

Board proposal for alternative gifted education programming

"All students can learn, though at different rates and in different ways."

"Continuous improvement is essential."

"Intolerance for anything short of the very best."

"All students demonstrating academic growth and success."

"Provide more instructional options at the elementary and middle school level."

These Core Values and Key Results are part of the Buffalo-Hanover-Montrose Mission Statement. The following proposal is intended to increase our capacity to implement these values and improve results for a special population within our district, our most highly gifted learners.

This proposal is submitted by Laura Halldin, Gifted Education Coordinator, and the planning team that has been meeting since April 2009 to develop this document. Planning team members include: Matt Lubben, BCMS Assistant Principal; Kris Thompson, BHS Assistant Principal; Michelle Robinson, Parkside and Discovery Elementary Principal; Susan Lee, School Board Member; Janice Michalek, MES grade 5 teacher; Micah Morris, BHS science teacher; Teresa Weise, BCMS mathematics teacher; Jenina Rothstein, K-8 Intervention Specialist; Jenny Boldt, HES grade 4 teacher; Deb Scherber, BHM parent; and Peggy Bowers, BHM parent.

This is the first of two proposals regarding gifted education services for BHM students. The second proposal, to be submitted to the board in the fall of 2010, will outline a plan for the tier of highly intelligent students who need program considerations and whose teachers will need support to meet these students' academic needs but who will not meet the criteria of those accepted into the program outlined in this proposal.

Proposal: In this proposal, it will be shown that our most gifted learners frequently do not show academic growth at the rates we would expect based on their intellectual capacity due to lack of opportunity to learn at their own level through the regular curriculum. To address this student need, we propose the establishment of a school-within-a-school model of programming for highly gifted learners. This program will start small – one elementary classroom for grade 4-5 students, and a 6th grade middle school program covering the core areas of English, mathematics, science and social studies. Our intention is for the program to grow based on need and demonstrated success; and for the program to become financially self-sustaining.

Statement of need: Currently, there are students in our district who are not receiving a fair, adequate, or appropriate education based on their learning needs. These students – the top 5% of our district students - are likely, due to their unusually high level of intelligence, to be underserved in a regular, mixed ability classroom. This occurs for a number of reasons. Class sizes throughout the district are growing and the diverse needs of students within each classroom are increasing, which makes it more difficult for teachers to differentiate enough to keep these students challenged.

The implementation of the requirements of the federal No Child Left Behind (NCLB) legislation has compounded this problem due to penalties imposed on districts that do not show adequate yearly progress with low-performing students. BHM schools have responded by focusing resources and instructional attention on these students' needs.

This trend is proving helpful for low performing students as they are demonstrating growth in the areas of reading and math through our testing programs.

Gifted students do not enjoy this same level of instructional attention. There are no provisions in NCLB or other federal legislation to support gifted learners. The National Association for Gifted Children (NAGC), in their *State of the States Report*, notes that only 2 cents of every \$100 the federal government spends on K-12 education is earmarked for gifted education. The burden to provide for the needs of our gifted students is left to states and local districts, resulting in an inequitable system of funding where a few states invest heavily and some not at all. Even where funding is provided by states or local districts, gifted education programs are characterized in the report as “a patchwork system of teacher training, availability of services, and ... lack of reporting and accountability (that) has real consequences for high-ability students who may not succeed without specialized and rigorous instruction” (NAGC, 2009).

We see the effect this creates in BHM schools when some of our most intelligent students do not show achievement gains that reflect their ability. They do not meet their growth targets on the Measures of Academic Progress (MAP) testing. Their academic growth slows down the longer they are in an unchallenging program. When everything being taught is something a student already knows or learns with little effort, he or she frequently loses interest in progressing in school. These students arrive at Buffalo High School or at post-secondary institutions having failed to learn important time management and study skills; to be persistent in their learning; to develop an accurate sense of their abilities; or to deal with frustration.

Our district has been involved in Response to Intervention (RtI) – an approach that provides extra instruction at an appropriate level for students who are performing below grade level standards. RtI is frequently depicted as a pyramid of interventions for students. This pyramid would be better thought of as a diamond, because just as students below level need intervention and remediation, with increasing teacher support needed for deficits that are more severe, those students above level need enrichment and acceleration, also with increasing teacher support needed as students require more advanced programming.

