

White Paper on Gifted Education In St. Clair County

Prepared by
The Gifted Education Task Force
St. Clair County RESA
September 2007

The world's fastest person is, officially, Asafa Powell, a 22-year-old Jamaican who in September ran the 100-meter dash in 9.74 seconds, a world-record time.ⁱ He set the record by doing one simple thing: running faster than everyone else. Not only was he allowed to do so, he was encouraged, supported and pushed to excel.

Athletic excellence is one thing. Academic excellence is quite another. Intellectually gifted students exist by the hundreds across St. Clair County, but rarely are they pushed to excel to their full potential. As one expert on gifted education has noted, "A pervasive and unsubstantiated belief that our highest achievers will make it on their own without any additional resources or instructional accommodations continues to prevail. But intellectual and academic talent must be cultivated and nurtured — not ignored."ⁱⁱ

Purpose of this report

The St. Clair County Regional Educational Service Agency (RESA) created in 2007 a task force on gifted education. This task force was created with the acknowledgement of the superintendents of the seven public school districts for which it provides support services.

This task force was comprised of teachers, administrators and parents. Its charge was to report on the state of gifted education and offer recommendations that local districts could consider. The task force reviewed the current literature on gifted education, surveyed gifted programs offered elsewhere, and analyzed existing offerings locally.

Underlying the mission of the task force is the knowledge that a squandered talent is not only an individual tragedy, but also a tragedy for the community, county, state and nation deprived of that individual's potential accomplishments.

This report encapsulates the task force's findings.

Introduction

A 1972 federal report estimated that gifted students make up a minimum of 3% to 5% of the student population.ⁱⁱⁱ If applied to St. Clair County, that formula would mean 850 to 1,400 gifted students live here. Test scores locally tend to support the accuracy of that percentage estimate. For example, 1,931 11th graders took the ACT in 2006-07. Of those, 115 students, or 6%, scored 30 or higher on at least one section of the test. A perfect ACT score is 36. A score of 30 puts the test-taker in the top 5% of the country. By comparison, the average score is 21.

In PLAN testing (the ACT preparatory test) of 10th graders in 2006, 75 students out of 1,388 (5%) taking the test scored a 26 or higher on at least one section of the test. A score of 26 in PLAN also reflects the top 5% of achievement nationwide.^{iv}

Collectively, these high achievers have few alternatives to the traditional classroom track. No district has a special curriculum program dedicated to gifted and talented education, a fact mirrored by districts across the state and nation. Michigan has no requirement for differentiated programs for gifted students, and its almost irrelevant allocations to gifted education (\$500,000 statewide last year) reflect that disinterest.

Gifted learners differ from their classmates on three key dimensions: the pace at which they learn, the depth of their understanding, and the interests they hold.^v

Gifted students are highly intelligent, incisive and creative. Numerous reports show these same extremely smart young people are at high risk of squandering those talents if they are not intellectually nurtured and academically challenged.

Those challenges are few and far between, in St. Clair County as elsewhere. The traditional K-12 system of public education is not designed to help these students' special gifts blossom. Rarely are they pushed to reach their potential.

Gifted young people are correctly viewed as "special," but rarely receive the "special education" that would help them thrive. Dr. Patricia Schuler, an expert in working with high-ability children, addressed this concern in a scholarly article published on the SENG (Supporting Emotional Needs of the Gifted) Web site^{vi}, "So what happens when a gifted adolescent is 'just smart' and is trying to survive in a perceived anti-intellectual environment? Options may include: conformity (working hard to be 'average' or 'normal'), withdrawal (isolation or alienation), depression (blaming themselves), aggressiveness (blaming others), or continued nonconformity."

