General Intellectual Ability

Gifted and talented learners with general intellectual ability tend to perform, or show the potential to perform, at remarkably high levels (at least two years above) compared to same age peers in several fields of study. The following are some of the common traits displayed by this group of gifted learners:

- Has an extensive and detailed memory, particularly in an area of interest.
- Uses vocabulary that is well advanced for his or her age.
- Learns new information rapidly, with very few repetitions.
- Is easily bored with routine tasks.
- Uses logic, analytical thinking, and reasoning skills.
- Understands complex, abstract concepts and ideas.
- Has a broad base of knowledge.
- Observes relationships and patterns and makes connections easily.
- Finds and solves difficult and unusual problems, often in creative or unique ways.
- Is highly curious.
- Shows a high degree of concentration in an area of interest.
- Strives toward perfection; is self-critical; is not easily satisfied with his or her own speed and products.
- Prefers to work independently; requires little direction from teachers.
- Displays a keen sense of humor.

Specific Academic Fields

In this area, gifted and talented students exhibit high potential or demonstrate remarkable accomplishment (at least two standard deviations or two years above grade level) in one or more specific fields of study. Some example behaviors include the following:

**Mathematics/Science**

- Is excellent with codes and cyphers, may play and create own system.
- Has a good memory for storing main features of problems and solution. The student often skips steps or does not show all of his or her work as a result.
- Can reverse steps in the mental process.
- Solves problems intuitively and with insight.
- Improvises with science equipment and mathematical methods.
- Is flexible in solving problems.

**Social Studies/Language Arts**

- Engages in intellectual play, uses puns and has a good sense of humor.
- Is original and creative, has unique ideas in writing and/or speaking.
- Suspends judgment, entertains alternative points of view.

<table>
<thead>
<tr>
<th><strong>Bright Child</strong></th>
<th><strong>Gifted Learner</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Knows the answers</td>
<td>Asks the questions</td>
</tr>
<tr>
<td>Is interested</td>
<td>Is highly curious</td>
</tr>
<tr>
<td>Is attentive</td>
<td>Is mentally and physically involved</td>
</tr>
<tr>
<td>Has good ideas</td>
<td>Has wild, silly ideas</td>
</tr>
<tr>
<td>Works hard</td>
<td>Plays around, yet tests well</td>
</tr>
<tr>
<td>Answers the questions</td>
<td>Discusses in detail, elaborates</td>
</tr>
<tr>
<td>Top group</td>
<td>Beyond the group</td>
</tr>
<tr>
<td>Listens with interest</td>
<td>Shows strong feelings and opinions</td>
</tr>
<tr>
<td>Learns with ease</td>
<td>Already knows</td>
</tr>
<tr>
<td>6-8 repetitions</td>
<td>1-2 repetitions for mastery</td>
</tr>
<tr>
<td>Understands ideas</td>
<td>Constructs abstractions</td>
</tr>
<tr>
<td>Enjoys peers</td>
<td>Prefers adults</td>
</tr>
<tr>
<td>Grasps the meaning</td>
<td>Draws inferences</td>
</tr>
<tr>
<td>Completes assignments</td>
<td>Initiates projects</td>
</tr>
<tr>
<td>Is receptive</td>
<td>Is intense</td>
</tr>
<tr>
<td>Copies accurately</td>
<td>Creates a new design</td>
</tr>
<tr>
<td>Enjoys school</td>
<td>Enjoys learning</td>
</tr>
<tr>
<td>Absorbs information</td>
<td>Manipulates information</td>
</tr>
<tr>
<td>Technician</td>
<td>Inventor</td>
</tr>
<tr>
<td>Good memorizer</td>
<td>Good guesser</td>
</tr>
<tr>
<td>Enjoys sequential presentation</td>
<td>Thrives on complexity</td>
</tr>
<tr>
<td>Is alert</td>
<td>Is keenly observant</td>
</tr>
<tr>
<td>Is pleased with own learning</td>
<td>Is highly self-critical</td>
</tr>
</tbody>
</table>

Parents and schools are partners. Communication between home and school is essential to your child’s success. You are encouraged to meet with your child’s teacher to ask questions and share insights and concerns.

**Suggested questions to ask:**
- What services are available for gifted and talented students in this school?
- In what grade level do gifted education services begin?
- In what subject areas are gifted and talented services provided?
- How are these classes differentiated to meet my child’s needs?
- Are there specialized materials (e.g., textbooks, software, etc.) used in the gifted education program?
- Will my child be grouped with other highly able students?
- How do teachers differentiate for highly able students in mixed ability classrooms?
- Has my school’s gifted and talented resource teacher received specialized training or certification in gifted education?
- How can I become involved?

