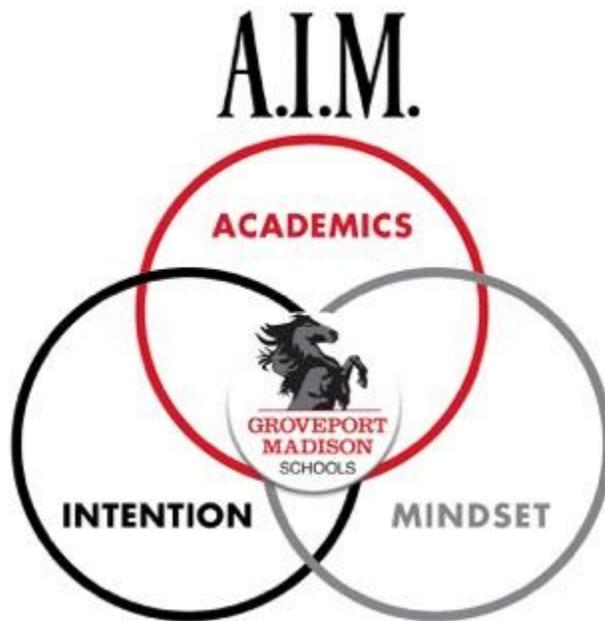


# Gifted Handbook

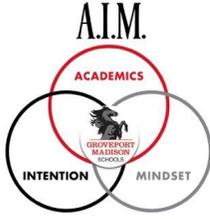
## Student Edition



# Groveport Madison Gifted Student Handbook

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Dear Gifted Student,

Our mission in the Groveport Madison Schools is “to build a community of learners, leaders and responsible citizens.” We are so excited to have you as a part of our gifted community and for all the opportunities you will have as a Cruiser. In this guide, you will learn about our gifted program, characteristics of gifted learners, and opportunities for continued learning and growth inside and outside of the classroom.

Our gifted specialists and classroom teachers continue to learn and grow from you, as you do from them. They seek out opportunities to provide you with challenge and choice and work to make you critical thinkers, so you can succeed as a lifelong learner. We believe in each one of our students and their ability to persevere and become a successful student and citizen. If you need guidance along your learning journey, please never hesitate to reach out to one of your gifted specialists for assistance. We hope you find this handbook to be a helpful guide to your continued learning and growth.

Yours in Education,

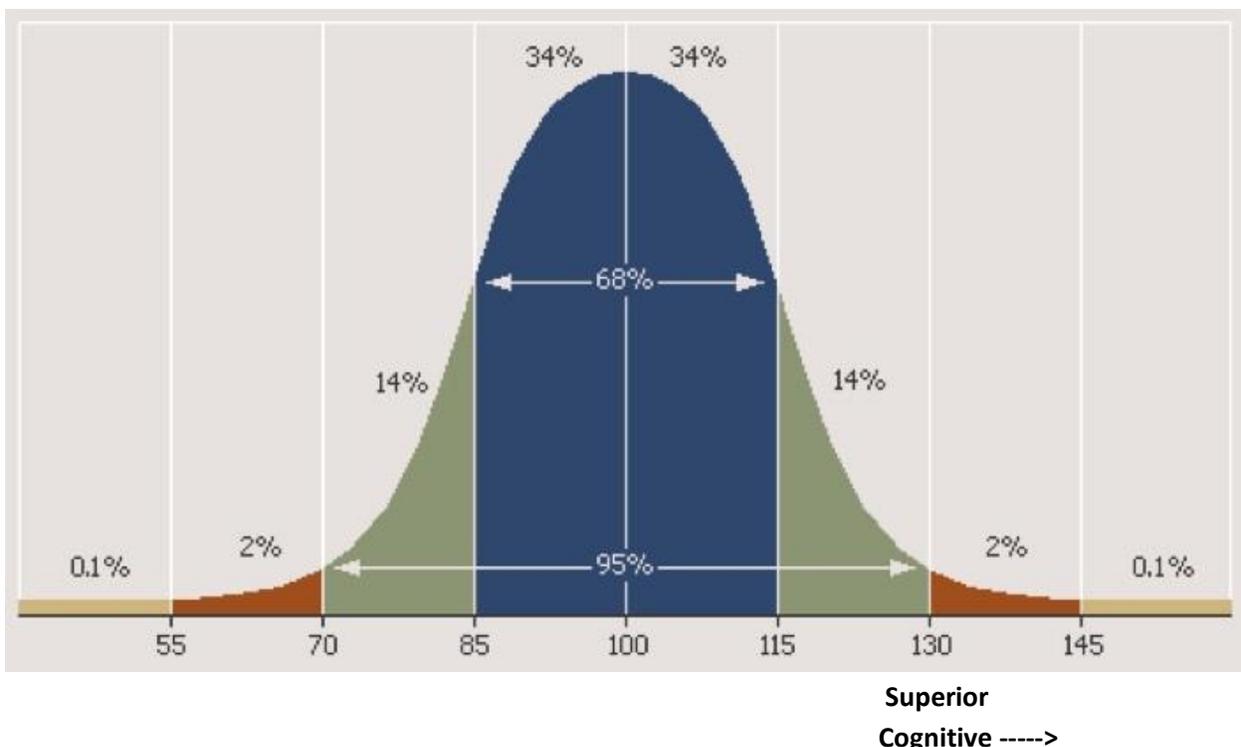
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**What Does it Mean to Be Gifted?**

Students are gifted when they are significantly above the norm for their age. Technically, this means they have scored in a certain range on an assessment. More explanation on the specific areas are outlined below.

