

Goddard School of Science and Technology

Mission

At the Goddard School of Science and Technology we are proud of our commitment to educate all children with purpose and support each child in reaching readiness for college and career. We do this through innovative teaching methods that foster intellectual curiosity and promote the values of an engaged community.

Vision

The Goddard School of Science and Technology recognizes that our individual vision for innovation and improvement begins with the overarching set of expectations set by the Worcester Public Schools. The Worcester Compact promises to parents and students that, as a system, they will deliver on high expectations and outstanding results for all students. 100% of students will be guaranteed a rigorous core curriculum resulting in measurable gains in student learning. As part of that compact, Goddard has established a culture of high expectations, teacher collaboration and focused instructional strategies.

We have moved beyond the notion that school operates as an independent unit to a belief that Goddard is part of a larger community that must make purposeful connections from cradle to college and career. Solid neighborhood partnerships make it possible for us to ensure that relationships with children and their families are strong, personal and lasting. We are committed to developing a Main South community where all partners know families personally and can provide individualized support because of that knowledge.

We will prepare all students who enter our learning community with the skills, experience and knowledge to advance as proficient speakers, readers, writers and thinkers. Emphasizing reading and writing across all content areas, we will develop our students' confidence and competence in learning core subjects. Alongside school families and neighborhood partners, we will ensure that transitions from cradle to college and career are strong. Together we will guide all students in setting high goals, establishing values and assuming responsibility for constructively contributing to the Main South community.

A. Curriculum, Instruction and Assessment

Early Childhood Literacy

Rationale/Approach:

Developing proficient, independent readers by Grade 3 requires students to have a strong foundation of early literacy skills upon which to build. Two years ago, Goddard implemented explicit, multi-sensory literacy instruction in Kindergarten to better serve our ELL students and increase the overall rigor and consistency of instruction. This past year, instruction was expanded to include the blending of multiple approaches. The results are promising. In 2011-2012, before implementation, the DIBELS subtest Nonsense Word Fluency results showed 54% of kindergarten students at grade level proficiency at the middle of the year (MOY) and 66% at that level at the end of the year (EOY). The results after implementation demonstrate strong increases in student performance. In 2012-2013, 51% of students were proficient at MOY and 78% were proficient at EOY. In 2013-2014, 76% of students were proficient at MOY and 90% were proficient at EOY.

Through both our Everyone Reads at Home (ERAH) and family literacy initiatives, Goddard has increased student access to grade/age appropriate reading materials, and improved family involvement with literacy development at all grade levels. Access to reading materials for students and families has been further strengthened by the formation of the One City, One Library partnership with the Worcester Public Library. One City, One Library is a collaboration between Worcester Public Library and Worcester Public Schools aimed at providing teachers, families and school with a wealth of resources including, but not limited to, books, databases, audio materials, public library services and much more. The project has not only brings library material to our students, but also trained public library staff to assist students, teacher and families in accessing material for learning and the pure joy of reading.

Goddard School has extended its focus on early childhood literacy and family partnerships to include a unique approach to early literacy support. In partnership with the Worcester Education Collaborative and the Hanover Insurance Group, we are implementing the Reading Together initiative, a project aimed at getting books into the hands of our youngest children, along with tools for their parents and caregivers to support proficient reading and sustained literacy. As part of the program, books are given out at a special book club for children and their families. In addition to books, literacy strategies are modeled by teachers, and families receive a booklet of literacy activities designed to make reading a family event that's fun for everyone.

As we continue to look for ways to strengthen the readiness of our early childhood students, a logical next step is expansion of our pre-school program to full-day. A longer school day not only offers more structured instructional and socialization opportunities for our young learners, but also offers neighborhood students and their families easier assimilation into the larger school community during their preschool years and beyond. Our better prepared pre-school and kindergarten students will become primary students equipped with the foundational literacy skills needed to be successful, proficient readers and writers.

Autonomies:

- Continued implementation of multi-sensory, systematic early literacy instruction based on the integration of multiple research-based approaches as identified by Goddard faculty.
- Partnership with Worcester Public Library and autonomy to develop programs to support curriculum specific to Goddard's mission and areas of autonomy.
- Explore the opportunity for neighborhood children to participate in a full-day preschool program, servicing no more than 15 students. The program would children serve children, both typically developing and those with identified disabilities, who turn four by December 1. Family interviews and screenings would ensure full understanding of and commitment to Goddard's mission and vision.

