may zip through work and bounce around the classroom, looking for something else to do.	Teacher may decide that the child is inattentive, negative, or a behavior problem who has a bad influence on other children.
High energy level	May be very distractible, into everything and finishing nothing; may interrupt classroom discussions because there are so many thoughts and ideas he or she wants to talk about.	The child can be worn out by trying to take on too many projects at once. High energy may be mistaken for attention deficit hyperactivity disorder (ADHD). Medication may be suggested to "calm the child down."
Great powers of concentration	Sometimes stays too long on one project; gets lost in detail and misses deadlines.	Poor grades because assigned work is not completed, causing frustration for the child, parents, and teachers.
Adult-level thinking	Adult-level thinking not accompanied by adult-level social skills, such as tact; may say rude or embarrassing things.	Both adults and other children may consider the child rude and avoid him or her altogether. Child becomes isolated.

Published in *Helping Gifted Children Soar*, 2nd Edition. Find this and other resources at:

**[www.GreatPotentialPress.com](http://www.GreatPotentialPress.com)**

Specific characteristics for age groups

- Preschool age (3-6 years)
- Primary school age (7- 11 years)
- Lower secondary level (11-15 years)
- High school (15 -17 years)

Areas of giftedness: mathematics, music, drawing, creatively thinking, leadership,intellectual activity.

## Practice

### 7 types of intelligence

If you have 'Highly developed curiosity' you can test yourself here:

<http://www.edutopia.org/multiple-intelligences-assessment>

<http://psychology.about.com/library/quiz/bl-mi-quiz.htm>

### Preschool age (3-6 years)

Every child has at least seven ways of being smart or seven intelligences. Each way is important. Your child may be stronger in some ways than in others. This section explains how children are smart at different ages in their development. It also has ideas to help children grow in each of these 7 ways. These activities are just ideas to get you started. The most important thing is to have fun with your child while learning. You are your child's first and most important teacher. You will know by watching your child if he likes an activity. If he is bored or wants to do something else, change the activity.

### language (Linguistic) Intelligence

#### Child May Be Good at:

- Creating a private language or an invented one like pig-latin
- Picking up phrases or stories
- Memorizing long strings of words from books or TV
- Telling stories or writing poetry
- Reading at early age, often teaching self

#### How to Encourage:

### Spatial intelligence

#### Child May Be Good at:

- Seeing pictures in her head
- Catching a ball before it hits the ground (anticipates movement in space)
- Looking at a picture and copying the shape with his body
- Drawing in accurate perspective
- Drawing what they see
- Finding her way easily

#### How to Encourage:

### Logical (math) Intelligence



**Child May Be Good at:**

- Seeing patterns
- Organizing, blocks, toys, clothes, shoes
- Noticing how things are same/different
- Playing checkers and chess
- Abstraction, building imaginary worlds

**How to Encourage:**

## **Physical (body) Intelligence**

**Child May Be Good at:**

- Sports
  - Performing skits, puppet shows, and plays
  - Dance, gymnastics, and active play
  - Hands-on activities like finger painting and clay
  - Climbing, running, jumping, skipping, hopping

**How to Encourage:**

## **Musical Intelligence**

**Child May Be Good at:**

- Singing tunes on key
  - Remembering songs just by their tune (without words)
  - Making all kinds of sounds

**How to Encourage:**

## **Social intelligence**

**Child May Be Good at:**

- Making friends
  - Solving quarrels between friends
  - Caring for others
  - Leading others

**How to Encourage:**

## **Self Intelligence**

**Child May Be Good at:**

- Being independent
  - Knowing his/her feelings
  - Finding secret places
  - Doing things on his/her own

**How to Encourage:**

## **Practice 1**

***Select ideas from „How to encourage” list and match to different types of intelligence.***

***Work in groups. Every one group presents one type of intelligence and ways to encourage the child.***

### **How to Encourage :**

- Provide paints, clay, crayons, etc. and make special area for drawing
  - Walk in unfamiliar places and have child draw a map
  - Teach pottery
  - Encourage arts and crafts
  - Sing to child, play tapes and CDs
  - Encourage your child to sing and make up songs to remember other things (like ABC song)
  - Help them to learn to play the piano, or an instrument
  - Find schools that give music lessons (singing, band, orchestra)
  - Provide dolls, puppets, stuffed animals, dress-ups, play money
  - Play board games together
  - Have dinner table discussions
  - Act out favorite stories together
  - Encourage journal writing
  - Provide “how to” books and tapes
  - Take your child to the playground often
  - Trace letters and words on each other’s back
  - Make letters and words from play dough or pipe cleaners
  - Take a walk and read all the words you find during the walk
  - Trace words in the air using first two fingers
  - Provide a computer
  - Give lots of time for day-dreaming
  - Read to child every night
  - Give a library card and visit the library
  - Pin up his/her writing on refrigerator
  - Play word games at night and on trips
  - Give him/her a good dictionary
  - Show how books are important in your life
  - Talk about books at supper
  - Encourage storytelling
  - Write down his stories
  - Make picture books on themes
  - Help child build a collection of books
- Give games—boards games (Monopoly)
- Play cards
  - Conduct experiments (Chemistry)
  - Encourage collecting, observing, categorizing, bugs, rocks, butterflies, etc.
  - Visit nature stores
  - Play math games—multiplication tables or counting , predicting, mysteries

## **Practice 2**

***Describe 7 types of intelligence for other ages:***

- Primary school age (7- 11 years)
- Lower secondary level (11-15 years)
- High school (15 -17 years)

Make list of ideas „How to Encourage” every age group.

## **Practice 3**

***What is different?***

Smart vs Gifted

Gifted vs Intelligent