Study after study has echoed Dr. Schuler's assessment that gifted young people are truly at risk. Considering their special needs, however, also is a matter of equity. As two Duke University professors noted in a recent paper, "Many will argue that addressing the needs of the gifted and talented through specialized programs is 'elitist.' The needs of gifted and talented should not be an argument on behalf of privilege, but one on ensuring that every child, regardless of ability, demonstrates growth. ... A pervasive and unsubstantiated belief that our highest achievers will make it on their own without any additional resources or instructional accommodations continues to prevail. But intellectual and academic talent must be cultivated and nurtured — not ignored."^{vii}

St. Clair County educators are well aware of this gap in the educational system that affects children at the high end of the intellectual spectrum. Many factors, however, converge to discourage county schools from allocating new resources to fill that gap. Yet options may exist.

Defining gifted learners

Lewis Terman, a cognitive psychologist from Stanford University, is credited with first using the term “gifted” to refer to a child with unusually high potential. He refined an existing intelligence test into what became known as the Stanford-Binet scale.^{viii} His test, as with most other IQ (intelligence quotient) tests, measured primarily analytical and memory skills. The average Stanford-Binet score is 100. A score of 110 puts the person tested among the top 25% of the population; a score of 130 puts a person in the top 2%.

In 1972, a former U. S. commissioner of Education, Sidney P. Marland Jr., prepared a report to Congress on gifted and talented education. That report expanded the definition of gifted to those children with abilities beyond exceptional intellectual talent. States and school districts across the country have developed various definitions of gifted and talented students, but most are based heavily on the Marland report. That report estimated that gifted students make up a minimum of 3% to 5% of the student population.

Assuming that percentage holds in Michigan, it would mean that the state has between 48,000 and 80,000 gifted students among its 1.6 million. If 3% to 5% of St. Clair County’s approximately 28,000 students is gifted, the number would be between 850 and 1,400. Using a broader definition of giftedness suggested by the Council for Exceptional Children, a school system could expect to identify 10% to 15% or more of its student population as gifted and talented.^{ix}

The St. Clair County Gifted Education Task Force recommends county educators adopt the National Association for Gifted Children’s definition of gifted learners that was excerpted from the federal No Child Left Behind Act of 2002.

By this definition, gifted learners are:

“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.”

Identifying gifted learners

The definition of gifted learners is broad. Their diverse talents and skills are not easily categorized. Thus, it is particularly important for teachers and school leaders to understand the differences between a student who is precocious and one who is truly gifted.

Mary Ruth Coleman in her monograph, *The Identification of Students Who are Gifted*, writes, “To be appropriate, the identification process must accurately find the students. It must neither overlook students who need services nor identify students who do not. This is not easy. Historically, the identification of gifted students has been plagued with the following dilemmas that must be addressed,” including Coleman’s four areas of concern:

- Disproportionate Representation. Children from different cultures and languages, who are economically disadvantaged, or have disabilities are underrepresented in programs for gifted students. The suggested reasons include

an overreliance on standardized tests, narrow conceptions of intelligence, and local policies for gifted programs.

- Disregard for Theoretical Knowledge of Intelligence. Intelligence can be inhibited or enhanced by experiences. A variety of supplements to standardized testing, such as student work over time and performance-based assessments can provide a more complete view of a person’s intelligence.
- Inappropriate Use of Statistical Formulas. Combining scores from a variety of measures into a single score (i.e., an IQ score combined with an achievement score and a performance score from a checklist) is statistically invalid, but persists.
- Mismatch between Identification and Services. Gifted programs too often do not match the nature of each child’s gift. A student who is gifted in visual-spatial ways may not benefit from a gifted program focusing on advanced mathematics. The system works best when the identification process assesses a variety of abilities, and when a variety of services are available so that optimal matches can be made.^x

The St. Clair County Gifted Education Task Force recommends schools use a variety of assessments, including those requiring behavioral and observational tools. The task force supports the National Association for Gifted Children’s *Pre-K through Grade 12 Gifted Program Standards* for student identification, which reflect goals rather than specific methodology. Among the key standards for gifted student identification listed by the association:

- Parents should be provided with special workshops or seminars to gain a full meaning of giftedness.
- Assessment should be responsive to students’ economic conditions, gender, developmental differences, handicapping conditions and other factors that mitigate against fair assessment practices.
- Students identified in all designated areas of giftedness within a school district should be assessed consistently across grade levels.
- Student assessment data should come from multiple sources and include multiple assessment methods.^{xi}

Ultimately, the Gifted Education Task Force recognizes that choosing processes to identify potentially high-achieving students appropriately rests with local school districts, and should align with program requirements.