### Superior Cognitive Ability

You have scored two standard deviations above the norm on a bell curve on an approved ability test which tests thinking overall as opposed to a specific area (such as reading or math). In our district, we use the Inview for our whole group testing. Some individuals have also been tested using other assessments approved by the state of Ohio. The identification score depends upon the test but is between a 125 and a 130.



### Reading, Math, Science and Social Studies

To identify in these areas, a student must score at the 95th percentile or above. This doesn't mean a 95 percent on a test. It means you have scored above 95% of the other students who have taken the same assessment in a normed group. \*The AIR test we take for the state of Ohio is not one of these types of tests. In our district, tests we take include the MAP assessment and the Terra Nova assessment. Other tests from the Ohio approved list can also be used.

## **Creativity**

The identification process for creative thinking identification in Ohio has two steps including a cognitive score on an ability test (the same type we use for superior cognitive identification). Students must score one standard deviation above the norm or around a 112- 115. The next step includes a checklist of behaviors which is completed by an educator who is familiar with the student's creative thinking ability. This can be a classroom teacher or a teacher in the area of the arts who has worked closely with the student.

## **Visual and Performing Arts**

To identify in this area, a student starts off with a referral in music, art, drama or dance. A student can actually refer themselves or be referred by a parent, teacher or even another student. A teacher who is familiar with the student in the specific area of referral will then complete a checklist. Students scoring high enough on the checklist will then do an audition (performing arts) or a portfolio (visual art). The audition or portfolio will be scored by someone who is not familiar with the work of that student, so they can give an objective viewpoint about the work of the student.



## FAQs of Identification for Students

### How did I become gifted?

Gifted ability is something that a student is born with. We call it an aptitude. The giftedness was demonstrated through student performance on an assessment in one or more areas.

### Can I become ungifted?

In Ohio, once you are identified as gifted in an area that identification stays with you for the rest of your school career. This doesn't mean, however, that you won't have to work hard in the area where you are identified. Giftedness is an aptitude that you must continue to work on throughout your life.

## Differences Between High Achievers, Gifted Learners and Creative Thinkers

Created by Bertie Kingore

<b>A High Achiever...</b>	<b>A Gifted Learner...</b>	<b>A Creative Thinker...</b>
Remembers the answers	Poses unforeseen questions	Sees exceptions
Is interested	Is curious	Wonders
Is attentive	Is selectively mentally engaged	Daydreams; may seem off task
Generates advanced ideas	Generates complex, abstract ideas	Overflows with ideas, many of which will never be developed
Performs at the top of the group	Is beyond the group	Is in own group
Learns with ease	Already knows	Questions: What if...
Needs 6 to 8 repetitions to master	Needs 1 to 3 repetitions to master	Questions the need for mastery
Enjoys the company of age peers	Prefers the company of intellectual peers	Prefers the company of creative peers but often works alone

Completes assignments on time	Initiates projects and extensions of assignments	Initiates more projects that will ever be completed
Enjoys school often	Enjoys self-directed learning	Enjoys creating
Is highly alert and observant	Anticipates and relates observations	Is intuitive
Is pleased with own learning	Is self-critical	Is never finished with possibilities
Gets A's	May not be motivated by grades	May not be motivated by grades

One important thing to understand is that **a child can belong to more than one group**. That is, it is possible for a high achiever to also be a gifted child. It's just that not every high achiever is gifted. In that same vein, every gifted learner is also not a high achiever. There is actually a large percentage of gifted learners who are underachievers. In the same way, not every gifted learner is also a creative thinker, but it is unlikely that a creative thinker would not also be a gifted learner.

### **Gifted in Groveport Madison**

The Ohio Department of Education publishes Gifted Operating Standards that all Ohio districts must follow when identifying and designing services for gifted children. While gifted identification is required by law, gifted services are not mandated.

Through the use of Ohio's Content Standards, gifted programming is focused on evidence-based practices which increase the rigor of instruction, strengthen cognitive abilities, increase creativity, and foster the social and emotional development of gifted learners. Emphasis is placed on enhancing interpersonal and technical communication in the 21st Century for gifted youth to realize their potential.

The Groveport Madison Gifted and Talented Team is dedicated to providing appropriate and challenging services for our gifted youth. Students must first meet gifted identification criteria set forth by the State of Ohio and then meet the requirements set by the GMLS to qualify for specialized programming.

## **Current Programming Options**

*\*We are consistently examining the needs of our students and programming can change to ensure opportunities align to gifted needs.*

GMLS is dedicated to expanding opportunities for all students to reach their potential. With this goal in mind, we work to serve our students through a strong continuum of services which begins in the second grade and continues until our students graduate.

### **Elementary Services**

Our team of Gifted Intervention Specialists, housed at Sedalia Elementary, teaches all of our elementary students in grades 2-5. These are educators who have received specialized training in order to meet the needs of gifted learners. Students will be in special course sections that will include only other students with their same areas of identification who are at similar levels of understanding. Through these groupings, our specialists are able to work with both the academic and social-emotional needs of our gifted students. Students who are identified in reading and/or math receive services in their area of identification. Superior cognitive students receive services in both reading and mathematics. More specific information about our programming is explained below.

### **Grades 2-5 Reading**

Our elementary reading service includes the William and Mary Literature Units created specifically for gifted learners, as well as additional novel study aligned to both the grade level standards, as well as above level standards. Gifted learners will gain exposure to a variety of genres and work on their ability to think critically, provide evidence from reading, and analyze what they read. They will engage in rich discussion with like-minded peers on a daily basis. Fourth and fifth grade students will also enhance their grammatical understanding through our Caesar's English program. By the end of their elementary career, 5th grade students will extend their understanding by beginning work with the 6th grade standards.

