# GIFTED AND TALENTED PROGRAM: SUSTAINING MOMENTUM

Woodbridge Public Schools

Beecher Road School Woodbridge, Connecticut November 16, 2015

Prepared by: Jeanne H. Purcell, Ph.D.

# **District Information**

Superintendent	Gaeton Stella
Special Services Director	Clare Kennedy
Beecher Road School	
Leadership Team	Gaeton Stella, Clare Kennedy, Gina Prisco, Analisa Sherman, Jean Molot, Maureen Krawec
TAG Committee Members	Clare Kennedy, Analisa Sherman, Linda Acheson, Carson Echeverry, Cheri Guerra, Maureen Krawec, Doreen Merrill, Jean Molot, Teresa Nakouzi, Lori Patrick, Mary Sell, Kristine Rose, Kayla Widmeyer

# PREFACE

It is important to note that many of the accomplishments noted in this report relate not only to the learning needs of identified G/T students at Beecher Road School (BRS), but also to the learning needs of many of the precocious students who reside in the school and are not formally identified. Thus, these accomplishments are presented together; they cannot be presented in isolation.

Taken together, therefore, the accomplishments illuminate: (1) the enhancements to the services for G/T students, (2) the increasing attention to differentiation for all students, including those who have high abilities in mathematics, (3) how the instructional strategies used for G/T students are having a positive impact on the instructional strategies used in the regular classroom, (4) the attention and actions of the newly formed Leadership Team toward the recommendations that emerged from the Tri-State Report, 2015, (5) attention of the Leadership Team to the Board of Education's current goals for Beecher Road School, and (6) an **organized and well-designed plan** for improving mathematics instruction for all students.

# **BRIEF HISTORY**

In 2010, the leadership of Beecher Road School requested an audit of their gifted and talented program. It was conducted in that year, and an Audit Report was submitted and presented to the Board of Education in June 2011. In 2102, a follow-up to the Audit was provided and is included in Appendix A of this document. Most recently, and in 2015, BRS leadership requested an update since the Follow-Up. The update is included here and it is entitled Sustaining Momentum.

To ensure consistency, continuity, and a laser-like focus on the recommendations from the Follow-Up, 2012 Report, the organization and formatting from the Follow-Up is used here. In fact, pages 4-6 are duplicated below in **BLACK** type to highlight the 2012 recommendations. Continuing activity and accomplishments related to each 2012 recommendation is noted in **BLUE**.



### Timeline

# **RECOMMENDATIONS FROM FOLLOW-UP, 2014, AND PROGRESS**

### **RECOMMENDATIONS FOR GRADES ONE AND TWO**

- 1. In 2014-2015, it is critical to focus professional development on the declarative knowledge (e.g., concepts and principles) of the *Investigation* series, as well as accompanying best-practices/research-based instructional strategies.
  - a. Team level meetings occurred with regularity in 2014 and continue to occur, 2015-2016. These meetings focus specifically on the content or declarative knowledge of *Investigations*, among other mathematics topics.
- 2. Ensure that PLC time is dedicated to data analysis, examination of student work, and the next instructional steps.
  - a. Time has been and is currently spent on data analysis and possible next instructional steps for all learners, including those who are high achievers.

### **RECOMMENDATIONS FOR GRADES THREE THROUGH FIVE**

- 1. In 2014-2015, it is critical to place an emphasis on differentiated instruction in mathematics.
  - a. The math coaches (Maureen Krawec and Jean Molot) are providing continuing support for differentiating the mathematics instruction, especially for those who are precocious in math.
  - b. The common assessments in mathematics have been and continue to be reviewed for alignment with the Common Core State Standards (CCSS), per Tri-State Report.
  - c. Learning Walks, being conducted in 2015-2016 in mathematics classrooms, concentrate on a variety of Focus Questions, including one on the nature and occurrence of small, flexible groups and differentiated instruction.
- Provide for summer curriculum writing. The purpose of the summer writing is for teachers to develop a bank of aligned options for both reluctant and high-end learners. It would be most efficient to start with curriculum units that will be covered at the beginning of the 2014-2015 school year, so that teachers are ready for the fall semester. If there is time during the year for additional curriculum writing, other units can be targeted.
  - a. Summer curriculum writing occurred in 2014, and the focus was on aligning the *Investigations* series with CCSS.
  - b. Summer curriculum writing occurred in 2015, and the focus was on creating aligned assessments and identifying resources for differentiating lessons, with a specific focus on extensions for *all* students.
- 3. Plan collaborative meetings between the math coordinators/coaches and the grade level teams. These collaborative meetings should occur just before the start of each math

unit, and the purpose is for teachers to review how to teach the content, as well as familiarize them with learning options for struggling and high-end learners.

