

Maryland State Department of Education A Publication from the Maryland State Department of Education State Department of Education

Gifted Education in Maryland

Nurturing Potential, Challenging Performance

hen President Bush set about reauthorizing the Elementary and Secondary Education Act in 2001, he said he was motivated by a concern that "too many of our neediest children are being left behind." That concern yielded a strong federal focus on those students who have long struggled academically—because of poverty or disability or limited fluency in English. With sanctions tied to stagnation among underperforming subgroups, this focus on the "neediest children" has been sharp and sustained.

Receiving comparatively little attention in the era of No Child Left Behind is a group of students that many believe *requires* less attention: gifted and talented students. The truth is, however, that gifted and talented students think and learn differently than their same-age peers, and—just like students in any other subgroup—they need different educational services to reach their full potential.

Maryland is committed to the achievement of every child—which means that as we strive to guarantee that no child is left behind, we must be equally confident that no child is held back.

"Gifted and talented" is defined in Maryland law.

Nationwide, the definition of "gifted and talented" ranges from inclusive (all students are gifted) to exclusive (students with an IQ of 130+ are gifted).

Both extremes involve misconceptions about giftedness, because both neglect the nuances of the gifted student.

In Maryland, a gifted and talented (GT) student is identified as "having outstanding talent and performing—or showing the potential for performing—at remarkably high levels ... when compared with other students of a similar age, experience, or environment" (Maryland Annotated Code §8-201). The law recognizes different types of gifts and talents. Some gifted students have a highly developed general intellectual capacity to think and analyze. Some show acute subject-specific ability. Others excel in creative or artistic areas. And still others exhibit a keen ability to lead, influence, and organize others.

These are the students that Maryland law stipulates need different services—beyond those normally provided in a regular school program—to develop their potential.

Gifted students think and learn differently.

Many think that GT programs are populated by students who have had more opportunities provided them than other children. Their gifts are material, and their talents are taught. However, decades of research document real, innate differences in how gifted students learn.

Students identified as gifted and talented differ from their same-age peers in two distinct ways: First, they're advanced, or precocious. They learn rapidly, remember more, and can master subject matter or skills at a much higher level. Second, they exhibit a more complex type of reasoning.

GT students make unique connections among facts and ideas. They are curious and ask the big, hard-to-answer questions. They typically have a personal passion and can and will concentrate for long periods of time to explore their interests. They are attracted to complex problems and may be sensitive beyond their years to moral and ethical issues.

GT students also have unique social and emotional needs. "Even if they are doing really well in school, these children feel different," says Joan Cable, an enrichment teacher at Roye-Williams Elementary School in Harford County. "They need instruction about giftedness and what their responsibilities [as gifted children] are."

Many methods are used to identify gifted students.

In Maryland, it's rare to identify giftedness using a single, standardized test score. Ability and achievement tests are used, but teachers' and parents' observations of students' learning behaviors are also important. Joan Cable advises, "Look at the student who is getting the work done quickly, and then begins acting out. Sometimes a gifted child will call out answers, or even challenge you." Some students show advanced learning behaviors that aren't validated by high test scores. "We have children who speak many languages at my school," Cable says. "I can catch a lot of children's talents through their verbal responses when doing demonstration lessons in thinking or discussion skills."

Educators who work with gifted students recommend supplementing classroom observation with ability tests that include a nonverbal reasoning com-

ponent. Kate Boehmler, formerly a Title I gifted and talented resource teacher at Baltimore County's Johnnycake Elementary School, says that when it comes to identifying gifted students, these kinds of ability tests are better than achievement tests like the MSA. "They level the playing field for ELL students and other groups because they don't rely on background knowledge or vocabulary."



Gifted students need different services.

Differentiated instruction for GT students involves both acceleration and enrichment. *Acceleration* allows students to move rapidly through grade-level material

and learn content typically taught at a higher grade. This mastery might be demonstrated on a test. *Enrichment* allows students to more deeply explore the subject matter, and to use their knowledge in real-world applications. Enrichment is always product- or performance-based.

There are many acceleration and enrichment opportunities open to Maryland students: early entrance into kindergarten, single-subject or whole-grade acceleration, dual enrollment in college, pull-out enrichment classes, a GT curriculum or curricular units, magnet programs, AP courses, original research, and mentorships.

Allison Weese, an enrichment teacher at Middletown Middle School in Frederick County, relies on two practices to challenge her GT students. She uses active, rather than teacher-directed, instruction. (Her Socratic Seminar encourages students to take responsibility for their own learning.) Weese also avoids needless repetition of mastered skills through curriculum compacting. "The less time they spend on material already mastered, the better," she says.