### **Grades 2-5 Math**

The Gifted Specialists will adjust the instructional level for our gifted math students by using resources appropriate for young gifted math learners, including our gifted math text adoption,

M3 Mentoring Mathematical Minds. Through this math instruction students will be exposed to content above level and will prepare for their path of acceleration in gifted services. The use of hands on learning and exploration aids our students in their growth and development as mathematical thinkers. If successful on this path through the elementary years, these students will have the opportunity to take 6th grade math while still at the elementary school.

**Middle School**

GMLS Middle School Gifted Programming, housed at Groveport Madison North, continues through grades 6, 7 and 8, for math, reading and science. Gifted identified students in each of those areas, as well as those with superior cognitive abilities, participate in honors level courses every day for each identified subject area. The Gifted Intervention Specialist may be the full-time instructor for the service. Students will work at a faster pace in these specialized courses with curricular materials created specifically for gifted learners.

**High School**

Our high school services involve a variety of both Honors and Advanced Placement Courses (AP) in which students may earn college credit while still in high school. Gifted students may also pursue College Credit Plus, credit flex, courses taken through the career center as well as other opportunities that enable them to earn credits in non-traditional ways, graduate early, accelerate through content, or advance their understanding of specific content. Teachers of these courses receive specialized professional development to aid them incorporating rigor, depth, and complexity into coursework.

**Groveport Madison District Service Plan**

The district ensures equal opportunity for all district students identified as gifted to receive any services offered by the district for which the student meets the criteria.

District Name for Service	Service Setting	Grade Level	Criteria for Service	Service Provider
Gifted Single Subject Self Contained	<b>Self-Contained Classroom</b> <i>(Single Subject)</i>	2-8	<u>2-5</u> gifted math sections: superior cognitive or Math ID for math courses <u>2-5</u> gifted reading sections- superior cognitive or reading ID for reading course sections	All Gifted Specialists

			6-8: superior cognitive or math OR reading OR science ID for corresponding areas of service.	
6-12 Honors Courses	<b>Regular Classroom Honors</b>	6-12	Gifted identification in mathematics, reading, S.S. or science; OR superior cognitive ability	Regular Classroom Teachers with GIS and Gifted Coordinator as support and providing PD.
Single Subject Acceleration with GIS as the teacher of Record	<b>Self-Contained Single Subject</b>	5, 8	Meets district single subject acceleration and data requirements Acceleration Committee Agreement	GIS 5/6 compacted math 8 Algebra 8/9 Compacted ELA
AP Coursework	<b>Regular Classroom AP</b>	11-12	Gifted identification in superior cognitive ability or SA/M, or Reading, or Science, or SS (the subject area corresponding with the course of enrollment)	AP-trained teacher with authorized AP course and training by Gifted Coordinator or Specialist
CCP Approved course (varies)	<b>Regular Classroom CCP</b>	7-12	Gifted identification in superior cognitive ability or any SA/M,R,Sci., SS in the subject area corresponding with the course of enrollment	CCP Trained teacher with authorized course

### Growth Mindset Overview for Gifted Learners

#### What is Mindset

Mindset is our belief about our own abilities and potential.

#### The Research about Growth Mindset in a Nutshell

Growth mindset is a belief system about our own abilities and potential based on the work of Dr. Carol Dweck. Dweck believed that our intelligence can be improved upon with effort and the right strategies and tested her theory with hundreds of students by giving them different types of puzzles and tracking their results based on the way they were praised.

- Hear Carol talk about her research here: [Growth Mindset](#)
- Explanation of praise related to development is here: [The Effects of Praise on Development](#)

### So what is a growth mindset?

Growth mindset is a belief system that suggests that one's intelligence can be grown and developed with persistence, effort and a focus on learning.

### What other mindset is there?

Many people have a "fixed mindset" which is a belief system that a person has a predetermined amount of intelligence, skills or talents and can not improve.

### Growth Mindset in Practice





<b>INSTEAD OF.....</b>	<b>TRY THINKING....</b>
I'm not good at this	What am I missing?
I give up	I'll use a different strategy
It's good enough	Is this really my best work?
I can't make this any better	I can always improve
This is too hard	This may take some time
I made a mistake	Mistakes help me to learn
I just can't do this	I am going to train my brain
I'll never be that smart	I will learn how to do this
Plan A didn't work	There's always Plan B
My friend can do it	I will learn from them

### What to Do When You Have Extra Time

Things to do when you are done

- Read your favorite book
- Create an alphabet book about your favorite concept
- Write an acrostic poem of your name
- Write a letter to a friend, teacher, celebrity or athlete
- Create a gratitude journal and write 2 things you are grateful for each day
- Write a story about yourself
- Write an interview you would do if you could meet someone who impresses you
- Write a play (original) or from your favorite story
- Write a biography about a friend or family member
- Create a new planet, draw it and write about it
- Draw detailed portraits of celebrities or friends
- Invent something for a current problem
- Research colleges you might want to attend some day
- Research your favorite celebrity
- Create a mind map of your thoughts
- Organize your desk
- Create a calendar for your month of all parts of your life – color code to keep track
- Make a list of rules for something
- Create math problems related to a real world concept

- Research and plan an imaginary vacation to a place you would like to go someday
- Write a set of directions for a drawing and give them to a friend to try
- Create a game to help study for a topic you are learning about
- Make a list of learning websites
- Make a list of learning Apps like the one below
- Create a word puzzle

### **Learning APPS to Try**

#### **Creative and Critical Thinking**

Genius Game - With unique gameplay, classic graphics and ingenious levels, Genius Game is an addictive original casual game for everyone.