- a. These meetings continue to occur. Although the meetings cannot always be scheduled just prior to the start of a mathematics unit, they are proving helpful to the classroom teachers.
- 4. Ensure that there is enough money budgeted to secure resources necessary to provide for student choice, as well as any other resources related to DI.
  - a. Enough money has been allocated across the last two school years.
- 5. Fund a school subscription to NCTM (National Council of Teachers of Mathematics), and allow online access for individuals so that they can search archived volumes for ideas on how to teach difficult topics.
  - a. A mathematics subscription has been purchased for Beecher Road School teachers and the issues are made available to teachers in the teacher's room.
- 6. Collaborate with the tech team to ensure access to Kahn Academy and LearnZillions.
  - a. Learn Zillions, as well as other online support resources in mathematics, are available to classroom teachers.
- 7. Create a digital location for all common, supplemental materials so everyone knows where to look.
  - a. The math curriculum, as well as related resources, is available digitally. The effort continues and will be ongoing.
- 8. Develop a summer remediation mathematics program to close some of the critical gaps among struggling learners. Couple the remediation with enriching field trips.
  - a. This initiative is in progress, and there is conversation about its nature.
- 9. Develop after school and summer enrichment opportunities for high achieving students.
  - a. This recommendation continues to be discussed. See the school website for available resources.

# RECOMMENDATIONS FOR GRADE 6

- 1. Hire a math coach who can work with the team.
  - a. Maureen Krawec has been hired and works with grades 3-6.
- 2. Provide time for the Grade 6 Team to work with the coach to develop independent projects that advanced students can pursue when they already know the content of the math instruction.
  - a. This work and end products for this recommendation are in progress.
- 3. Support resources such as the Stock Market Game and Robotics.
  - a. Grade six students engage in activities and projects related to the stock market. Computer coding has been offered to some grade 6 students.
- 4. Provide support for summer curriculum writing.
  - a. This summer work has been completed, and teachers have an aligned mathematics resource that is aligned with CCSS.

### **RECOMMENDATIONS FOR OTHER CONTENT AREAS**

Music

1. Provide time for teams to meet in music. They want to be able to devote time to differentiating for high-achieving and talented students.

#### Science and PE/Health

- 1. Provide time for content specialists to work with grade-level teams. They have many ideas for relating science, physical activity and health to the mathematics curriculum.
  - a. On November 17, 2015, the specialists from these other content areas will conduct a "Share Out" of cross-disciplinary projects that have occurred to date. It is hoped that the shared ideas will serve to "jump start" other similar initiatives that will increase the connections that students can make across disciplines and increase the challenge level for all students, including those who are high-achieving. Further, additional "Share Outs" will be regularly offered in Beecher Road School faculty meetings.

#### **RECOMMENDATIONS ACROSS GRADES**

- 1. **Focus on Mathematics.** Mathematics content, instruction and differentiation should be the focus for Beecher Road School for the next several years.
  - a. Mathematics has been the focus since 2013; it was the focus of the Tri-State review in 2015; it will continue to be the focus for several more years. Please see the Tri-State report, 2015, for many specific examples of the initiatives that are in progress.
- 2. **Differentiated Professional Development.** Each faculty member should complete a self-assessment related to his/her practices with curriculum differentiation. The data from this assessment should be one source of information to construct the professional development plan that honors the different beginning points for individuals and teams.
  - a. Faculty members have not completed individual self-assessments. The math coaches, however, customize their coaching to address the unique needs of grade level teams. When asked, they provide differentiated or individualized support to individual teachers.
- 3. **Professional Objectives.** Every teacher should develop a professional goal around differentiation in mathematics, and the focus should be on the learning needs of high-achieving students. Accountability will be key.
  - a. At Beecher Road School, each teacher is required to create a student-learning goal in mathematics. Although the focus of the goal is not necessarily on differentiated instruction, the goal requires a teacher to incorporate differentiation into appropriate lessons to meet students' diverse learning needs, especially those who are above grade level.

