
Edward Devotion Elementary School Educational Program

Public Schools of Brookline

Table of Contents

Introduction	2
Strategic Plan Goals	3
Grade and School Configuration Policies	3
Class Size Policies	4
School Scheduling Method	5
Teaching Methodology and Structure	8
Grouping Practices	9
Tiered Instruction	9
Educational Technology	10
English Language Arts/Literacy	12
Mathematics	13
Performing Arts	14
Physical Education	15
Science and Engineering	16
Social Studies	17
Visual Arts	17
World Language	18
English Language Learners	19
Special Education	20
Social Emotional Learning and Bullying Prevention/Intervention	23
Outdoor Space for Physical Activity	23
Professional Learning and Teacher Planning	24
Room Assignment Policies	25
Lunch Programs	27
Transportation Policies	28
Functional and Spatial Relationships and Adjacencies	28
Security and Visual Access Requirements	30
Final Statement of Intention	30



EDWARD DEVOTION ELEMENTARY SCHOOL EDUCATIONAL PROGRAM¹

The Public Schools of Brookline (PSB) provides education to pre-school through twelfth grade students in eight elementary schools, one comprehensive high school, and early childhood programs in rental spaces across town. In addition to school-based programs, the Public Schools of Brookline offers continuing education courses, summer school, enrichment programs, and numerous athletic opportunities.

For more than two decades, the Public Schools of Brookline has been guided by four core values: high achievement for all, excellence in teaching, collaboration, and respect for human differences. More recently, a fifth core value was added – educational equity. The core values, along with a vision, mission, and set of goals, establish the four cornerstones of our strategic plan². Once finalized, the second version of our strategic plan will provide inspiration and direction, while holding us accountable to fulfilling our vision, which begins with:

Brookline provides an extraordinary education for every child. Each child's unique path to achievement is supported in academically exciting and programmatically rich environments.

These two sentences could be part of a school system's vision statement today or 50 years ago; however, the reality of what these schools would look like would be vastly different. Fifty years ago, or in some cases just ten years ago, what was considered extraordinary, exciting, and programmatically rich is practically irrelevant for the teaching and learning that is required today. No longer is learning confined to the classroom. Learning is ubiquitous. No longer is there a finite body knowledge that a teacher imparts to her students. Now, there is a vast amount of information available to students, not just by way of the teacher, but by virtue of access to technology. Described as the "Four Cs" or "super skills" for the 21st century – communication, collaboration, critical thinking, and creativity, are redefining the basics of children's learning experiences. No longer is "smart" defined solely by scores on standardized tests. Instead, intelligence and talent is expressed in a variety of ways: applying knowledge, creating products, solving complex problems, systems thinking, design and testing, and knowing how to learn³.

In the year 2014, our vision statement challenges us to shift the traditional paradigm of school to a new definition of a 21st century preK-12 education. Our strategic plan, specifically the four strategic plan goals, serve as our guide as we challenge ourselves to fully prepare children for their futures in an extraordinary time.

¹ Revised for September 2014

² See Appendix A: *Public Schools of Brookline: Strategic Plan – Vision, Mission, Core Values, and Goals*

³ M. Neumeier, *Metaskills: Five Talents for the Robotic Age*, New Riders, 2013

STRATEGIC PLAN GOALS

Goal 1: Every Student Achieving

Ensure that every student meets or exceeds Brookline's high standards and eliminate persistent gaps in student achievement by establishing educational equity across all classrooms, schools, and programs.

Goal 2: Every Student Invested in Learning

Increase every student's ownership of his/her learning and achievement by using rigor, relevance, and relationships to foster a spirit of inquiry and the joy of learning.

Goal 3: Every Student Prepared for Change and Challenge

Instill in every student the habits of mind and life strategies critical for success in meeting the intellectual, civic, and social demands of life in a diverse, ever-changing, global environment.

Goal 4: Every Educator Growing Professionally

Foster dynamic professional learning communities that inspire inquiry, reflection, collaboration, and innovation, and use data to improve teaching, advance student learning, and refine the programs and practices of the Public Schools of Brookline.

Our teaching and learning aspirations described in the strategic plan goals drive our building plans. The Devotion School building plan was developed with an understanding of how the physical structures can create and sustain an environment that maximizes student learning. **It's essential that the school be flexible, with spaces that can be reconfigured, that are accessible (both physically and technologically), and that create an environment that promises interest, creativity, and multiple learning opportunities.**

GRADE AND SCHOOL CONFIGURATION POLICIES

The Public Schools of Brookline provides educational programs for students in preschool through grade 12. As of September 8, 2014, there were 7,514 pre-K through 12 students enrolled in the Public Schools of Brookline. The eight elementary schools educate students in grades pre-K through grade 8, with a September 8, 2014 enrollment of 5,604 students. Students attend the Brookline elementary school in their geographical neighborhoods. Brookline High School serves students in grades 9 – 12, with an enrollment in September 2014 of 1,910 students.