In order to insure that we meet the educational needs of our gifted students, options that are economically sustainable need to be developed. The students who will be targeted for services under this proposal are our most intelligent students, those with the highest IQ's – the top 5% of our district students.

Research to support proposal: “All students deserve to learn something new every day – including the gifted. We can't forget excellence in our effort to achieve equity.” (Dr. Camilla Benbow, Dean of Vanderbilt University College of Education.)

Creating equity for all students does not mean providing identical educational services for all students – providing equity means striving to provide every student with what he or she needs to learn to their maximum potential. What has frequently been offered to gifted students, in BHM district and other districts, includes such options as ability grouping, enrichment activities in a resource or after-school setting, classroom differentiation, cluster grouping or independent projects. While these approaches are certainly helpful, they will not have as great an effect as will options which group high ability students together and, more importantly, offer students more challenging

curriculum – curriculum which moves at a faster pace and demands a higher level of work.

The effectiveness of acceleration for gifted students is both positive and substantial, as evidenced in the extensive research of James A. Kulik (1992), and Karen Rogers (1991) and others. Forms of acceleration such as full time classes, fast paced classes, and subject acceleration have resulted in dramatically increased learning when progress of accelerated gifted students is compared to progress of non-accelerated gifted students.

The benefits of acceleration extend beyond the K-12 experience. Children who are accelerated become ambitious adults: research indicates that they are more likely to earn advanced degrees and to make a goal of a career that requires education beyond a bachelor's degree. Experiencing accelerated curriculum increases the likelihood that gifted students will emerge from their K-12 experience with sound study and time management skills and an ability to persist when academic challenges present themselves.

In 2004, the John Templeton Foundation sponsored a report titled *A Nation Deceived: How Schools Hold Back America's Brightest Students*. This national report highlights the disparity between the research on acceleration and the educational beliefs and practices that frequently prevent implementation of the research. This report is based on the research findings of a wide range of experts in the field of gifted education.

The report cites a number of reasons why acceleration is not widely accepted or practiced in American schools: lack of confidence among educators to accelerate (this is correlated with lack of knowledge about the acceleration option); acceleration runs counter to personal beliefs of many educators; age is used as the most important determinant for grade placement; and it seems safer to do nothing than to take a perceived risk to accelerate a child. An example of a misconception is the perception among some educators that removing highly gifted students from the mixed-ability classroom removes role models from the average and below average students. In actuality, research extending back as far as that done by Albert Bandura (1964) and more recently by Dale Schunk (1996) has shown that students are most likely to choose a role model among those they see as being about their own intellectual level but who are achieving some sort of desired success. There is also considerable evidence that when a few of the highest performing students are removed from the group, other students will “rise to the top” and take on the leadership roles these students have vacated.

A further area of concern is the social and emotional development of our gifted students. A relatively new term researchers use to describe gifted children is “asynchronous”, meaning their intellectual maturity will not necessarily match their social maturity. Their intellectual development is likely to be on a par with persons much older chronologically, while their social and emotional development is likely to be congruent with others of their age, and gifted children need guidance to help cope with this. Research indicates that some gifted children also need assistance to deal with heightened sensitivity and perfectionism. As students move to middle school, friendship and social interaction becomes a top priority. Gifted students may face a dilemma: do they hide their intelligence to better fit in with their age peers, or do they reduce the potential for friendships in order to pursue achievement? According to the research, meeting these students' social and emotional needs occurs when they have the opportunity to learn

with others of similar interest, ability, and drive; and when they have an appropriate level of challenge and pacing.

A last area of concern is that of children who may be gifted, but are not identified for gifted education services due to factors such as being “twice exceptional”, meaning they have both a special education diagnosis (such as a learning disability or autism) as well as being gifted. Another group of students underrepresented in gifted education programs is students learning English as a new language. We need to be mindful of these students as we develop entrance criteria for a program to insure these students can access our program if appropriate.

Positive achievement results for all students: In the BHM school district, we want to see all of our students showing academic growth. When we look at our achievement data, it is glaringly obvious when students are scoring far below grade level minimums, and we quickly act to put plans in place to increase their growth in math and reading. What is less obvious is that students scoring at the top of our achievement data tables are not always showing growth. A student who tests above the 90th percentile on assessments certainly does not appear to be a problem; however, if that student is stuck at an achievement level, however high, and is not showing growth, that student is not learning anything new from our instructional programs.