Fit Brain Kids - Sparky's Adventures offers a first-of-its-kind cognitive approach to child learning and brain development. The app provides a fun and healthy collection of brain games for children ages 2 to 8.

Toy Physics - Enter the whimsical world of Toy Physics where you must draw lines to guide the falling toys into the toy crates below. The toys drop from the top and encounter many different types of physics objects on the way down making it challenging for you to get them into the moving crates.

Chess: Free! - This chess app is EASY and is guaranteed to improve your chess.

How does it work? - It's really simple: you just play! The coach shows you the moves a Grandmaster would pick. Not just one move, but the 4 best moves.

Clkwrk Brain - Discover a series of unique mini-games especially created to test various cognitive abilities such as visual, spatial, logic, language, arithmetic, and memory. Everything in

the game has been lovingly hand-painted with influences from Victorian Steampunk and Mayan art.

Puzzle Retreat - The rules are simple: Slide blocks to fill all the holes in the grid and use all the blocks. The challenge comes from working out the correct order to slide the blocks and really ramps up with the addition of special blocks including Fire Blocks, Stop Blocks and Arrow Blocks, which alter the direction of sliding blocks.

### **English Language Arts (ELA and Social Studies)**

Instant Poetry - Have fun creating your own beautiful poetry, with your own pictures as backgrounds! Tap a button to pop up some words, and then drag them around the screen to create your masterpiece. Send your creations to your friends to make them smile!

7words - Each bite-size puzzle consists of 7 clues, 7 mystery words, and 20 letter groups. Find the mystery words by deciphering the clues and combining the letter groups.

Spelling City – VocabularySpellingCity is a fun way to learn spelling and vocabulary words by playing engaging learning games using any word list. The most popular activities are Spelling TestMe, HangMouse, and our vocabulary games, available to Premium Members. The most popular word lists are Sound Alikes, Compound Words, Hunger Games and SAT Words.

Bluster - Breeze through vocabulary building with Bluster! This word matching game develops vocabulary and word understanding for school-aged children, or anyone brave enough to battle the elements.

Montessori Geography - Learn the names and locations of all the fifty states in America with this app that complements the geography materials used in the Montessori Classroom!

Geobee - Based on the National Geography Bee, in the multiple-choice round, answers come from a library of more than 1300 National Geographic Bee questions. In the map challenge round, you zoom, pinch and tap your way to find spots on an interactive map from a catalog of 1000+ locations. For an added challenge, bonus rounds include compelling National Geographic photographs where you have to locate what's in the photo on the interactive map...only we don't tell you where the photo was taken or what is in the picture.

### **Mathematics & Science**

Khan Academy - Khan Academy allows you to learn almost anything for free. Our iOS app is the best way to view Khan Academy's complete library of over 4,200 videos and articles. We cover

a massive number of topics, including K-12 math, science topics such as biology, chemistry, and physics, and even the humanities with playlists on art history, civics, and finance.

**Singapore Math** - Allow your child to visualize even the most complex math word problems with Singapore Math, Bar Models. This activity uses the signature Singapore math method for problem solving and teaches children in grade 5 how to visually represent word problems in a fun and interactive way.

**Mathlands** - Kids are too often faced with math exercises that are mechanical and dull. They learn to solve problems without any real understanding of the underlying mathematics. Mathlands was designed by game lovers and teachers to remedy this problem. In this interactive app, kids will be asked to exercise logical and critical thinking but in the context of gameplay and puzzle-solving. The concept is called "learning through play" and it will change children's attitudes towards math.

**King of Math** - King of Math is a fast-paced mathematics game with lots of fun and diverse problems in different areas. Starting as a male or female farmer, you level up your character by answering math questions and improving your total score. New character design and music for each of the ten levels. Collect stars, get achievements and compare your scores against your friends and players all over the world!

**Smithsonian** - Smithsonian Mobile is your digital mobile guide to the Smithsonian, built collaboratively with our visitors. Find out what's on where, discover highlights, search our collections, access tours, podcasts and other apps. Add tips and photos from your visit for other visitors, or share your experiences and photos with Twitter and Facebook followers and friends.

**NASA** - The NASA App showcases a huge collection of the latest NASA content, including images, videos on-demand, NASA Television, mission information, news & feature stories, latest tweets, ISS sighting opportunities, satellite tracking, Third Rock Radio and much more.

**Earthviewer** - EarthViewer is like a time machine for exploring Earth's deep history. Based on the latest scientific research, it lets you scroll through the last 4.5 billion years with your fingertips. Follow a favorite landmark, be it Greenland or New York City, as its position shifts through time, or watch a famous fossil like Tiktaalik make an incredible journey from its origin to its current location. Layer your view of shifting continents with data on atmospheric composition, temperature, biodiversity, day length, and solar luminosity, to get a more complete view of our dynamic planet.

**3D Cellstrain** - Learn about the cell and all its structures using our new 3D Cell tool. Enjoy the ability to rotate the cell 360 degrees and zoom in on any cell structure. Choose from our list of

cell structures to learn more about how each structure functions and relates to the other components of the cell. Dive even deeper and create your own stained cell image by using Molecular Probes™ products. There are over 250 image combinations to explore! Once you have created an image you can get help from our tech support team or email the creation to a colleague. This is a great tool for anyone interested in Biology, Biochemistry, or the Life Sciences in general.