*Tips for parents:*
- Help your child explore his/her passion.
- Foster a love of reading by reading aloud to your child, subscribing to newspapers at home, or taking your child to libraries and bookstores for reading material.
- Offer music lessons. Research shows that the study of music enhances brain development. Children enjoy a sense of accomplishment as they learn to play an instrument.
- Encourage your child to be kind and respectful of others. Also, encourage them to take an interest in helping the community around them.
- Teach them organization, planning, time and resource management, and other skills to make effective use of their abilities.
- Explore opportunities where they can be accepted for who they are, such as being with their intellectual peers.

There are numerous organizations that focus on gifted and talented children and adults. Below is a list of a few of the state and national organizations that support research, advocacy, and/or education of the gifted as well as links to articles and websites for parents of gifted learners.

**State & National Organizations**

Maryland Coalition for Gifted and Talented Education (MCGATE) – [http://www.mcgate.org](http://www.mcgate.org)
Maryland Educators of Gifted Students (MEGS) – [http://www.megsonline.net](http://www.megsonline.net)

**Websites and Articles**

A Nation Deceived Report on Acceleration
Davidson Institute for Talent Development article database on grouping practices
Helping gifted children cope with perfectionism
[Hoagies Gifted Education Page](http://www.hoagiesgifted.com) - Articles on gifted issues for parents, educators and students
Motivating gifted underachievers
National Association for Gifted Children (NAGC) [Common Myths in Gifted Education](http://www.nagc.org/commongiftededucation)
Supporting Emotional Needs of the Gifted (SENG) articles on parenting the gifted child
Top 10 Myths in Gifted Education [video](http://www.marylandpublicschools.org/MSDE/programs/giftedtalented/) from the Maryland State Department of Education
[Uniquely Gifted](http://www.uniquelygifted.org) Resources for Gifted Children with Special Needs: ADD/ADHD, Learning Disabilities (LD), Asperger Syndrome, etc.
SUMMER PROGRAMS AND ENRICHMENT OPPORTUNITIES K-12

*This is for informational purposes only and inclusion on this list does not indicate endorsement.

**Army Educational Outreach Program** - Gains in the Education of Mathematics and Science (GEMS) – GEMS is a paid summer internship that allows students unique hands-on science experiences in real Army laboratories. [http://www.usaeop.com/programs/gems/](http://www.usaeop.com/programs/gems/)

**Baltimore Museum of Art Free Family Sundays** – Every Sunday at 2 p.m., enjoy different activities – sketching tours, hands-on workshops, gallery tours, and more – designed just for families. [http://www.artbma.org/families/sundays.html](http://www.artbma.org/families/sundays.html)

**Destination Imagination (DI)** - An extracurricular activity that encourages teams of learners to have fun, take risks, focus, and frame challenges while incorporating STEM, the arts, and service learning in collaborative problem solving challenges. [http://www.destinationimagination.org/who-we-are/](http://www.destinationimagination.org/who-we-are/)

**Exploration Art School** [http://www.explorationartschool.com](http://www.explorationartschool.com) - Offers studio arts classes during the school year and summer camps.

**Fun with Foreign Language** [http://www.funwithforeignlanguage.com](http://www.funwithforeignlanguage.com) - Offers Spanish and Mandarin Chinese classes during the school year.

**Harford Community College** – See the credit and non-credit course listings.

**Johns Hopkins Center for Talented Youth Talent Search** - [http://cty.jhu.edu/](http://cty.jhu.edu/)

**Maryland Institute College of Art** – Young People’s Studios for Elementary and Middle School Students: [http://www.mica.edu/Programs_of_Study/Programs_for_Children_and_Teens/Young_Peoples_Studios.html](http://www.mica.edu/Programs_of_Study/Programs_for_Children_and_Teens/Young_Peoples_Studios.html)

High School Students: [http://www.mica.edu/programs_of_study/programs_for_children_and_teens/programs_for_high_school_students.html](http://www.mica.edu/programs_of_study/programs_for_children_and_teens/programs_for_high_school_students.html)

**Maryland Summer Centers** - The goal of the Maryland Summer Centers is to provide opportunities for Maryland’s gifted and talented students to work with like-minded peers in an area of ability or interest. [http://www.marylandpublicschools.org/MSDE/programs/giftedtalented/centers.htm](http://www.marylandpublicschools.org/MSDE/programs/giftedtalented/centers.htm)