Jack Brady, District Assessment Coordinator, compiled data from Measures of Academic Progress (MAP) tests from current 8th grade students who were identified for the district’s gifted education program during their elementary school years. The data examined for these 55 students covered three years; these students’ 5th, 6th and 7th grade years. What the data show is that over this period, 62%-75% (depending on the year) of these students met their growth targets in mathematics, and 67%-71% met their growth targets in reading. This percentage is somewhat higher than the total percentage of BHM students that meet their growth targets.

Probably the most interesting BHM data from the perspective of this proposal is that comparing results from this group of 55 gifted 8th grade students who have been in enriched or accelerated classes with the gifted students who have not been in enriched and accelerated classes. In reading, after two years in enriched English, 75% of the gifted students met their growth targets while 65% of the gifted students in regular English classes met their targets. In mathematics, after two years in accelerated math, 73% of the gifted students met their growth targets while only 40% of the gifted students in regular math classes met their targets.

A comparison of MCA test data from the spring 2008 and spring 2009 testing for these same gifted 8th grade students yields similar findings:

Math:	#	High	Medium	Low
No Advanced Class	34	44.1%	38.2%	17.6%
Advanced Math Class	21	76.2%	23.8%	0.0%
Reading:		High	Medium	Low
No Advanced Class	33	21.2%	57.6%	21.2%
Advanced English Class	22	59.1%	22.7%	18.2%

The benefits in terms of positive achievement results for gifted students in an accelerated program are clear, both in the research and in BHM data. Working with appropriately leveled curriculum at a rapid pace will mean less boredom and frustration,

learning appropriate study skills and habits, and boosting achievement levels due to constant encounters with challenging, new ideas.

In implementing more challenging curriculum with our gifted students, we would expect to see a trickle-down effect for other students. As teachers experience and observe the success of challenging curriculum that is taught in gifted classes, they may be willing to implement such changes in their mixed ability classes. This would promote the opportunity for all students to achieve at a higher level.

Community and stakeholder interest, support and sustainability: We have created enriched and advanced classes at the middle and high school. These classes are always in demand with students and parents; the classes are full with waiting lists for admission. Two years ago, a similar initiative occurred at one of our elementary schools, where the gifted education coordinator taught daily advanced math classes for grades 3-5, and enriched language arts twice per week. These classes were very well received by parents, students and classroom teachers. Our parents have indicated strong support for challenging programming that occurs daily for their children by choosing these opportunities when they are available.

Full time gifted programming exists in several Twin Cities metro school districts. These programs have proved to be popular options for district families, as well as attracting open enrollment students from neighboring districts that do not provide this type of gifted programming. The districts that do provide a full time programming option have attracted sufficient open enrollment to cover much of the cost of operating their programs. No other school districts in our area offer full-time gifted programming, so it is likely we would attract open enrollment students that would add revenues to pay for all or part of our program. We want to make it clear, however, that the primary purpose of our program is to serve the needs of our own students. No open enrollment students will be admitted until after all of our qualified district students have the option to enroll.

Curriculum model/ alignment with district and state standards: Any curriculum model used in the program would be aligned with district and state standards, although students may encounter the standards at an earlier grade level than that to which they are assigned. Students will be taught regular district mathematics and science curriculum at an accelerated pace. In mathematics 4/5 graders will accelerate to 5th and 6th grade math concepts, 6th graders to pre-algebra, 7th graders to algebra and 8th graders to geometry. In science, courses will also be accelerated by a grade, with 6th graders taking 7th grade life science, 7th graders taking 8th grade earth science, and 8th graders taking 9th grade physical science. Language arts and social studies curriculum will include regular district curriculum, but will be enriched through the inclusion of curriculum specifically developed for gifted students, such as the well-researched English and social studies curriculum units from the Center for Gifted Education at the College of William and Mary.

Instructional strategies may differ from those used in regular classes. A multiage format will be used for the grades 4-5 class. The curriculum should extend above and beyond the simple gaining of factual knowledge to give the students opportunities for research, and real-life application of learning through community involvement and mentoring.