### **About Gifted Kids by Gifted Kids from Groveport**

#### **What do you like best about being gifted?**

##### Elementary Students Shared

- The teachers I get to work with
- Having fun above level reading topics
- Being smart and really learning
- I like getting to work at my pace and level
- Being challenged
- I have a lot of confidence in myself
- Learning things above my grade level

##### Middle School Students Shared

- Getting to be challenged and presented with new ideas
- Working above my grade level and learning faster
- The amount of homework sometimes

##### High School Students Shared

- Having the drive to learn something new & master it
- Teachers in my honors classes
- Being able to get ahead in my credits by taking difficult classes earlier
- Being able to take advantage of higher programs and more opportunities
- It makes me feel empowered

#### **What is the hardest thing about being gifted?**

##### Elementary School Students Shared

- Trying to complete harder, newer things
- Saying big words

- Turning things in on time
- High expectations
- It can be more stressful
- Lots of writing
- Doing things on your own

#### Middle School Students Shared

- I worry that the work will be too hard for me and I won't get the results and benefits that I want towards my peers and education
- The expectations. Everyone always expects the best from you.
- Stress
- Being how everyone expects you to be
- The challenges
- It is harder to complete work quickly because the work is harder
- The pacing of the work can be difficult
- Sometimes you feel like you can't make mistakes

#### **What helps you be successful in class?**

##### Elementary Students Shared

- My brain
- Listening to the teacher
- Using all the posters and signs around me
- Working on everything I need to do
- Lots of books!
- Motivational quotes
- Communicating with my classmates

##### Middle School Students Shared

- Paying attention and being engaged by activities
- I need a stress free environment and teachers who help deepen my understanding if I am struggling
- Remaining calm and trying to get things done before they are due

##### High School Students Shared

- Engaging challenging work
- Being able to do more activities than packets
- Paying attention and taking notes I can study
- Asking questions to better understand the content

- Paying attention
- When I am in an environment where I am comfortable

### **What helps you be successful out of class?**

#### Elementary Students Shared

- You've got to find something to entertain yourself
- Reward yourself
- Practicing the work
- My self esteem
- Having a Growth Mindset!

#### Middle School Students Shared

- Take time away from anything school related and set aside a period of time for you.
- Talking to people
- My family and friends
- Being able to relate to other gifted students
- Doing homework and projects
- Being positive when I am worried about my work
- My desire to be a better person
- Going to a quiet place to clear my mind

#### High School Students Shared

- Organization and keeping busy
- Limiting distractions at home and being able to focus on my work
- Going on walks, bike rides and listen to music to decompress
- Studying
- When I am praised for my accomplishments and encouraged to keep working hard

### **What other advice do you have for gifted students?**

#### Elementary Students Shared

- To keep doing your best
- Take your time, if you rush you will not get it right.
- Do what scares you until it doesn't.
- Believe you can do it!
- Work on your math facts at home!
- The work will be hard but if you take time to get into it it is really rewarding
- Try new things and do not object because it could be fun!

### Middle School Students Shared

- Do everything you can
- Effort is best
- Don't overstress
- Trust your instincts, you are here for a reason
- Practice Makes perfect
- Try and manage stress and not give up
- Get help if you need it, don't suffer in silence
- Stick with your like minded friends and help one another
- Voice your opinions and never be afraid to do well
- Agree to disagree with those who don't share all of your morals and values

### High School Students Shared

- Do the work on time every week
- Stay organized
- Accept every challenge!
- Learn to study! It is only easy for so long; eventually school is about who works the hardest, (weather or not you are smart).
- Don't procrastinate or allow yourself to get over distracted
- Make sure you have a way to decompress and let go of weekly stresses; doing this will allow for a healthier mind and quality grades in advanced classes.
- Don't bite off more than you can chew.
- Never stop giving your best effort!

## **Publications and Educational Opportunities for Gifted Students**

- Adderholdt-Elliott, Ph.D. *Perfectionism: What's Bad About Being Too Good*. Free Spirit Publishing 1987.
- Barrett, Susan L. *It's All in Your Head*. Free Spirit Publishing, 1992.
- Berger, Sandra L. *College Planning for Gifted Students*. Prufrock Press, 2014.
- Fonseca, Christine. *101 Success Secrets for Gifted Kids*. Prufrock Press, 2011.
- Galbraith, Judy. *The Gifted Kids Survival Guide (for ages 10 and under)*. Free Spirit Publishing, 2009.
- Galbraith, Judy & Deslisle, Jim, Ph.D. *The Gifted Teen Survival Guide: A Teen Handbook*. Free Spirit Publishing, 2011.

- Hipp, Earl. *Fighting Invisible Tigers: A Stress Management Guide for Teens*. Free Spirit Publishing, 1985.
- Martin, Donald. *How to be a Successful Student*. Martin Press, 1988.
- McCutcheon, Randall. *Get Off My Brain: A Survival Guide for Lazy Students*. Free Spirit Publishing, 1985.
- Peters, Dan. *From Worrier to Warrior: How to Conquer Your Fears*. Great Potential Press, 2016.
- Schultz, Robert A. & Delisle, James R. *If I'm So Smart, Why Aren't the Answers Easy?* Prufrock Press, 2012.

## **Educational Opportunities**

### **College Credit Plus (Formerly Post Secondary Enrollment Options)**

Ohio Senate Bill 140 has enacted Section 3365.02 of the Revised Code which establishes a Post-Secondary Enrollment Option Program for eligible students. This program was revised to create the College Credit Plus program. Beginning as early as 7th grade, students may take nonsectarian courses at a post-secondary institution and receive high school and/or college credit. Acceptance by a post-institution is required. For more information regarding College Credit Plus, plan to attend one of the information meetings this winter or talk to your guidance counselor.