**Merlin’s Pen Mentors in Writing Program** – A distance learning option for serious teen writers. The Mentors program matches student writers in grades 6-12 with published writers and editors for personalized one-on-one mentoring. [http://www.merlynspen.org/contentmgr/showdetails.php/id/1763](http://www.merlynspen.org/contentmgr/showdetails.php/id/1763)
National Security Agency’s Gifted and Talented Program STEM for High School students - This program is designed for high school students who have demonstrated an aptitude for Engineering, Math, and Science.
http://www.nsa.gov/careers/opportunities_4_u/students/high_school/stem.shtml

Towson University College for Kids Camp – Summer courses allow children with exceptional intellectual ability to extend their existing fund of knowledge through first-hand experimentation and creative experiences.  http://www.towson.edu/collegeforkids/index.htm

Towson University Saturday Morning Science Program – Free, open to the public, and suitable for all ages.
http://www.towson.edu/hackermanacademy/Calendar_of_Events/Saturday_Morning_Science_at_TU/

University of Maryland Young Scholars Program - The Young Scholars Program invites high school students with exceptional ability and promise to an outstanding pre-college experience at the University of Maryland.  http://oes.umd.edu/index.php?slab=young-scholars

Upper Chesapeake Summer Center for the Arts (UCSCA) Provides an 8-day residential summer camp for students in grades 7-12 at Washington College in Chestertown, Maryland.
http://edservices.ccps.org/finearts/ucsca.html

Young Playwrights Inc. – Writers younger than 18 years submit original plays. Finalists attend the Young Playwrights Writers Conference where they work with theater professionals and have the chance to have their play produced Off-Broadway.  Tips and workshops are also available.
http://www.youngplaywrights.org/for-writers/

Youth for Astronomy and Engineering – a program at the Space Telescope Science Institute (STScI) for youth interested in astronomy and engineering as a career.
http://www.stsci.edu/institute/conference/youthae
## APPENDIX G

### GLOSSARY

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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</thead>
<tbody>
<tr>
<td><strong>Ability Grouping</strong></td>
<td>Enabling students with advanced abilities and/or performance to be grouped together to receive appropriately challenging content instruction. This type of grouping allows for more appropriate, rapid, and advanced instruction, which matches the developing skills and capabilities of GT students. Ability grouping is not the same as “tracking” because it is flexible and not fixed. Students should be able to move in and out of ability groups as they show need and/or growth.</td>
</tr>
<tr>
<td><strong>Acceleration</strong></td>
<td>Acceleration is an academic intervention that moves students through an educational program at a rate faster or at an age that is younger than typical. Acceleration helps match the level, complexity, and pace of the curriculum with the readiness and motivation of the student. It is about creating a better match between a student and the level and pace of instruction.</td>
</tr>
<tr>
<td><strong>Aptitude</strong></td>
<td>Refers to the degree of readiness to learn and to perform well in a particular situation or domain.</td>
</tr>
<tr>
<td><strong>Cluster Grouping</strong></td>
<td>A full-time grouping assignment for highly gifted students in the regular heterogeneous classroom. Typically, four to eight gifted students with similar needs and abilities are “clustered” in the same classroom, which allows one or two teachers per grade level to more efficiently differentiate assignments for a group of advanced learners.</td>
</tr>
<tr>
<td><strong>Curriculum Compacting</strong></td>
<td>After showing a level of proficiency in the basic curriculum, a student can be allowed to exchange instructional time for other learning experiences. This reduces the unnecessary repetition for gifted learners who by nature need few or no repetitions of content for mastery.</td>
</tr>
<tr>
<td><strong>Differentiation</strong></td>
<td>Modifying curriculum and instruction according to content, pacing, and/or product to meet unique student needs in the classroom.</td>
</tr>
<tr>
<td><strong>Early Entrance</strong></td>
<td>Students who enter Kindergarten or grade 1 at an age that is younger than typical.</td>
</tr>
<tr>
<td><strong>Enrichment</strong></td>
<td>Activities that add or go beyond the existing curriculum. Activities may occur in the classroom or in a separate setting. Enrichment lessons and activities are beneficial to all learners, not just those identified as gifted and talented.</td>
</tr>
<tr>
<td><strong>Grade Acceleration</strong></td>
<td>Shortens the number of years a student remains in the K-12 school system. Student does not remain with same-age peers. Appropriate for the most highly gifted students.</td>
</tr>
<tr>
<td><strong>Pre-Assessments</strong></td>
<td>A necessary component of curriculum compacting and efficient differentiation. Students are assessed prior to instruction to determine content they already know so that instruction may then be tailored to their needs and allow them to progress and learn something new.</td>
</tr>
<tr>
<td><strong>Subject Acceleration</strong></td>
<td>Provides the student advanced content, skills, and understandings before the typical age or grade level. Students may remain with peers of same age and grade or may participate with a higher grade level class for particular content area instruction.</td>
</tr>
</tbody>
</table>