- 4. **Role of Coordinators.** The role of the coordinators should be redefined. They need to be coaches who reach out to teachers to provide, for example: resources, planning assistance, modeling, and feedback. Although they might, on occasion, work with individual and small groups of students, the largest percentage of their time should be spent with teachers.
  - a. The newly created Leadership Team at Beecher Road School has collected several traditional job descriptions for mathematics coaches. The members are in the process of refining a description so that it accurately reflects the uniqueness of the roles within Beecher Road School.

Coaches should meet regularly to discuss progress and share insights and strategies so that their work can be targeted and efficient. They should also plan to meet with building administrators on a regular basis.

a. Coaches currently meet regularly to discuss the progress with mathematics instruction. They are part of the newly created Leadership Team that meets with administrators on a frequent basis.

Their job description should be written and shared with all faculty members.

- 3. **Time.** As much as it is possible, capture as much professional development time from PD days, planning meeting time during the six-day cycle, daily planning time, and any other professional time that is planned in the 2014-2015 year. The focus of the professional development time needs to be on mathematics content, instruction and differentiated instruction. Furthermore, ensure that PLC time is dedicated to data analysis, examination of student work, and the next instructional steps.
- 5. Walk-Throughs. In 2014-2015, it is critical to make walk-throughs/instructional rounds a priority. Conducting these classroom visits will allow administrators and/or coaches to determine the extent and quality of curriculum differentiation in both LA and mathematics. The data can be used for a three-fold purpose: (1) to modify the professional development plan, (2) to provide meaningful data to the Board of Education related to the practice of differentiated instruction, and (3) to support the Tri-State Visit in 2014-2015.
  - a. The nature and protocol of Learning Walks were discussed on the following 2015 dates: 7/21, 8/21 and 8/25.
  - b. Learning Walks were conducted in grade 2 and 3 classes on 10/29 and 11/10, respectively. Other grade level Learning Walks will be scheduled throughout the school year such that all grade-level classrooms will be visited.
- 6. **Tri-State Visit.** The Tri-State Visit will begin toward the end of the current school year, and focus questions are required. The focus questions should revolve around the new emphasis on math, and possible questions might include:
  - a. What constitutes rigor in mathematics content and instruction?

- b. How do we know when it is rigorous enough?
- c. How do we know if our mathematics differentiation for *all* students is rigorous and appropriately challenging?
  - i. Completed. Please refer to the Tri-State Report, 2015.
  - ii. "Essential Question 1: To what extent does our students' work in math:
    - Reflect an alignment of curriculum with common core standards and mathematical practices?
    - Demonstrate a balance between procedural knowledge and opportunities for student engagement in real-world, authentic applications?
    - Inform us about what students know and are able to do?"

"It is through the work of articulating and implementing the new curriculum that many teachers are collaborating and creating differentiated lessons that are targeted at the connection between the math program and the implementation of the Common Core Standards." (p. 9)

iii. Essential Question 2: To what extent do we recognize, nurture and meet the diverse mathematical needs of all learners?" (p.10)

"The Woodbridge District recognizes that students develop mathematical skills and understanding in different ways and at different rates and is committed to meeting these diverse needs. This recognition is evident in the use of differentiated grouping, choice and variety in demonstration of understanding, and in the provision of both intervention and enrichment experiences in addition to the core curriculum...While the Tag program serves a relatively small number of students, the district educates a number of high-fliers in mathematics-students whose mathematical abilities and proclivities are noticeable advanced. Currently there does not appear to be an organized approach to addressing the unique skills and interests of these students." (pp. 12-13).

Clearly, everyone at Beecher Road School is committed to increasing the robustness of the mathematics program for years to come, not only in the TAG program, but also in the regular classroom. To that end, the following initiatives have been enacted to support increasing the robustness of the mathematics program for diverse learners, including those with talents in this area. Initiatives with an asterisk (\*) are designed with G/T students as beneficiaries.

- Redefining the roles of the two math coaches
- \* Creating extension activities in many of the mathematics units.
- Use of NCTM publications.