¹ Curriculum compacting reduces the time dedicated to review and practice activities, and streamlines objectives to gain time for advanced content and enrichment.

A Continuum of Services in Gifted and Talented Education

We live and work in a conceptual age where the competitive edge goes to expert thinkers who can identify and solve new problems. So it's critical that every child have the opportunity to develop these skills and to access programs and curricula that will help them do just that.

Maryland offers a continuum of programs in gifted education—some serving all students, and some serving considerably fewer. In general, as program intensity increases, the number of students participating decreases.

Nurture critical and creative thinking and problem-solving in all students.

Primary Talent Development Early Learning Program (preK-grade 2)

Primary Talent Development (PTD) is a "thinking" curriculum used in 10 Maryland school systems¹ with all of their preK-2 students. The curriculum and strategies are based in GT and early childhood theory and practice. Teachers use open-ended, engaging lessons—not to teach discrete content, but to target one of the seven PTD expert learning behaviors: perceptiveness, communicativeness, inquisitiveness, persistence, resourcefulness, creativity, and leadership. Teachers observe and document students' responses to the PTD experiences and plan instruction that moves them to the next level on the developmental continuum.

The strategies used to develop questioning and problem-solving attributes are scaffolded across the program's three years to ensure that all students can participate, while potentially gifted students are increasingly challenged and engaged. The PTD method provides data about student achievement that may not be directly assessed on traditional tests but may be a more reliable predictor of what students can achieve in the real world. By the end of grade 2, each student has a cumulative PTD Behavioral Checklist supported by portfolio items. The checklist and portfolio can be used to make referrals to GT education.

Baltimore, Calvert, Caroline, Cecil, Dorchester, Queen Anne's, Somerset, St. Mary's, and Wicomico counties; Baltimore City While we target these behaviors in PTD and we really look at them in isolation through our PTD program, the hope is really twofold: First, that children will realize they have these cognitive abilities, that they are valued and that there are strategies they can pull from their own little toolbox ... as they solve problems throughout life. That's ideal. The second piece is probably the professional development piece—that primary teachers begin to realize that these cognitive behaviors are just as important an isolated skill ... just as important as content.

I think the turning point for teachers is when they try it and they see for the very first time a response from a child where they never thought they would. The teacher is kind of invited into that child's world in a way that he would've never been before if the experience hadn't existed.

> Melanie Carter Primary Talent Development Resource Teacher Baltimore County Public Schools

The goal is to identify children ... who may have certain gifts in certain areas, and you don't know which child that might be. What I found in my classroom is that the children who excelled in this program were not necessarily the children who had the strong academic skills. The kids that I found excelled in their communication skills were the kids who were the squirmiest kids on the carpet, who often seemed to be daydreaming about other things as I was trying to teach a letter shape, the ones I had to redirect because their interests might be somewhere else. But when asked to go outside and explore and come back to the table and explain what they had seen, they were the ones who were observant of the world around them.

Sarah Fischer PreK Teacher Sandy Plains Elementary School Baltimore County

Provide additional challenge and enrichment as indicated.

Schoolwide Enrichment Program: Instructional Seminars (grades 2–8) Howard County Public Schools

Most schools provide all students general enrichment activities that expose them to potential areas of interest: field trips, guest speakers, cultural

events, etc. To serve students whose interest is piqued beyond general exploratory experiences, Howard County uses instructional seminars, a component of its Schoolwide Enrichment Program. Through the seminars, many students—not just those identified as gifted—can undertake in-depth study in an area of interest.

they require no formal testing for identification, they do require students' interest and commitment.

The seminars emphasize

The seminars are offered by school-based GT resource teachers. While

Kids don't have to have a particular score on a test in order to have a talent or passion that can be cultivated We help them cultivate it and develop new skills. The teachers come up to you saying, "You won't believe what this student is doing in my classroom now."

Bill McCauley GT Resource Teacher Folly Quarter Middle School Howard County interest and commitment. The seminars emphasize original products and often link students with professionals in the field who provide additional instruction and guidance throughout product development. (These products are displayed each spring at the school's Enrichment Fair.) Partnerships

with nonprofit organizations enrich the seminar experience for students and teachers alike. What many Howard County teachers value is the fact that everything students gain from these seminars—advanced skills in communication, critical and creative thinking, research, technology, visual and performing arts—they take back to the regular classroom.

And the number of interests accommodated by the seminars is remarkable. For students interested in literature, there's the Shakespeare Festival or the Book Club. For those interested in math, there's the Math Olympiad. There's Debate for those into forensics, Black Saga for those into history, and TV Production for those into media.