The Edward Devotion School is the largest of Brookline's K-8 elementary schools, with a population of 815 students. It enjoys an international reputation, welcoming students from all over the world. The system-wide programs offered at Devotion are the English Language Learner program with a high concentration of Hebrew speakers, and a K



through 8 Therapeutic Learning Center for students who need intensive social and emotional supports.

A 5-section K-8 school serving approximately 1,000 students is a big elementary school. To serve students of this age most effectively, the physical space, at a minimum, needs to feel small. Students thrive in a small learning community where teachers know them well; in a community that supports a sense of safety, respect, and trust; in a community that is energizing and promotes creativity; and in a community that supports learning *every way* with the appropriate facilities that promote learning *everywhere*. Our educational plan calls for clustering grade levels, for pedagogical reasons. This renovation creates the necessary intimacy and scale to create caring, connected, and collaborative learning communities in the new Devotion School.

CLASS SIZE POLICIES

The Brookline School Committee, Brookline district leadership, and the Brookline Educators Union recognize that class size is an important factor in a quality education. While recognizing that a steadily increasing enrollment in Brookline, coupled with limited space in our school buildings, has put pressure on class sizes, the average system wide class size has remained relatively steady during the recent 8-year period of enrollment growth. A goal of the new facility is to create classes as small personalized learning environments.

The number of required classrooms based on current enrollment for 815 students is as follows:

- | | |
|----------------|---------------|
| • Kindergarten | 5 classrooms |
| • Grade 1 | 5 classrooms |
| • Grade 2 | 5 classrooms |
| • Grade 3 | 5 classrooms |
| • Grade 4 | 4 classrooms |
| • Grade 5 | 4 classrooms |
| • Grade 6 | 4 classrooms |
| • Grade 7 | 4 classrooms |
| • Grade 8 | 4 classrooms |
| • Total | 40 classrooms |

Historically, all Brookline elementary schools have housed pre-kindergarten classrooms, providing inclusive educational opportunities to the children of Brookline. In 2012, pre-kindergarten classes were moved out of the Devotion School and displaced to other sites in town due to increasing enrollment and space constraints. We value preK-8 configurations. Therefore, the Devotion building project creates two inclusive pre-

kindergarten classrooms allowing the Devotion community’s youngest learners to be housed, once again, in an elementary school setting in a preK-8 school.

Applying the design principle of making a large school feel smaller, grade levels are clustered to allow teams of teachers to work with their cohort of students. A smaller, more personalized learning environment is created within such clusters, which also promotes a strong sense of teachers “owning” all students and helps to ensure that no student feels anonymous.

In addition to supporting a strong sense of community and allowing teachers to get to know their students well, clustering grade levels promotes collaboration. For this reason, proximity matters. Teachers teaching side-by-side in classrooms with windows to the hallways naturally promotes a sharing of practice. Classroom windows serve the purpose of informal supervision with a clear line of sight into hallways and gathering spaces while also making teachers’ practice more public and student learning more visible. The newly renovated school will support these critical characteristics of professional learning communities.

SCHOOL SCHEDULING METHOD

Every year the district distributes the document, *Time Allocations – Expectations and Guidelines*⁴. This document clearly communicates the minimum teaching and learning minutes by grade level, across the disciplines, per day and in a week, in order to meet state requirements and adhere to the collective bargaining agreements.

Teachers use this information for planning purposes and the document highlights the opportunity for interdisciplinary curriculum. Administrators create the K-8 master schedule using the *Time Allocations* document and collective bargaining agreement.

Regarding scheduling, the Unit A contract reads:

Under Article 43, Section I - Teaching Hours and Teaching Loads – Each elementary teacher (K-6) will be scheduled for a daily preparation period. In a five-day week, at least four (4) of these preparation periods will be scheduled for at least forty (40) minutes in length, while the fifth will be scheduled for at least thirty (30) minutes in length. Such preparation periods are exclusive of the one-half (1/2) hour duty-free lunch period per day. The employee’s supervisor shall have the responsibility to schedule preparation and lunch periods.

The Public Schools of Brookline has a rich program of specials – visual arts, performing arts, physical education, and health. A *secondary* benefit of these classes is the use of

⁴ See Appendix B: *K-8 Time Allocations: Expectations and Guidelines* and *21st Century Interdisciplinary Themes*



this time for teachers' planning (individual and common planning time). Of course, the *primary* benefit of visual arts, performing arts, physical education, and health is the experience students have in each of these disciplines, both within the separate classes and through the integration of these subjects with the other disciplines.