### **Credit Flexibility & VCAP**

Students in any grade who are capable of the work may apply to earn high school credit for courses taken in non-traditional ways. This may include, but is not limited to, testing out of a course, taking the course online from a third-party provider, independent study, or summer programs. Applications for credit must be made and approved PRIOR to completing the proposed plan. Contact your high school guidance counselor for more information about the credit flexibility policies for CCS.

## **Podcasts and Websites for Enrichment**

### **Podcasts**

Apple Computer's iTunes Store offers free podcasts for a variety of topics. iTunes can be downloaded onto any home computer for free from the Apple website. Browse the education

podcasts for radio-style lessons or search for the ones below. For security purposes, always preview a podcast. Apple marks questionable podcasts with the label “Explicit” so they can be avoided by parents and children. Still, please use discretion when downloading any content from the internet.

Some possible podcasts include:

- Learn Italian Pod – 15 minute Italian lessons.
- French for Beginners – Short lessons include printable vocabulary sheets and have been labeled “Clean” for content, etc.
- LearnChinesePod.com – The few existing lessons are about 10 to 25 minutes in length.
- Mandarin Chinese with Serge Melnyk – Basic conversational Chinese lessons ranging from 10 to 30 minutes in length.
- My German Class – There are 20 video lessons in conversational German.
- Insta Spanish Lessons – This podcast teaches colloquial Spanish.
- Japanese Pod 101 – There are nearly 100 beginner and intermediate lessons in the cast. In addition to language and culture, it talks about current events and may be better suited to high school students.
- SAT, ACT, GRE Test Prep Vocabulary – These mini-lessons include 5 new vocabulary words a day for test preparation.
- Big Story Time – About 50 short bedtime stories for kids read by kids.
- Calculus Cast – This series of video casts deal with multivariable calculus skills.

There are also many podcasts available from specific schools of all levels and backgrounds. Many of them contain single lessons from teachers or single casts with students sharing projects they have completed and teaching others what they have learned.

### **iTunes U**

Apple Computer’s iTunes U store offers coursework from K-12 institutions, public organizations, and colleges all around the world. Some courses and resources are entirely free. Other offerings are lectures, seminars, or portions of courses and include audio, video, and even some documents or assignment sheets. Use the iTunes store on your computer or the iTunes U app on your mobile device to access the content. These programs would be ideal for enriched study, independent projects, or as instructional content as part of credit flexibility proposals. For security purposes, always preview a course. Apple marks questionable content with the label “Explicit” so they can be avoided by parents and children. Still, please use discretion when downloading any content from the internet.

### **Massive Online Open Courseware (MOOCs)**

MOOCs are online courses available free of charge through universities or other organizations. They do not result in a transcript or official grade, but they can be a source of content information for independent study, personal interest, or credit flexibility plans. Below are a few of the more established programs.

- [Class Central](#) - This site collects links to hundreds of online courses in all disciplines from nearly 400 universities around the world and other MOOC providers. Many are free although some "for credit" courses are fee-based.
- [Khan Academy](#) – This site has over 3,100 videos on everything from arithmetic to physics, finance, and history and hundreds of skills to practice to help you learn what you want, when you want, at your own pace.
- [MIT OpenCourseWare and EdX](#) – Free lecture notes, exams and videos from MIT. No registration required. The EdX consortium now includes other universities and also includes courses designed for high school students. Those courses can be found at <https://www.edx.org/high-school-initiative>. There are some fees for the completion certificates, if that option is chosen.
- [Coursera](#) - More than 400 courses from over 80 universities are available. Includes videos, lectures, homework, discussions, and other interactive features.
- [Udacity](#) - This smaller MOOC is focused primarily, but not exclusively, on math, science, and technology. The courses are self-paced.

Here is the link to lists of other MOOCs:

<http://www.mooc-list.com/>

[Open Stax](#) - This site is a source of free online college-level textbooks. Some are standard books used in universities, and others are available only to students at participating schools. Ohio State is one of those schools. This could be used to save money on textbooks for PSEO or to gain source material for credit flex proposals

## Websites

- [Academic Skills Builders](#) - This site has academic games at a variety of skills/levels. Search at the bottom of the page for more difficult skills.
- [Conceptis](#) - Puzzle designer for publishers, but online sites include downloadable puzzles and ones to solve online. Includes Sudoku, logics, and others.
- [EdHeads](#) – Conduct virtual science experiments ranging from building a cell phone to exploring machines to conducting surgery.
- [Fun Brain](#) – Fun Brain has links to lots of games for all interests and ages. There are arcade-style games, web books, and other interactive activities.

- [How Stuff Works](#) – This site is exactly what it says. It is a group of pages that explain how EVERYTHING works. It is organized and easy to navigate.
- [Instant Chess](#) - Chess games online for all levels of expertise.
- [Kid Chess](#) - Get chess instruction and play practice games at the user's level.
- [Quiz Hub](#) - online interactive quizzes, subscription necessary for some quizzes, online activities covering all subject areas include games, test prep, and other interactive activities.
- [Set Game](#) – Play the Set game online and learn variations for playing the card game at home. You can also play Quiddler and Xactika online.
- [Web Sudoku Puzzles](#) – Play the Sudoku game online. Players can choose their level of difficulty.
- [Wolfram Mathworld](#) - A major reference with definitions, examples, etc.