Identify and develop demonstrated talent areas.

Center Programs for the Highly Gifted (grades 4–5) Montgomery County Public Schools

Montgomery County's seven Centers for the Highly Gifted—housed in

eight elementary schools across the system—are designed for students in

grades 4 and 5 who learn at a faster pace than their peers and can handle concepts of greater complexity. The students' unique learning profiles make this level of programming a better match for their needs.

curiosity, analytical thinking, and creativity; and an indication that the student can succeed with accelerated and enriched instruction.

Teachers are committed to ongoing professional development and best practices for teaching highly able students. We create opportunities for authentic learning, problemsolving, and technology integration Our role is facilitating the critical and creative thinking process and providing opportunities for shared inquiry.

> Lead Teacher & Program Coordinator Center Programs for the Highly Gifted Montgomery County Public Schools

The Centers' above-gradelevel curriculum is based on interdisciplinary, thematic units, and instruction promotes critical thinking, shared inquiry and application of research skills, authentic problem-solving, communication, academic risk-taking, and creative self-expression. Teaching

The families of all county 3rd graders are mailed an application for the Center programs. The selection process is carried out in two steps and is based on extensive criteria, including students' academic performance; standardized test scores; recommendations from teachers, parents, and school-based GT committees; evidence of motivation, intellectual

and enrichment experiences are tailored to students' strengths and needs, their interests and learning styles, and their readiness levels. At the end of grade 5, students may apply to the county's middle school magnet programs or return to their neighborhood schools.



Expand expectations for high achievers.

The Ingenuity Project (grades 1–12) Baltimore City Public Schools

The Ingenuity Project prepares highly capable and motivated students to achieve at nationally competitive levels in math, science, technology, and related fields. A partnership between the Abel Foundation and Baltimore City Public Schools, The Ingenuity Project originated as a middle school program in 1994, expanded to high schools a few years later, and then branched out into elementary schools in 2001. The Project now enrolls more than 450 Baltimore City students in grades 1-12.

At the high-school level, all Project Ingenuity math and science classes are taught at an accelerated pace and cover advanced concepts. The expectation is that students will choose careers in these fields and ultimately become leaders in their professions. The summer before 11th grade, students enroll in a research practicum and begin working with mentor scientists at

universities, laboratories, and research facilities. Students continue their practicums in 11th grade, leaving the school campus to conduct project research. They report their findings in extensive papers due in the fall of their senior year.

The culmination of the practicum is entry into the prestigious Intel Science Talent Search. Over the past three years, Project Ingenuity seniors have placed 5th, 7th, and 10th in the national competition (often called the "junior Nobel Prize" because talent search alumni have won six of the real thing). Ingenuity students participate in several other national competitions as well, such as those sponsored by Siemens Westinghouse and the National Society of Black Engineers.

The students are taught by PhDs who engage them in cutting-edge mathematical discoveries and challenge them to develop their own research projects. There are no boundaries as to how far or deep the learning can go.

> former Gifted and Talented Education Associate **Baltimore City Public Schools**

Some gifted students also have learning difficulties.

Some students are "twice exceptional," which means they're advanced in one area, but struggle in another. A student gifted in science may struggle with writing. A student gifted in math may struggle with time management. Many of these students need special education *and* gifted education services.

"Look for discrepancies between oral and written responses," says Alaina Haerbig, a GT resource teacher at Carroll County's Linton Springs Elementary School. "A student may struggle with organization, forget to do or turn in homework, but clearly has mastered the material. Do what you would do for any student who needs help with organization, but don't 'dumb down' the instruction," she says. "Requiring support from other specialists in the building doesn't exclude [these students] from gifted education."

MSDE offers an online course on twice-exceptional students: *Smart Kids with Learning Difficulties*. For course information, go to MarylandPublicSchools.org/MSDE/programs/GiftedTalented.

To learn more about twice-exceptional children, go to the Council for Exceptional Children: www.CEC.SPED.org. (Under News & Issues, click on Exceptionality/Topic Area.)

Extracurricular activities are important.

No curriculum can adequately address gifted students' many interests, so extracurricular programs are an essential supplement to the school schedule. Academic clubs—the debate team, the literary magazine, the French or math or robotics club—don't just give students a chance to explore their chosen disciplines more deeply, they give the students a chance to socialize with others who want to do the same.