Appropriate space for the specialists to provide a high level of instruction is essential. Within the week, all students at Devotion take one 40-45 minute visual art class; grades K-3 take one 30-minute and one 40-minute general music class; Grades 4 & 5 take one 40-minute general music class and one 45-minute Conservatory class; and grades 6-8 take two 45-minute Conservatory classes per week. There are two small music classrooms at Devotion with minimal storage space. Conservatory classes are taught by itinerant staff, who also serve other elementary schools in town. As a result, we are limited in our ability to schedule these classes across all days of the week. Conservatory classes take place one afternoon and one morning per week. Due to the lack of physical space, these instrumental music classes take place in the music rooms, auditorium/multipurpose space, computer lab, cafeteria, the art room, and at times in a lobby area.

All students, K-8, participate in two periods of Physical Education instruction each week. The Devotion School houses only two gym spaces – one full-size gym and one “small” gym; the small gym is used as an instructional space only for students in grade K-2. The schedule requires three Physical Education classes to be scheduled at one time. Therefore, two classes must “double up” in the large gym in order to accommodate all of the instructional sessions. This creates obvious limitations to instruction.

Elementary world language (K-6) is also a variable in scheduling. The program is described in detail later in the document and listed here only for purposes of understanding the complexity of the Devotion School scheduling process. Teachers travel from classroom to classroom for instruction, by grade, as follows:

Grades K-2:	3 sessions x 20 minutes = 60 minutes/week
Grades 3-5:	3 sessions x 30 minutes = 90 minutes/week
Grade 6:	3 sessions x 45 minutes = 135 minutes/week

The English Language Learner (ELL) program is another area of attention in the schools' master schedule. The Devotion School is home for our ELL Hebrew speaking students. Currently, 119 students (across languages) are serviced in four classrooms, utilized in the following ways:

- K-3 Hebrew ELL: four 60-90 minute periods per day; small groups range from 6-8 students

- Grades 4-8 Hebrew ELL: six 45-60 minute periods per day; small groups range from 1-8 students
- K-2 non-Hebrew ELL: four 60-90 minute periods per day; small groups range from 3-7 students
- Grades 3-8 non-Hebrew ELL: six 45-60 minute periods per day; small groups range from 1-6 students

Two teachers are assigned to support our Hebrew speakers and two teachers work with our non-Hebrew ELL students. Our support model is both push-in and pull-out, as determined by the student’s level of English proficiency. Students at the entering and developing stage need a designated ELL learning classroom.

Currently, space is a strong driver of the master schedule at the Devotion School. The building plan not only addresses the issues of the amount of space (e.g., number of classrooms), it provides for the types of spaces and the functions necessary for the teaching and learning that is aligned to our local standards and strategic plan goals.

The building plan presents structural elements that support a more educationally effective master schedule for the school. A few examples include:

- Appropriate spaces to schedule math specialists and literacy specialists providing intervention services to students;
- Special education services stationed and provided throughout the school with proximity to the clustered grade levels;
- More classrooms that support the work of the *Engineering Design Process*⁵ – define the problem, explore, design, create, try it out, and make it better;
- Grade level clusters to allow elementary world language teachers to move from class to class across a grade level more efficiently;
- Large rooms that can be divided into smaller spaces;
- Instrumental lessons conducted in the proper space, not in a classroom or an alcove causing disruption to other classes;
- Fully accessible classrooms allowing students with physical disabilities to be scheduled into any learning space in the building;
- Appropriate professional spaces available for teacher collaboration during common planning time;
- Adequate and secure storage spaces with moveable furniture allowing use by multiple users;
- Availability of appropriate open space for informal gathering;
- Adequate spaces (walls, glass cabinets, display areas) for extended display of student work so that a space is not deemed “not available” while displaying student work.

⁵ See Appendix C: *Engineering Design Process*, a student-friendly version of the engineering design process provided by TheWorks.org. The graphic supports Brookline teachers’ understanding of how to build engineering practices into and across the curriculum.



TEACHING METHODOLOGY AND STRUCTURE

“Form follows function” is a fundamental principle in science/engineering. The Devotion School renovation project provides the opportunity to create the school facility in a form that supports the functions of a 21st century education and promotes the innovative teaching and learning that is called for in our strategic plan goals.

Brookline’s K-8 curriculum⁶ is created across all disciplines within our local standards, called *Learning Expectations*⁷ (LEs). Brookline’s Learning Expectations meet or exceed the rigorous Massachusetts Curriculum Frameworks. The Brookline Learning Expectations are developed with teams of teachers, led by curriculum coordinators. With the adoption of the Common Core State Standards, our most recent revisions are in English language arts and literacy, and mathematics. The revisions needed were relatively minor, given the earlier research and development of our local LEs through our Program Review Process.