Gifted education in St. Clair County

Special programming for gifted learners in St. Clair County dates back more than half a century. When the Soviets launched the world’s first Earth satellite, Sputnik, in 1957, math and science education in the United States got renewed attention as Americans worried they were losing the “Space Race.” Those concerns nationally reverberated in St. Clair County. In the early 1960s, the “new” math was introduced, as was the concept of a textbook-driven curriculum. By 1968, the Michigan Association for Academically Talented was incorporated.

The Marland Report of 1972 helped spur another round of attention on gifted learners. The state and federal governments began offering grant programs to encourage programs for gifted students. In 1978, the Michigan Association for Education of the Gifted, Talented and Creative was formed. The special education law of 1978 specifically noted that gifted education may be included in school curricula.

By the 1980s, the state had established its math/science centers as sources of specialized education for advanced students. New technology was being introduced into classrooms that better allowed students to proceed at their own pace.

Although progress was continuing in the 1990s, initiatives focusing on gifted students continued to operate at the margins of public education. Just as public school funding in Michigan varied widely from district to district, so too did attention to gifted education.

Today, a number of organizations continue to promote special programs for gifted learners, but state and federal dollars to support those programs are minimal. The demand of 2002's No Child Left Behind Act is for schools to educate all learners. However, that act also effectively forces schools in St. Clair County and Michigan to focus their limited resources on struggling learners, with little left over for those who would qualify as "gifted."

Meanwhile, Michigan's struggling economy has forced funding cutbacks which, in turn, has led districts to cut personnel and programs that are not central to their missions. That is cutting deeply into previously funded initiatives for the gifted such as summer institutes and gifted/talented coordinator position at local districts.

That is not to say, however, that opportunities do not exist locally for gifted students. Among locally available programs:

- **Advanced Placement classes.** AP classes are first-year, college-level courses offered in high school. Students can earn college credit by taking national AP exams. Currently, AP exams are available in 38 subject areas, including the sciences, mathematics, music literature and a number of foreign languages. Advanced Placement classes vary by district in St. Clair County. For example, one district may offer AP chemistry while a neighboring district does not. On the other hand, the district that offers AP chemistry may not offer AP World Literature, an option available to students in the other district. In 2006-2007, St. Clair County's seven districts offered 52 Advanced Placement classes in 12 subject areas, including biology, chemistry and U.S. history. Taking these AP classes were 979 discrete students. This list of available AP classes keeps growing. Statewide, 31,788 students took AP tests in 2006-2007, according to the Michigan Department of Education.
- **Dual enrollment.** In 1996 the Michigan State Legislature passed the Postsecondary Enrollment Options Act or "Dual Enrollment bill." The bill expanded on the State School Aid Act providing for the participation of eligible high school students in dual enrollment or postsecondary enrollment options. Under dual enrollment, an academically eligible student may enroll in a course at a postsecondary institution (such as St. Clair County Community College) while still in high school. The student's local school district will reimburse the student's tuition provided that the course meets certain criteria and is not provided by the local school district.

- **Math & Science Academy.** In the fall of 2007, the inaugural class of the Math & Science Academy began their studies. The academy is underwritten by RESA to provide advance mathematics and science instruction to 20 students per class identified as academically gifted in these areas. Classes are taught by college-level instructors using teachers and classroom space provided under contract with St. Clair County Community College.
- **St. Clair County Science and Engineering Fair.** This annual event draws hundreds of student participants from across the county. Projects range in complexity by grade level. High school winners advance to the International Science and Engineering Fair competition.
- **Quiz Bowl.** County districts field Quiz Bowl teams at the middle and high school levels. Students compete by answering academic-related questions in a game-show format, with points awarded for correct answers as teams from different schools compete.
- **After-school and in-school enrichment programs.** These are offered at various times through different districts. Some are led by the instructional staff; others by volunteers. These programs include Pro-Solve, Mathematical Olympiad, Science Olympiad, the JASON Project, RESA's Mathematics and Science Technology Enriched Research (MASTER) program, and Destination Imagination, among others.