Curriculum Modules across all Grade Levels

Rationale/Approach:

We believe all students can and must reach significantly higher levels of reading, writing, and thinking, and we embrace the challenging expectations set by the Common Core State Standards. The development and implementation of rigorous, inquiry-based curriculum modules serve as a pathway for our student to meet the demands of the Common Core State Standards. Following the Understanding by Design framework, the curriculum modules are an instructional system for developing students' literacy skills to prepare them for the demands of middle, high school and beyond. Different from "off-the-shelf" curriculum units or lesson plans, the modules empower teachers to build students' literacy skills and understanding of science, history, literature, and other important academic content through meaningful reading and writing assignments that are aligned to the CCSS.

During the module, teachers engage students in daily tasks through which they learn and practice each literacy skill that will lead them to complete a curriculum embedded performance assessment. Each student task yields evidence teachers can use to determine whether students have developed the requisite skills and content expected and therefore what instruction needs to happen next. That is, tasks throughout a module effectively act as formative assessments that are fully integrated with the ongoing teaching and learning.

Through the integration of complex texts, inquiry-based learning experiences and higher order questioning students are able to:

- **Read**, analyze, and comprehend complex texts as specified by the common core
- **Write** products as outlined in the common core (focusing on argumentation, informational/explanatory, and narrative)
- **Apply** common core literacy standards to content (ELA, social studies, and/or science)

Goddard's work with curriculum modules began in 2011-2012 with teachers in grades five and six engaging in initial training through the Literacy Design Collaborative. During the 2012-13 school year, this work was extended as the second and third grade teachers tested modules created by DESE curriculum teams. The piloting framework allowed teachers to test, refine and strengthen the curriculum, while developing a stronger understanding of the UbD framework.

Support from the district literacy specialist and collaboration with teachers throughout the state aided in our success.

During year two, implementation was expanded to include six modules in grades two and three. Initial modules were also piloted in grades one, four and five. Reflecting on year one implementation, teachers reported that there was a need for more differentiation, especially for our ELLs and SPED students. Refining and adapting the modules to address the needs of a wide range of students is a work in progress. Recognizing the need for support in this area, we implemented a tiered intervention plan that provides all students with forty minutes of targeted literacy instruction four times per week.

Next steps include a concerted and intentional effort to develop and implement curriculum modules across all grade levels. To accomplish this goal, we will leverage the experience of current school staff that will facilitate professional development, lead module development and provide peer support to teachers.

Autonomies:

- Development and full implementation of cross-curricular modules in grades PK-6 by 2017.
- Design research-based and engaging instructional practices that differentiate so that all students can succeed. In this way, our instructional practices will serve as pathways to student achievement.

Explicit Instruction of the Language and Communication of Mathematics

Rationale/Approach:

Language and communication are essential elements in all learning, including mathematics. We understand that the language of mathematics must be explicitly taught by all teachers of mathematics and recognize that language can provide a barrier to the understanding of concepts. Effective teaching of mathematics also requires being able to support students as they work on challenging tasks. Goddard strives to build a practice of engaging students in academically rigorous tasks supported by purposeful discussion.

Using *Intentional Talk* by Elham Kazemi and Allison Hintz as a framework, Goddard teachers will plan and facilitate purposeful mathematics discussions at all grade levels. Teachers will enrich and deepen student learning, examine students' roles as both listeners and talkers and, in the process, offer a number of strategies for improving student participation and learning.

Central to this shift, is the development of professional learning experiences that strengthen teachers' classroom practices and support this type of student learning. Teachers will deepen their understanding of eliciting and responding to children's mathematical thinking in ways that advance the learning of key ideas in mathematics.

Autonomy:

- Implementation of intentional, inquiry-based mathematical discussions at all grade levels

Standards-Based Assessments and Reporting Tool

Rationale/Approach:

Goddard has strengthened the partnership between home and school through development of an inclusive school culture and a new system of standards-based student assessment and progress reporting. Our initial work in the areas of assessment and reporting began with teachers collaborating to identify the target standards in each of the core academic areas. They worked to develop and align common assessments, both formative and summative, to the standards at each grade level. To provide parents more and better information about the standards and how their children are progressing, a new report card was developed. Anecdotal, skills specific comments and assessment data are included in the report and serve as additional information about each child's progress.