### **Research Tools**

- [Diigo](#) - This tool allows users to store text clips, websites, videos, and images. Users can set up accounts to access the information from iPads phone apps, and the website. IT can be a useful tool for storing content for research projects.
- [Glogster](#) - An online tool for creating interactive posters. This can be used to create visuals for your students or for students to create interactive posters to share their research.
- [Go! Ask, Act, Achieve](#) - This is a tool to help students in grades 4-10 learn research skills.
- [InfOhio](#) – This site links to databases of professional journals and kids’ magazines. Articles for students can be searched by topic, source, and lexile. There are also links to virtual field trips and much more.
- [LucidChart for Education](#) - This is a digital flow chart, venn diagram, and mind mapping site that allows users to create these documents and manipulate them online.
- [Piktochart](#) - Users can create infographics to share a condensed version of their research.
- [Powtoon](#) - Create animated presentations to present research and share with others.
- [Prezi](#) - This is a spin on presentation slides that works in a mind-mapping format.
- [Research 4 Success](#) - This is an online course to teach juniors and seniors in high school how to do rigorous research projects in preparation for college work.

### **Summer Programs**

#### **Local Summer Programs**

<http://owjl.owu.edu/apply/howToApply.html>

Campers attending OWJL select four courses from an academic program that includes mathematics and computing, science, humanities and creative development. Cultural, recreational and social activities round out the experience and include the annual OWJL Camp Review, the Historic Strand Theatre Movie Night, the OWJL dance, swimming, campus tours, crafts, and games.

<https://www.otterbein.edu/summercamps/essex/>

The 2015 Martin W. Essex School for the Gifted and Talented™ at Otterbein University offers rising high school juniors and seniors opportunities for career exploration through a unique program comprising classes, seminars and workshops on the arts, sciences and humanities. Taking place in multiple venues throughout Otterbein's campus, this residential program encourages social interaction and peer discussion so that students can be challenged intellectually and artistically and develop a better understanding of the role of their abilities and talents in their lives and in society.

<https://www.columbusacademy.org/summer>

These coed camps are available for children in all grade levels and cover all subject areas. Half and full day options are available.

<http://www.classroomantics.com/columbus-ohio/>

These technology summer day camps for students 7-13 allow students to take part in learning activities which incorporate Legos , Stop Motion Animation, and Computer Programming.

<http://www.campofla.org/>

Students entering grades 3-8 next year may choose from Arabic, French, German, Russian or Spanish for a week of language immersion and cultural fun.

### **National Summer Programs Designed for Gifted Learners**

The Summer Institute for the Gifted

[WWW.giftedstudy.org](http://WWW.giftedstudy.org)

SIG programs, housed at universities throughout the country, are three-week summer programs for gifted students ages 9-17 providing instruction in over 60 exciting and challenging multi-curricular, arts and recreational courses.

Duke TIP

<http://tip.duke.edu/>

Duke TIP summer studies programs are superb academic opportunities and dynamic residential and social experiences for 7th through 10th graders. These three-week sessions are intense and demanding; students are challenged to think critically about themselves and their world.

Johns Hopkins Center for Talented Youth

<http://cty.jhu.edu/>

Our summer programs offer eligible students from all over the country and around the world the opportunity to engage in challenging academic work in the company of peers who share their exceptional abilities and love of learning.

## Terms Related to Gifted Identification

**Ability Assessment:** An ability assessment measures a student's performance on a nationally-normed intelligence instrument. There are group ability assessments (e.g., Cognitive Ability Test, Terra Nova) and there are individual ability assessments (WISCIV, WNV, Stanford-Binet V). Ability measures the capacity to do something. Ability is different from achievement. Ability measures how a student learns while achievement measures what a student has learned.

**Acceleration:** Faster presentation of content to more closely match the speed at which gifted students learn. Acceleration options include early entrance to Kindergarten or 1st grade, subject acceleration, whole-grade acceleration, dual enrollment programs, and early entrance to college.

**Achievement Assessment:** An achievement assessment measures how much a student has learned or acquired learning. There are group achievement assessments (e.g. ITBS, MAP) and individual achievement assessments (Woodcock-Johnson-III NU). Achievement is different from ability. Achievement measures what a student has learned while ability measures how a student learns.

**Advanced Placement:** This refers to a program of college-level courses offered through CollegeBoard. Many high schools throughout the country offer AP courses in various subjects. Students may take a test in that subject in May to potentially earn college credit. Some colleges accept AP credit while some do not.

**Asynchronous Development:** Differing rates for physical, cognitive, and emotional development. For example, a gifted child may be chronologically 13 years old, intellectually 18, emotionally 8, and physically 11. The discrepancies are greatest for children at the chronological age of about 13, but the extremes displayed by gifted children have led some experts to define giftedness itself as asynchronous development.

**Bloom's Taxonomy:** Benjamin Bloom's taxonomy (1956) is often used to develop curriculum for students. Bloom's levels of thinking include: knowledge, comprehension, application,

analysis, synthesis, and evaluation. Gifted students typically need instruction at the highest levels of Bloom's taxonomy which promote higher level thinking skills.

**Cluster Grouping:** Placing a group of five to ten identified gifted students in a classroom with other students of mixed abilities. Instruction can be targeted to the cluster groups within the classroom.

**Creative Thinking Ability:** Ohio recognizes creative thinking as a category of giftedness. A child with creative thinking ability is one who consistently engages in divergent thinking that results in unconventional responses to conventional tasks to the extent that s/he needs and can profit from specially planned educational services beyond those normally provided by the standard school program.