Programming options for the education of gifted students

After research and careful study, the St. Clair County Gifted Education Task Force recommends the following program options:

All levels (K-12th grade)

- **Acceleration.** Students identified as gifted should be allowed to attend classes that match the students' intellectual level. According to the 2004 Templeton National Report on Acceleration, *A Nation Deceived: How Schools Hold Back America's Brightest Students*, "Research continuously demonstrates the positive impacts of the various forms of acceleration. Yet the educational establishment, especially at elementary and middle school levels, remains skeptical based on the implications of ruined scope and sequence charts and ungrounded fears of hampering healthy social-emotional adjustment. Voices ... in the field of gifted education and psychology, spurred by current and relevant studies, have consistently sustained support for acceleration, yet to little avail." Among the types of acceleration indicated in the report:
 - *Grade-skipping:* This may be done at the beginning or during the school year and should be done after an assessment of a student's indicators for academic and social success.
 - *Continuous progress:* The student is given new content progressively as prior content is completed and mastered.

- *Self-paced instruction:* The student proceeds through learning and instructional activities at a self-selected pace.
- *Curriculum compacting:* This entails reduced amounts of introductory activities, drill and practice. The time gained may be used for more advanced content instruction or to participate in enrichment activities.
- *Mentoring:* A student is paired with a mentor or expert tutor who provides advanced or more rapid pacing of instruction.
- *Advanced Placement classes.*^{xii}

Elementary (K-4th grade)

At this level, the focus by schools should be on increasing teacher understanding of high-potential children, cataloging of available resources, enhancing opportunities for those students, and engaging parents in those opportunities.

- **Increasing teacher awareness.** Schools should provide professional learning experiences that will allow staff members to deepen their understanding of gifted education issues, including:
 - Identifying students in need of advanced options (using standards suggested by the National Association for Gifted Children).
 - Identifying the specific potential and talents of individual students.
 - Understanding available programming options for those students.
 - Using differentiation techniques to address in a single classroom the needs of students at all points on the academic spectrum.
- **Cataloging resources.** A resource guide of gifted education opportunities could be compiled and freely distributed.
- **Expanding enrichment opportunities.** Many programs could be instituted or expanded with little additional cost in terms of time or other resources. Among them: Battle of the Books, Destination Imagination, Future Problem Solvers, the county Science and Engineering Fair, Junior Great Books, Mathletics, Science Olympiad, and writing festivals. Other enrichment programs with more expense involved include Lego robotics, rocket clubs and the like.
- **Engaging parents.** Many of the listed enrichment opportunities depend upon the direct participation of parents. That participation can be encouraged if school leaders provide information to parents about possible options.

Middle school (grades 5-8)

At this level, the focus should be continuing to identify gifted learners, and on expanding or initiating accelerated programming.

- **Identifying gifted learners.** As with the recommendations at the elementary level, the identification processes used by districts should follow National Association for Gifted Children standards.
- **Expanding enrichment opportunities.** Many programs appropriate for elementary school can be continued into middle school. Among them: Battle of the Books, Destination Imagination, Future Problem Solvers, the county

Science and Engineering Fair, Mathletics, Science Olympiad, Math Olympiad and writing festivals. In addition, Quiz Bowl activities can be expanded.