As we have strengthened our understanding of the Common Core State Standards and reflected on feedback from parents, the manner in which we report progress has evolved. We now construct both formal report cards and mid-term progress reports four times per year. Parent/teacher conferences are scheduled three times per year, providing additional opportunities for families to strengthen their understanding the CCSS's as well as our unique reporting tool. Goddard teachers have had the opportunity to share their work across the district, as they have participated in the development of a new district elementary report card.

Through the autonomies set forth in Goddard's original plan, we have utilized multiple forms of assessment data to inform instruction. The Fountas and Pinnell Benchmark Assessment System is administered three times per year in grades K-6. Both the BAS data and running records compiled in the interim are utilized to drive targeted interventions and enrichment for all students. In addition, we have developed Common Core aligned rubrics as well as an inter rater reliability system for assessing monthly writing. This has resulted in a greater amount of writing across all content areas, and has led to consistent high expectations for literacy development. As a result, Goddard seeks continued flexibility in the area of assessment.

Autonomy:

- Continued implementation of student progress reporting and communications as a way to strengthen the partnership between home and school.
- Piloting of new district report card.
- Continued flexibility in administering assessments such as, but not limited to BAS and DIBELS.

B. Scheduling and Calendar

Goddard School seeks to establish seamless pathways for students as they transition from elementary to middle to high school and beyond. The presence of four Innovation Schools in Worcester's Main South Community provides a unique opportunity to maximize collaboration between the schools and extend opportunities to engage in differentiated professional

development. Goddard proposes an enhancement to the school schedule. The changes outlined below will not alter the total number of hours that students and teachers are engaged in learning.

The Goddard School currently follows the targeted professional development plan provided by the Worcester Public Schools and EAW Teachers Union contract in reference to required professional development for staff. Our current model includes two 90 minute professional development meetings for staff on the first and third Monday of every month, with the exception of December, February and June for a total of 1500 minutes. We also provide 8 hours of targeted professional development after school (480 minutes) to support our literacy development focus.

Goddard proposes moving to a one day per month early release model to replace both Monday meetings and the additional 8 hours of professional development. Through this model, we will have **one day a month** where students are released at 12:30pm after having lunch provided. Teachers will then participate in 3.3 hours of collaborative, targeted professional development from 12:45-4:03.

Per our proposed plan, students and teachers will follow a regular schedule on Wednesday mornings including a lunch break. On the **first Wednesday of every month**, students will be dismissed at 12:30pm, having had lunch at school. Teachers will assist with dismissal and then attend 3.3 hours (198 minutes) of professional development 12:45-4:03. After school meetings for Instructional Assistants will also take place on the first Wednesday of every month 12:45-2:15. These changes to the schedule will not impact the number of hours worked by the Instructional Assistants.

Proposed Lunch/Recess Schedule:

Lunch schedule: 10:45 Kindergarten

11:00 Grade 1/2

11:30 Grade 5/6

12:00 Grade 3/4

Recess Schedule: 11:15 Kindergarten

10:40 Grade 1/2

11:10 Grade 5/6

11:40 Grade 3/4

The 18.3 hours of time on learning lost due to early dismissal will be made by adding 6 minutes to every day, Monday, Tuesday, Wednesday, Thursday, and Friday, with the exception of the first Wednesday of every month. Teachers are currently responsible for supervising children for 15 minutes during either a morning or an afternoon duty. The proposed plan will allow teachers to choose between adding 6 minutes to the beginning of the day or 6 minutes to the end of the

day, depending upon their chosen duty. If there is a snow day or holiday that falls on a Wednesday, the next available Wednesday will be the early release/professional development day.

Full-time itinerant teachers, ESL teachers and child study staff will continue to attend the required department meeting and professional development. As a result, the minutes spent in these meetings will be deducted from the 3.3 hours on the Wednesday of the same month.

We are committed to ensuring that each student has an opportunity to engage in meaningful enrichment activities on Wednesday afternoons. Strong relationships with the Worcester Public Library, Clark University, Worcester State University and other Main South neighborhood partners, we serve as meaningful connections as we develop enrichment experiences tailored to the diverse needs of our students.

Autonomy:

- Change of schedule (as outlined above) to allow for increased grade level, lateral and cross school collaboration.

C. Staffing

Rationale/Approach:

Goddard's current staff is committed to providing high quality instruction that is centered on research-based best practices and the continual use of data to determine next steps for instruction. All teachers are members of Professional Learning Communities, where they collaborate to reflect on practice, examine student work and craft rigorous Common Core aligned lessons. Collegial conversations are part of Goddard's school culture.