Integration of technology: Technology will be a cornerstone of the program. Several applications of technology have been discussed. One potential application is offering

students on-line courses when appropriate. Use of the Rosetta Stone program for learning languages is one possibility. Research or other learning projects which allow students to access professionals or experts around the country using Skype or other technology will be an option. There is a plethora of programming available to advance student skills in the core subjects of reading and math. These options will allow students to explore their areas of interest and develop them further. We are well aware that there are costs associated with these programs, and would be looking for grants or other sources of funding in this area. Two potential sources of grant funds are the American Honda Foundation and the Qwest Teachers and Technology Grants.

Teacher selection process: Teachers for the program will be drawn from our existing staff. It is desirable to have teachers with Gifted Education Certification teaching the classes; if there are not enough teachers with Gifted Education Certification, we will need to provide professional development on working with gifted children to those selected to work in the program. Professional development time will also be necessary for curriculum development.

Student selection process: Students must qualify for inclusion in the program. Students may submit IQ evaluation results from a licensed psychologist for consideration. For students who do not have test results from a psychologist, a combination of measures will be used, including longitudinal achievement data from the *Measures of Academic Progress (MAP)* tests and ability data from the *Cognitive Abilities Test (CogAT)*. Supporting data on behavioral characteristics may be collected from teachers in areas such as learning, motivation, leadership and communication, using the *Scales for Rating the Behavioral Characteristics of Superior Students*. Decisions on admission will be made by a group of teachers and administrators who will review data submitted for each student. This group will include an elementary and middle school administrator, the Director of Teaching and Learning, the Gifted Education Coordinator, and one to two teachers teaching in the program.

One of our goals is to include students who are gifted but may also have a special education diagnosis who could benefit from this type of programming. These students, if they have been evaluated for special education services, are likely to have data from the *Wechsler Intelligence Scale for Children* and/or the *Woodcock Johnson Tests of Cognitive Abilities* that will show their intelligence level. The admission group will need to evaluate each child by balancing their ability level with their disability to determine whether they are likely to meet success in a full time gifted program.

Another goal is to include English Language Learners in the identification process, which may require using some alternate forms of assessment, such as the *Naglieri Non-Verbal Ability Test*. It is a short (about 30 minutes), multiple-choice test, with no reading. As the test name suggests only non-verbal (also called spatial or figural) reasoning ability is tested.

The student selection plan will be finalized following approval of this proposal. No open enrollment students will be accepted the first year of the program to give us time to pilot and iron out any issues in implementation of the program.

Advantages of implementation: The most important advantage will be for the highly intelligent students themselves, with the increased level of challenge in classes which spurs the love to learn, a chance to continue to reach toward their potential and show

growth in achievement, to want to stay in our schools, and to better have their social and emotional needs met. Not having to differentiate instruction for this exceptionally high group of students will be an advantage for teachers and other students, allowing them to focus on a narrower range of student needs. Parents will be pleased due to their children's instructional needs being met.

Challenges/disadvantages of implementation: There are several challenges to be overcome. Information and training will need to be offered to the entire staff to gain their acceptance and support of the program. There will be some extra initial costs to start the program to purchase appropriate curriculum materials and technology, and to train the teachers who will teach in the program. We will need to design our criteria and procedures for admission with care, so parents are clear about what it takes to be accepted into the program. There will also need to be a clear policy on exiting the program, should it be necessary to drop a student who is not meeting the standards or if a parent wishes to remove their child. A clear appeals process will need to be articulated for implementation in cases of disagreement between school and parents or students over admission to or exiting from the program. Transportation from all district elementary attendance areas will need to be arranged, as for Discovery Elementary.

Implementation plan: We propose the implementation of the program in phases, with future growth based on the demand of additional qualified students and on demonstrated success of the program. We recommend the following implementation sequence:

- For the 2010-2011 school year, create one full-time grade 4-5 classroom and locate it in one of the Buffalo elementary schools. Students from all elementary schools have the option of applying for the program. At BCMS, identify a cohort of 6th graders. These students will have enriched/accelerated courses in math, English, science and social studies. Their remaining classes will be regular 6th grade classes.
- For the 2011-12 school year, expand the BCMS program to include 7th grade. The elementary program will remain at one class until there are sufficient qualified students to warrant the addition of another class. Consider creating a grade 2-3 classroom.
- For the 2012-13 school year, expand the BCMS program to include 8th grade. Monitor the grade 4-5 enrollment to determine if expansion is necessary.