**Curriculum Compacting:** Adapts the regular curriculum to meet the needs of advanced students by eliminating work that has already been mastered or condensing work that may be mastered at a pace more appropriate for the student's ability level.

**Differentiated Curriculum:** Refers to a process by which the standard curriculum is modified in content, process, product, and/or environment to meet the needs of high ability students. Modifications relate to the quality of work as opposed to the quantity.

**Dual Enrollment:** Taking upper-level coursework concurrently with grade-level coursework.

**Early Entrance to Kindergarten/1st grade:** Some children need to start Kindergarten or 1st early because they are ready. Early entrance is designed for the exceptional child who is both academically ready as well as developmentally mature when compared to others his or her chronological age.

**Full Scale:** The Full Scale IQ refers to the sum of the parts on an intelligence test. For example, the full scale IQ on the WISC-IV is a composite of these parts: Verbal Comprehension, Perceptual Reasoning, Working Memory and Processing Speed. IQs between 85 and 115 are considered within the "average range" in that they are one standard deviation above and below the mean (100).

**Giftedness:** Giftedness refers to distinctly above-average competence in intellectual, creative, socioaffective (leadership, empathy, self-awareness) sensory motor ability (strength, fine motor control, endurance), or other areas (extrasensory perception, healing) [Gagne].

**Iowa Acceleration Scale (IAS):** This is the instrument that is required to be used in evaluating whole-grade acceleration candidates (early entrance as well as other whole-grade candidates).

The assessment involves school history, evaluation of a student's ability, aptitude and achievement, developmental factors, interpersonal skills, parental/school attitude and support, as well as critical items.

**IQ Intelligence Quotient:** This is a numerical representation of intelligence. IQ is derived from dividing the mental age (based on an intelligence test such as the WISC-IV or the Stanford-Binet V) by the chronological age; times 100. An average IQ is considered to be 100 (the mean).

**Post-Secondary Enrollment Option (PSEO):** Provides students with the opportunity to attend college courses while earning both high school and college credit. Tuition for the college courses is paid for with state education funds.

**Pre-assessment:** An assessment given at the beginning of a unit or lesson to determine how much content the student has already mastered. Instruction is then differentiated to meet the student needs.

**Pull-Out Program:** Program in which students are pulled out of the regular classroom on a scheduled basis to go to a resource room staffed by a teacher(s) trained in the education of gifted children.

**Reliability:** This refers to the "repeatability" and stability of scores. Reliability refers to the consistency of a measure. A test is considered reliable if we get the same result repeatedly. For example, if a test is designed to measure a trait (such as introversion), then each time the test is administered to a subject, the results should be approximately the same. Synonym: Precision.

**Self-contained classroom:** A self-contained classroom is a classroom where the district places students in a classroom with other gifted students full-time, everyday. The teacher is a Gifted Interventional Specialist. The state of Ohio limits self-contained classrooms to no more than 20 students.

**Services:** Services for gifted students are determined by the local education agency or school district. Services vary among the Ohio school districts. A service must conform to the Operating Standards for Identifying and Serving Gifted Students (OAC 3301-51-15). Districts are to apply service placement criteria consistently. Services typically involve a differentiated curriculum. A setting (AP course, resource room, Honors class) is not service without curriculum modifications that are specified in the Written Education Plan.

**Socio-Emotional Needs:** Many gifted students have affective needs that include heightened or unusual sensitivity to self-awareness, emotions and expectations of themselves or others, and a sense of fairness. Typical issues with gifted students include perfectionism, depression, underachievement, interpersonal relationships and career planning.

**Specific Academic Ability:** Ohio recognizes that some children have an aptitude in a specific subject or several subjects. A student who has specific academic ability is typically identified using an achievement test. Ohio requires performance of 95% or above at the national level on a standardized achievement test. The four areas recognized by Ohio are: reading and/or writing, mathematics, social studies and science. A student may be identified as a specific academic but not superior cognitive. The reverse may also be true.

**Standard Error of Measures (SEM):** The SEM is essentially the reliability of an instrument. For example, the SEM on the WISC-IV is 3.0. This means a child who scores 144 on the WISC-IV would most likely score between 141 and 147 if that instrument is used again. The higher the SEM, the less reliable the instrument.

**Standardized Test:** A test taken by many students under identical conditions which allows results to be compared statistically to a given standard. Popular standardized assessments include the ACT, SAT, PSAT, GRE, LSAT, MCAT, Iowa Tests of Basic Skills and the Cognitive Ability Test.

**Superior Cognitive:** In Ohio, a student must score two standard deviations above the mean (minus the standard error of measure) on an intelligence test (e.g., WISC-IV, WNV or Stanford-Binet V) or perform at or above the 95th percentile on a basic or composite battery of a nationally-normed achievement test (e.g., ITBS), or attain an approved score on an above grade level standardized, nationally-normed test (e.g., ACT, SAT or EXPLORE).

**Tiered Assignments:** In a heterogeneous classroom, a teacher uses varied levels of activities to ensure that students explore ideas at a level that builds on their prior knowledge and prompts continued growth.

**Twice Exceptional:** This is a term used to describe a child who has two or more exceptionalities. For example, a student who is both gifted and hearing impaired.

**Validity:** Validity is the extent to which a test measures what it claims to measure. It is vital for a test to be valid in order for the results to be accurately applied and interpreted. Validity isn't determined by a single statistic, but by a body of research that demonstrates the relationship

between the test and the behavior it is intended to measure. There are three types of validity: content, criterion-related and construct.