In keeping with Goddard's mission to provide our students an education that will propel them to college or career readiness, we seek to recruit and retain highly effective teachers and administrators who meet the unique professional expectations of our school. Goddard's original plan called for a hiring process independent of district policies and practices and added the inclusion of Clark MAT graduates to the candidate pool. The plan has, however, been narrowly interpreted to consider only Clark MAT candidates. As a result, Goddard has not been able to fully assess the impact of this autonomy on student learning. To ensure a shared understanding of autonomy, we propose the following changes:

Qualifications:

In order to work as an effective member of the Goddard School Professional Learning Community, prospective teachers (regular education, full-time itinerant, SPED, ESL and SAC)

positions and administrators who are new to the building or in current bid positions will be expected to:

- Demonstrate an understanding of and commitment to the mission and vision of the school
- Embrace Goddard School's Professional Learning Community and team based culture
- Participate in demonstration lessons and/or performance assessments as part of the hiring process
- Hold either ESL licensure or SEI endorsement
- Show willingness to present and facilitate targeted professional development to school faculty/staff at Goddard

Process:

Current WPS teachers and external candidates will be considered for teaching/administrative/staff vacancies and bid positions at Goddard. Openings will be posted through both the WPS Intranet and SchoolSpring. In keeping with Goddard's shared leadership model, Goddard teachers will have an opportunity to participate in the selection process of candidates. Candidates will first be screened by the ILT. Selected candidates will then interview with a team comprised of current Goddard teachers, administrators, district specialists (for full-time itinerant, SPED, ESL and SAC positions) and community partners (when appropriate). The Worcester Public Schools Framework of High Quality Teaching and Learning document in conjunction with the Standards and Indicators of Effective Teaching Practice Rubric will be used as reference tools in the hiring process. A demonstration lesson or performance assessment will serve as an additional way to measure teacher effectiveness. The decision making process will be rooted in consensus. In the event that the team is unable to come to consensus, the principal will make the final determination, considering evaluation data and the overall needs of the school.

After School and Summer School Positions:

To ensure that the individual social, emotional and academic needs of our students are addressed throughout the year, Goddard seeks to extend our hiring autonomy to include after-school and summer staffing. Applications will be accepted from current WPS employees through the WPS Intranet. Applicants will be screened by the ILT and interviewed by a team of Goddard administrators and teachers. Preference will be given to current Goddard teachers and administrators serving in the role in which the opening occurs.

Autonomy:

- As described above, the selection process for teaching, administrative and bid position vacancies will reflect our shared leadership model and will be independent of district policies and practices.
- After School and summer school hiring will be independent of district policies and practices as detailed above.

E. District Policies and Procedures

Rationale/Approach:

The Goddard School of Science and Technology Governing Board.

The Goddard School of Science and Technology Governing board is charged with carrying out the school's vision, mission and policies as agreed upon by the Worcester Public Schools Committee and the Worcester Public Schools Teachers Association. The Innovation Plan and state laws will continue to guide the board's work in terms of budget, staffing, calendar, schedules, curriculum and governance. The governance board members will include the following:

- Goddard's principal
- Goddard's assistant principal
- Goddard's instructional coach
- Two representatives from Goddard's staff
- Two Clark University partners
- One representative from Family Health
- One Worcester Public Library representative
- Two parent representatives
- One student representative
- One additional community partner

The role of board members will be to carry out the mission and vision of Goddard School, to ensure alignment of partnerships to the school's mission and vision, to collaboratively secure outside funding for students and programs and to foster and development family and community engagement.

Special Permission and Rescission

Goddard has made significant strides in reducing the tardy rate and improving student attendance. Despite this progress, we continue to struggle to engage the families of a small population of students who reside outside of the attendance boundaries. With almost 90% of our students receiving free or reduced lunch and 65% of our students speaking English as a second language, the needs of our neighborhood students and their families are tremendous. Goddard seeks direct oversight of special permission and rescission procedures. Direct oversight is critical to the mission and vision of the Goddard School, as we seek to strengthen partnerships within the Main South community, engage neighborhood families in meaningful ways and establish seamless pathways to college and careers.