- Required teacher goals and subsequent monitoring related to the progress of diverse learners in mathematics.
- Continuing the implementation of Learning Walks and the use of Learning Walk data.
- \* With the TAG teachers, explore the recent research on acceleration. TAG teachers will look to make a presentation to the staff at the end of the 2015-2016 school year.
- Continue to focus on the analysis of f.

The following are examples of additional initiatives that will serve to support the activities already in place:

- Self-assessment of teachers related to their differentiation practices and use of the data in subsequent professional development opportunities, 2015-2017. A likely focus will be advanced strategies in differentiation, such as tiered instruction.
- Engagement of teachers in the Learning Walk process, 2016-2107.

#### CONCLUSION

In conclusion, much progress has been made to enhance the TAG services to Beecher Road School students since the Follow-Up to the Audit was presented in 2012. Equally important, the refinements in the TAG services have clearly influenced the curriculum and instructional practices in the regular curriculum as seen in the following eleven significant accomplishments. Most important, they outline a clear, well-organized, coherent and forward-thinking approach to addressing the needs of TAG students at BRS, as well as those who have high abilities in mathematics. Specifically, these initiatives include:

- 1. A new, more challenging mathematics series has been purchased, and many related initiatives have coalesced to help teachers incorporate increasing rigor into their mathematics instruction. This series benefits both TAG students, as well as those who have high abilities in this area.
- 2. Summer curriculum writing has aided teachers in understanding the new mathematics content instruction and assessment techniques. These activities address the needs of *all* students.
- 3. The mathematics instruction at Beecher Road School is aligned with CCSS, as are all assessments, and this makes for more robust learning opportunities for all students.
- 4. Some PLC time is devoted to analysis of student learning data that informs the next instructional steps for all students, including those who are gifted and talented.
- 5. Additional resources have been purchased to support teacher's use of new instructional techniques and ideas in mathematics instruction.
- 6. Increasingly, technology is part of the mathematics instruction, and this benefits all students.
- 7. A math coach has been hired for the upper elementary grades. Among other things, she spends time customizing coaching for teachers about the needs of all learners, especially those who need extra challenge.

- 8. Cross-disciplinary projects are encouraged to increase the complexity of tasks for all, especially those who are high achieving in mathematics.
- 9. Teachers are required to create a professional objective in mathematics, often with a focus on the diversity of learners.
- 10. A new Leadership Team has been created at Beecher Road School to support an increasingly robust mathematics curriculum.
- 11. Learning Walks are underway. Currently they support the growing professionalism among the staff, increasingly robust mathematics curriculum, and differentiation for all students. It is hoped that—as they evolve—they will build capacity among all staff members as they continue to collaborate and refine their craft.

In ending this report, it is important to note the title. "Sustaining Momentum" clearly reflects the persistence, dedication and hard work of everyone at Beecher Road School to enhance not only the program for G/T students, but also the curriculum and instruction for the many high ability students who live in Beecher Road School. If asked the question about their progress, every member of the newly formed Leadership Team and teacher would be modest about their measured, but steady and remarkable progress, and the first to say that they have much left to do, not only for their students who are identified as gifted and talented, but also the many others who have high abilities. Quite simply, they are to be commended for their commitment and progress to on their important goals, both for the Board of education and the Tri-State Report Committee. I consider it a privilege to be a "thought partner" to members of the Leadership Team on their continuing journey toward excellence.

# **APPENDIX A:**

# GIFTED AND TALENTED PROGRAM AUDIT FOLLOW-UP

# Woodbridge Public Schools

**Beecher Road School** 

Woodbridge, Connecticut

March-May, 2014

# **District Information**

Superintendent	Gaeton Stella
Special Services Director	Sheila Haverkampf
Focus	Assessment of Differentiated Instruction in the Classroom
Dates of Visits:	March 3, March 10, May 12, and May 13

# PURPOSE AND NATURE OF THE VISITS

The purpose of visits to Beecher Road School was three-fold: (1) to follow up on the Gifted Program Audit, 2011, (2) to assess the extent to which differentiated instruction (DI) is occurring for all students in all content areas, especially language arts and mathematics (Recommendations #5-10, p.12 of the Audit Report), and (3) to make recommendations that would increase the use of this instructional strategy in classrooms.