The Maryland Summer Centers for Gifted and Talented Students serve both functions—learning and socializing. A 41-year-old, statewide program, the Centers offer GT students in grades 4–12 challenging, hands-on learning experiences that can last a week or more than a month. The Department operated 17 Centers last summer (five of them residential), including aquatic research,

It isn't fair to expect gifted students to make it on their own without specialized instruction, nor is it fair to expect teachers to work effectively with gifted students without specialized training.

Jeanne Paynter Specialist, Gifted and Talented Education Maryland State Department of Education

the physics of solar and wind power, paleontology, lunar robotic exploration, Chinese, law and government, performing and digital arts, and environmental conservation and historical preservation. Each Center's principal instructors are certified teachers or experts in the field, and their assistants are usually college students majoring in the discipline.

Nearly 1,400 students applied to the 2007 Summer Centers but, with a capacity under 900, fewer than two-thirds of those applicants were placed. For information and applications (due every year by April 15), go to Maryland PublicSchools.org/SummerCenters.

Teachers need training in gifted education.

Just as gifted students need specialized instruction to fully develop their potential, teachers of gifted students need specialized training in that instruction. They need to know gifted education research and pedagogy—most importantly, the characteristics of gifted students and how they're identified and served in the classroom. Just one-third of Maryland school systems employ school-based GT resource teachers who work directly with students and with teachers to deliver services. That means instruction for gifted students falls squarely on many classroom teachers. That's not such a bad thing, maintains Joan Cable, because using GT strategies tends to raise the achievement of *all* children. MSDE offers several online courses for teachers of gifted students. Go to MarylandPublicSchools.org/MSDE/programs/GiftedTalented.

Several school systems have formed partnerships with local universities to offer graduate certificate programs in GT education. For instance, 18 Carroll County GT resource teachers completed an 18-credit Hopkins program in June. "I never would have learned this much about my field on my own," says Alaina Haerbig. "I can't be an expert in everything, but now I have a cohort of colleagues I can go to. Knowing the research and best practices is huge. Even a good teacher can only go so far on instinct."

Kate Boehmler completed a gifted education certificate as part of her master's degree program. She echoes the sentiments of Joan Cable, saying, "Many strategies that are good for GT students are good for all students." But she cautions that if one doesn't seek out training, it won't necessarily be offered. "We tend to focus on proficiency, not 'excellency," she says.

Every fall, MSDE and the Maryland Educators for Gifted Students sponsor the Maryland State Conference on Gifted and Talented Education. Allison Weese, a regular participant and presenter, encourages teachers—GT resource *and* classroom teachers—to take advantage of every training opportunity.

Destination ImagiNation

Destination ImagiNation is the world's largest creative problem-solving program for K-college learners. Teams of up to seven members apiece solve one of six open-ended challenges in front of tournament appraisers. Challenges cover the sciences, technology, mechanics, engineering, theater, improvisation, goal-setting, time and budget management, team-building, and leadership.

More than 400 Maryland teams in eight regions compete each year in these brainstorming challenges, many beginning their work in September. Regional winners go on to a statewide competition, and state winners advance to the global tournament.

For more information, go to Maryland's Destination ImagiNation site: ImaginThis.org.

The conference, she says, is a good place to start. This year's conference will be held October 17 at Baltimore County's New Town High School. For information and registration, go to MEGSonline.net.

Parent support is vital.

Kids are gifted because their parents say they are ... or so the saying goes. But the truth is that many parents of gifted children are hesitant to speak up about the unique learning behaviors they see at home.

Jeanne Paynter, MSDE's specialist in gifted and talented education, says, "I often hear from parents, 'My child goes to a good school. I don't want to complain or seem like I'm asking for more. But I'm worried that my child is bored and losing interest in school." Paynter helps parents describe what "being bored" looks like, what the child's strengths are, and where their child needs help. She encourages parents to educate themselves about the special needs of gifted children, because a lack of information, she says, only causes more frustration.

Paynter also encourages parents of gifted children to get involved in their school's PTA, so that they can address the needs of GT learners and advocate on their behalf. (Some school systems also sponsor special groups for parents of gifted children.) The Maryland Coalition for Gifted and Talented Education holds an annual conference for parents, and can help them start a local advocacy group. Go to MCGATE.org.

You can get more information.

Each school system has a coordinator of GT education. To find yours, call the Maryland State Department of Education at 410.767.0363, or go to MarylandPublicSchools.org/MSDE/programs/GiftedTalented.

For information on giftedness and resources for identifying and nurturing it, go to the National Association for Gifted Children: www.NAGC.org. ■

When it comes to other students with special needs, we differentiate. We would never say to them, "You should all do the exact same thing [as other students]." Why would we say that to gifted students?

Allison Weese Middletown Middle School Frederick County

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