Autonomy:

- Direct oversight of special permission and rescission procedures

F. Professional Development/Learning

“We can achieve our fundamental purpose of high levels of learning for all students **only if we work together**. We cultivate a collaborative culture through the development of high-performing

teams!” —DuFour, DuFour, & Eaker, *Revisiting Professional Learning Communities at Work* (2008)

Rationale/Approach:

Goddard’s mission is centered on the belief that we must work together to achieve the collective purpose of learning for all. With this in mind, Goddard has set the foundation for meaningful collaboration and ongoing learning to occur. Throughout the 2013-14 year, all teachers have worked together in professional learning communities with a focus on improving student achievement. Every teacher team participates in an ongoing process of identifying the current level of student achievement, establishing a goal to improve the current level, working together to achieve that goal, and providing periodic evidence of progress. The practice has had a profound impact on Goddard’s culture, shifting it from a focus on teaching to a focus on learning.

As the school moves forward, every professional in the building will deepen their engagement with colleagues in the ongoing exploration of three crucial questions that will drive the work within the professional learning community:

- What do we want each student to learn?
- How will we know when each student has learned it?
- How will we respond when a student experiences difficulty in learning?

We will focus on designing strategies to ensure that struggling students receive additional time and support, no matter who their teacher is. In addition to being systematic and schoolwide, the professional learning community’s response to students who experience difficulty will be

- *Timely.* The school quickly identifies students who need additional time and support.
- *Based on intervention rather than remediation.* The plan provides students with help as soon as they experience difficulty rather than relying on summer school and retention.
- *Directive.* Instead of *inviting* students to seek additional help, the systematic plan *requires* students to receive 40 minutes of additional assistance until they have mastered the necessary concepts.

For teachers to participate in such a powerful process, the school will ensure that everyone belongs to a team that focuses on student learning. Each team will have time to meet during the workday and throughout the school year. Teams will focus their efforts on crucial questions related to learning and generate products that reflect that focus, such as lists of essential outcomes, different kinds of assessment, analyses of student achievement, and strategies for improving results. Teams will develop norms or protocols to clarify expectations regarding roles, responsibilities, and relationships among team members. They will also adopt student achievement goals linked with school and district goals.

Autonomies:

- Design and implementation professional learning experiences that create vibrant intellectual communities for students and teachers.

- Flexibility to engage in cross-site, neighborhood based professional development that directly supports the areas of curricular innovation.

Three Year Measurable Goals/Action Steps

1. 100% of Goddard students will demonstrate growth in English Language Arts as measured by assessments such as DIBELS, Fountas & Pinnell BAS, ACCESS and other state determined standardized measures.
 - a. Building upon our knowledge of the UBD framework, Goddard teachers will develop and implement high impact literacy modules at all grade levels
 - b. We will continue to engage in collaborative work to deepen our understanding of the standards and strengthen our practice
 - c. Engage deliberate and meaningful ways with Main South Community partners to develop curriculum and improve instruction
2. 100% of Goddard students will demonstrate growth in Mathematics as measured by assessments such common grade level and other state determined standardized assessments
 - a. Refine and implement common math assessments at all grade levels
 - b. Develop and implement a tiered intervention plan for math in all grades
 - c. Engage in grade level and lateral reflection of student work, especially in the area of writing to demonstrate mathematical understanding.
 - d. Integrate intentional, inquiry-based mathematical discussions at all grade levels
3. Goddard School will foster high levels of family and community engagement, commitment and partnership. 100% of Goddard families will be provided with daily, weekly, monthly and quarterly opportunities to engage in their child's literacy development.
 - a. Collaborate with Worcester Public Library and Worcester Education Collaborative to increase opportunities for Main South families to participate in literacy development
 - b. Provide additional opportunities for families to strengthen their understanding the CCSS's as well as our unique reporting tool
 - c. Continue to build a college and career culture thorough the expansion of AVID to include grades 4 and 5
4. Goddard will build and sustain a collaborative culture centered on student growth. 100% of Goddard teachers will work in Professional Learning Communities with a focus on growth for all students.

- a. Continue to build capacity of PLC's by learning and implementing additional protocols for examining student work and reflecting on practice
 - b. Engage all teachers in the practice of instructional rounds
 - c. Strengthen the role of the ILT in the development of focused professional development
 - d. Share what we have learned with the wider WPS community

5. In order to maximize opportunities for learning, all students in grades K-6 will have opportunities for either targeted intervention or enrichment.
 - a. Continue to build teachers' literacy toolkits through targeted PD in the areas of questioning, complex text, and effective reading strategies
 - b. Engage in ongoing review of best practices and make adjustments as necessary
 - c. Extend the intervention model to include math