These visits were requested by the Superintendent of Schools, Dr. Gaeton Stella, and Special Services Director, Ms. Sheila Haverkampf. Their request is in direct response to two critical pieces of data. First and foremost, administrators are keenly aware that a very large number of Beecher Road School students score at advanced levels on the Connecticut Mastery Test (CMT). Second, a small, but increasing number, of students is ELL. Finally—and as a result of these two data points—the administration and the Board of Education crafted a 3013-2014 district goal related to differentiated instruction:

"Explore an expanding focus on differentiation in student learning including through the support of the implementation of the following programs:

- Teacher Evaluation Plan
- Common Core
- SBAC
- Existing Programs (TAG, classroom differentiation, etc.)"

Sets of interviews were conducted with small groups of Beecher Road School administrators and coordinators, as well as teachers, usually by grade level. The purpose of the interviews was to gather information from participants about the use of differentiated instruction, the successes to date, as well as the challenges. Please see Appendix A for a copy of the interview schedule for each visit. The following questions were used to guide each interview:

- 1. To what extent is DI happening in language arts, especially for high achieving students?
- 2. What strategies are being used to differentiate for students in language arts?
- 3. To what extent is DI happening in mathematics, especially for high achieving students?
- 4. What strategies are being used to differentiate in mathematics?

5. What resources (e.g., planning time, professional development, related curriculum materials) are needed to ensure that all students, especially those who are high achieving, receive appropriately challenging curriculum and instruction?

Following each day of interviews, the notes were reviewed, edited and recombined. Subsequently, the notes were analyzed for trends and patterns across constituent groups. Finally, recommendations were prepared for administrators based upon the trends and patterns that emerged. Commendations are listed first. They are followed by the recommendations that are clustered into four categories: Kindergarten, Grades One and Two, Grades Three Through Five, and Special Areas. The recommendations are categorized because the needs of the constituent groups are different. The upper elementary grade teachers (grades 3-5) have implemented a new math series; their lower-grade counterparts (grades 1-2) have not yet implemented this series.

# COMMENDATIONS

- 1. Woodbridge continues to make a sustained effort to meet the needs of all students, including those who are high achieving.
- 2. In May 2014, the Connecticut State Department of Education recognized Beecher Road School as a School of Distinction. Based on CMT data, the annual award is presented to those schools that have high performing subgroups of students, high progress, and high overall performance.
- 3. Since the Gifted Program Audit in April 2011, Beecher Road School Administrators have devoted significant time and effort to address the recommendations contained in the audit.
- 4. With respect to it's program for gifted and talented, Beecher Road School has refined and clarified its gifted and talented identification procedures, refined its learning objectives for its students in the gifted and talented program, and created rubrics that can be used to assess the learning progress of its young people.
- 5. With respect to the regular classroom, all Woodbridge teachers have created and adopted a meaningful definition of curriculum differentiation.
- 6. The school has a well-developed Reader's and Writer's Workshop model in place for language arts. It requires differentiation for all students.
- 7. Woodbridge faculty has recently adopted *Investigations*, an inquiry-based mathematics program. Teachers in grades three through five implemented it this year; teachers in grades one and two will implement it next year. Like Reader's and Writer's Workshop, it supports differentiation for students.

# **RECOMMENDATIONS FOR KINDERGARTEN**

1. Educate parents about the mathematics program and differentiation for high-achieving students. Differentiation is always about going deeper. It is also about the Standards

for Mathematical Practice (MSP). For example, it may be that we are working to get students to persevere in math problem solving and explaining their thinking, a very different option than "another set of problems." Support teachers as they work to help parents understand the Common Core State Standards (CCSS) in mathematics and how we differentiate.

2. Support Kindergarten teachers as they search for the "best-of-the-best" articles about mathematics for parents, launch a website for these articles, and provide other opportunities for parents to understand mathematics instruction in the classrooms.

# **RECOMMENDATIONS FOR GRADES ONE AND TWO**

- 4. In 2014-2015, it is critical to focus professional development on the declarative knowledge (e.g., concepts and principles) of the *Investigation* series, as well as accompanying best-practices/research-based instructional strategies.
- 5. Ensure that PLC time is dedicated to data analysis, examination of student work, and the next instructional steps.