- **Initiating pullout academic programs.** The St. Clair County Gifted Education Task Force supports establishing a model developed in Kalamazoo, Mich., and expanded upon by Kent County: the Academically Talented Youth Program (ATYP). Qualifying Kent County youth meet one day a week for 2.5 hours to study a compacted course of accelerated mathematics or language arts. The program uses classroom space in downtown Grand Rapids provided through Grand Valley State University. Students are transported either by district buses or individual parents. Instructors are primarily from area higher education institutions. Grand Valley and Kent Intermediate School District contribute classroom space, in-kind contributions and support services. Other costs of the program are covered through a yearly tuition fee (\$725 per year per student in 2007-08). Many districts pay the costs of tuition for their ATYP students; parents are obligated to pay tuition in the other districts.^{xiii}
- **Helping students plan.** The Career Pathways program should be implemented with fidelity to help students discover their interests and talents, and to help them plan for the future. This will help students:
 - Identify course selections for high school.
 - Explore career options.
 - Identify post-secondary/higher education expectations.

High school (grades 9-12)

At this level, the focus is less on identifying gifted students and more on expanding accelerated learning and enrichment programming. Among the suggestions:

- **Increasing the variety and number of Advanced Placement classes.**
 - Consider blocking the same times for AP classes to allow sharing among districts.
 - Require regular professional development for teachers.
 - Increase the number of students taking AP tests.
 - Encourage weighting of classes for enrollment in AP classes.
- **More planning.** Use students results from EXPLORE and PLAN to assist with educational and career planning. Both are ACT (American College Testing) programs. The EXPLORE program is designed to help 8th and 9th graders explore a broad range of options for their future. The PLAN program for 10th graders provides information needed to address school districts' high-priority curriculum and instructional issues.
- **Expanding the Math & Science Academy and MASTERS program.** Both opportunities, provided through the RESA, currently reach about 20 students each. These programs could be expanded to accommodate additional students.
- **Promoting dual enrollment.** Schools should be as expansive as possible in allowing students to pursue dual enrollment opportunities at the community college. Last year, 123 students countywide participated in dual enrollment.

Implementing/administering gifted education

The Gifted Education Task Force recommends:

- **Administrative support:** At all levels, it is crucial that central office administrators and building leaders be aware of the importance of gifted education and the options available to address needs. They must support and encourage teachers' efforts to address gifted students in their classes, and actively pursue programming and enrichment opportunities that target gifted learners.
- **Gifted education coordinator:** An individual should be employed as countywide gifted education coordinator. With the appropriate support staff, this person would implement the recommendations of the Gifted Education Task Force and other related policy matters as established by county superintendents, local boards of education and the RESA Board of Education. Among the tasks of this coordinator would be preparing and maintaining a repository of gifted education resources, as well as a directory of enrichment opportunities across St. Clair County.
- **Advisory group:** A countywide gifted education advisory group should be established to foster information sharing and program development.

How to fund gifted education

External sources of revenue for gifted education, including the state of Michigan, are problematic in the extreme. Therefore, the county must look internally.

In an ideal situation, the Gifted Education Task Force would recommend that districts consider the goal of dedicating 1% of their annual operating budgets to programming for gifted learners. The task force believes that district support for gifted and enrichment programs should be at a level comparable to major extracurricular programming.

Summary

St. Clair County has hundreds of gifted students who are in danger of, at best, underachieving, and, at worst, dropping out of school or engaging in anti-social behaviors. St. Clair County's public school districts, facing tight budgets and many competing demands for resources, offer a limited range of services to these gifted students. By bringing new attention to this underserved student population, it is the hope of the Gifted Education Task Force that cost-effective program options will be expanded or created throughout our communities that will challenge our brightest young people to be the best they can be.

Citations

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- ⁱⁱⁱ Definition of Gifted (1990) The Council for Exceptional Children, Reston, Va. ERIC Digest #E476 ED 321 481
- ^{iv} St. Clair County RESA statistics, as reported by local districts, 2006-2007.
- ^v Maker, J. (1982). "Curriculum development for the gifted." Rockville, MD: Aspen Systems Corporation.
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- ^{xii} "A Nation Deceived: How Schools Hold Back America's Brightest Students." (2004) Edited by Nicholas Colangelo, Susan G. Assouline, Miraca U.M. Gross.
- ^{xiii} Parent and Counselor Information (2007-08) Kent ISD/Grand Valley State University Academically Talented Youth Program brochure

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