In order to be prepared to implement the first stage of the implementation sequence, the following must occur during the remainder of the 2009-10 school year and over the summer:

- December 2009
 - Develop entrance and exit policies and appeals process
 - Develop assessment plan for admission to the program
 - Investigate sources of grant funds for curriculum materials and technology
- January 2010
 - Obtain Board approval
 - Choose a location for the elementary class
 - Seek district professional development funds for teacher training for the program through an Exemplary Grant
 - Write other grants as appropriate
 - Communicate with district staff about the program
- February 2010

- Distribute publicity materials to district families with children in grades 3-5; collect applications
 - Administer assessments to children who apply for the program
 - Train teachers and have them rate student applicants on *Scales for Rating the Behavioral Characteristics of Superior Students*
 - Determine the student enrollment in the classes based on assessment data; communicate decisions to families
 - Develop the teacher selection process
 - Begin development of the curriculum plan
- March 2010
 - Select teachers
 - Meet with teachers to determine professional development needs in working with gifted students and developing curriculum for the program; determine work dates for the remainder of the school year and through the summer
 - Work on curriculum plan
 - Work on details of the evaluation plan
- April 2010
 - Determine equipment and furniture needs for the elementary classroom
 - Work on curriculum plan
- May 2010
 - Work on curriculum plan
- Summer 2010
 - Program teachers and planning team members attend the Hormel Foundation Gifted and Talented Symposium June 13-17 in Austin, MN.
 - Program teachers attend training in gifted education and complete work on curriculum plan
 - Order materials for classrooms

Evaluation plan: Multiple factors will be used to evaluate the effectiveness of the program. At the end of three years, we would expect to see the following if the program is successful:

- The program has become cost neutral; some of the funding is covered through open enrollment.
- Students are meeting their growth targets on the MAP tests at a higher rate than gifted students in the past. Earlier in this proposal, rates of 8th grade gifted students meeting growth targets were detailed. Similar data can be collected for all students scoring at or above the 95th percentile on MAP tests (the NWEA considers 95% to be the cut-off for gifted students), to compare percentages of students meeting growth targets who are in the program compared to students who are not. Student performance on MCA tests will be reviewed to insure students are scoring at a high level.
- Enrollment in the program shows yearly increase, and the increase includes both resident and open enrolled students. There will likely come a time when most eligible children from our own district are a part of the program and enrollment will stabilize.

- Examination of student retention data will show that 5% or fewer children exit the program, and that exiting is the result of a poor fit between the student and the program and not based on dissatisfaction.
- Teachers remain a part of the program for more than one year.
- Parents and students, through interview or survey, indicate satisfaction with the program. Indicators of satisfaction will include that the program is academically challenging; students are developing strong time management and study skills; students' social and emotional needs are being met.

Budget: This option is available to all students in the district, with bussing provided for any district students who qualify for the program.

Start-up costs of the program would be as follows:

- Space and classroom outfitting with furniture: no cost
- Classroom supplies: no additional cost
- Transportation for students from other attendance areas: no cost as buses are already transporting students for Discovery Elementary
- Curriculum materials: no cost for accelerated classes such as math and science as we will use materials already available in the district. Some cost would be incurred to acquire materials for language arts and social studies classes, but these costs would not exceed \$4000
- Staffing: 1 elementary FTE
- Professional development: \$4000 will be necessary for professional development and curriculum writing for teachers in the program. We will apply for district Exemplary Grant funds to defray this cost.

On-going costs would be for additional curriculum materials and professional development for teachers added to the program at a later date as the program expands into additional grade levels.

Role of the district Gifted Education Coordinator: The district coordinator would be involved in the program in the following ways:

- Developing and monitoring procedures for the program (admission, exiting, grievance, etc.)
- Disseminating publicity for the program; receiving and processing applications
- Providing or arranging for professional development and curriculum development for teachers
- Assessing students applying for admission; collating assessment data
- Sharing the assessment data with the admission committee and participating in the selection process
- Conducting the evaluation of the program

This would not be a full-time job for the Gifted Education Coordinator.

Sustaining costs:

Admission to the program will focus first on enrolling qualified students from District 877, but our goal would be to also attract qualified open enrollment students from other districts. Funds brought into the district would defray some or all of the costs associated with the program.