### RECOMMENDATIONS FOR GRADES THREE THROUGH FIVE

- 10. In 2014-2015, it is critical to place an emphasis on differentiated instruction in mathematics.
- 11. Provide for summer curriculum writing. The purpose of the summer writing is for teachers to develop a bank of aligned options for both reluctant and high-end learners. It would be most efficient to start with curriculum units that will be covered at the beginning of the 2014-2015 school year, so that teachers are ready for the fall semester. If there is time during the year for additional curriculum writing, other units can be targeted.
- 12. Plan collaborative meetings between the math coordinators/coaches and the grade level teams. These collaborative meetings should occur just before the start of each math unit, and the purpose is for teachers to review how to teach the content, as well as familiarize them with learning options for struggling and high-end learners.
- 13. Ensure that there is enough money budgeted to secure resources necessary to provide for student choice, as well as any other resources related to DI.
- 14. Fund a school subscription to NCTM (National Council of Teachers of Mathematics), and allow online access for individuals so that they can search archived volumes for ideas on how to teach difficult topics.
- 15. Collaborate with the tech team to ensure access to Kahn Academy and LearnZillions.
- 16. Create a digital location for all common, supplemental materials so everyone knows where to look.
- 17. Develop a summer remediation mathematics program to close some of the critical gaps among struggling learners. Couple the remediation with enriching field trips.
- 18. Develop after school and summer enrichment opportunities for high achieving students.

### **RECOMMENDATIONS FOR GRADE 6**

- 5. Hire a math coach who can work with the team.
- 6. Provide time for the Grade 6 Team to work with the coach to develop independent projects that advanced students can pursue when they already know the content of the math instruction.
- 7. Support resources such as the Stock Market Game and Robotics.
- 8. Provide support for summer curriculum writing.

### **RECOMMENDATIONS FOR OTHER CONTENT AREAS**

Music

2. Provide time for teams to meet in music. They want to be able to devote time to differentiating for high-achieving and talented students.

Science and PE/Health

2. Provide time for content specialists to work with grade-level teams. They have many ideas for relating science, physical activity and health to the mathematics curriculum.

### **RECOMMENDATIONS ACROSS GRADES**

- 7. Focus on Mathematics. Mathematics content, instruction and differentiation should be the focus for Beecher Road School for the next several years.
- 8. **Differentiated Professional Development.** Each faculty member should complete a self-assessment related to his/her practices with curriculum differentiation. The data from this assessment should be one source of information to construct the professional development plan that honors the different beginning points for individuals and teams.
- 9. **Professional Objectives.** Every teacher should develop a professional goal around differentiation in mathematics, and the focus should be on the learning needs of high-achieving students. Accountability will be key.
- 10. **Role of Coordinators.** The role of the coordinators should be redefined. They need to be coaches who reach out to teachers to provide, for example: resources, planning assistance, modeling, and feedback. Although they might, on occasion, work with individual and small groups of students, the largest percentage of their time should be spent with teachers.

Coaches should meet regularly to discuss progress and share insights and strategies so that their work can be targeted and efficient. They should also plan to meet with building administrators on a regular basis.

Their job description should be written and shared with all faculty members.

Sustaining Momentum November, 2015

- 6. **Time.** As much as it is possible, capture as much professional development time from PD days, planning meeting time during the six-day cycle, daily planning time, and any other professional time that is planned in the 2014-2015 year. The focus of the professional development time needs to be on mathematics content, instruction and differentiated instruction. Furthermore, ensure that PLC time is dedicated to data analysis, examination of student work, and the next instructional steps.
- 11. **Walk-Throughs.** In 2014-2015, it is critical to make walk-throughs/instructional rounds a priority. Conducting these classroom visits will allow administrators and/or coaches to determine the extent and quality of curriculum differentiation in both LA and mathematics. The data can be used for a three-fold purpose: (1) to modify the professional development plan, (2) to provide meaningful data to the Board of Education related to the practice of differentiated instruction, and (3) to support the Tri-State Visit in 2014-2015.
- 12. **Tri-State Visit.** The Tri-State Visit will begin toward the end of the current school year, and focus questions are required. The focus questions should revolve around the new emphasis on math, and possible questions might include:
  - a. What constitutes rigor in mathematics content and instruction?
  - b. How do we know when it is rigorous enough?
  - c. How do we know if our mathematics differentiation for *all* students is rigorous and appropriately challenging?