We teach for understanding and mastery⁸ of the *Learning Expectations*. Standards-based progress reports in grades 1-5 are a perfect example of Brookline’s commitment to the essential content and skills of the Common Core, the up and coming Next Generation Science Standards, and the contemporary research in education calling for student-centered learning, individualization and personalization, and attention to 21st Century skills (e.g., critical thinking), Habits of Mind (e.g., reflection), social emotional learning (e.g., respect), and noncognitive skills (e.g., perseverance)⁹.

In addition, the revised strategic plan goals require shifts in our curriculum, instruction, and assessment practices in order for students to acquire the high-priority skills and essential knowledge needed to flourish in high school and succeed in the digital age. Twenty-first century learning requires 21st century teaching in a 21st century school.

⁶ See Appendix D: *Public Schools of Brookline Grade 3 Curriculum Overview*. Brookline has a comprehensive K-8 curriculum across all subjects defined by the *Learning Expectations*. It is essential that parents and the community are aware of the Brookline curriculum. Each grade level’s *Curriculum Overview* introduces the discipline and a summary of important content, skills, and concepts in that discipline and grade.

⁷ See Appendix E: *Grade 3 Science/Engineering Learning Expectations*. Every subject has *Learning Expectations* – statements that define what students will know and be able to do, K-8.

⁸ See Appendix F: A subset of *Learning Expectations* across the subjects in grades 1-5 are defined as *Essential Learning Expectations* (ELE). Student learning and growth of each ELE is monitored, measured/described, and reported on the grade 1-5 Progress Reports with the use of rubrics. Rubrics describe the continuum of learning for each ELE. On the rubrics, *Established* defines grade level proficiency.

⁹ See Appendix G: *Work Habits and Skills*. Beyond the acquisition of discipline- specific content and skills, all students need to know how to learn in a variety of settings and be a good citizen. *Work Habits and Skills* define a set of high-priority skills that Brookline values greatly and, therefore, measures/describes on the *Progress Reports*.

Building plans for the Devotion School create the learning environment students need now in order to be prepared for the future.

Below is an overview of Brookline's educational programs and practices, the current state at Devotion, and how the renovated school building will support and promote improvements in pedagogy that are imperative if we are to meet our goal of fully preparing students for their futures.

Grouping Practices

General education teachers, in collaboration with special educators and other instructional specialists, determine a variety of grouping methods to meet the instructional needs of their students. Grouping and regrouping methods take place weekly within classrooms and among grade level classrooms. General education, special education, literacy and math specialists, ELL teachers, and ECS teachers collaborate to provide tiered instruction in the inclusive environment. Pullout instruction is provided for students who require it, based on their personalized instructional needs within tier two and tier three programming. There is shared responsibility among the faculty for all students' success. Grade level classrooms are organized within common hallways and adjacent locations. Close proximity is critical in order to achieve the requisite communication and collaboration for a variety of grouping methods in grade level teams. Current architectural aspects of Devotion School preclude the necessary adjacencies to ensure team proximity for all grade levels. Classrooms are not easily rearranged for different sized groups. Different areas of the classroom are not suitable teaching and conferencing spaces. The renovation would provide space that can be adjusted for the needed activity, with furniture that is easily moved and rearranged, with wall space that can support a small board and/or display student work and other visuals necessary for instruction.

Tiered Instruction

Teachers at the Devotion School support students through a variety of teaching models: co-teaching, team teaching, flexible grouping, small group instruction, and individualized instruction. Teachers believe that all learners should be provided differentiated forms of instruction and recognize that all students learn in different ways, rates, and timeframes. To that end, the Devotion School continually adapts its staffing support, instructional methodologies, and assessment practices to meet student needs.

Tiered levels of instruction provide the general education foundation of Devotion School's continuum of service model. Devotion staff provide tiered levels of instruction to all students (tier one - the general classroom curriculum; tier two - strategic levels of instruction; tier three - intensive levels of instruction, usually at the individualized level). If a student demonstrates academic and/or social/emotional/behavioral concerns despite thorough Response to Intervention (RTI) procedures, the teacher refers the



student to the building Child Study Team (CST). The CST supports teachers implementing additional strategies. CST meetings require a professional space for collaboration.

Educational Technology

Technology and digital learning play an ever-increasing and critical role in teaching and learning, both inside and outside of schools. Our schools need to be hubs of learning, with classrooms that are flexible and dynamic, with reliable access to the rich resources available to enhance teaching and learning, and with an understanding of the appropriate role of technology in our schools and students' lives.

In Brookline, we envision technology improving our ability to:

- Communicate and collaborate in our schools, our community, and the evolving global society;
- Maximize learning for all students using techniques and materials that take into account varying backgrounds, capabilities, and learning styles;
- Ensure that all students obtain digital literacy skills that are required in the 21st century;
- Create a well-integrated, learner-centered environment focused on inquiry into engaging problems;
- Enrich and extend professional learning for all teachers and instructional leaders; and,
- Enable all school personnel to effectively and comfortably use technology as a teaching and administrative tool so that more resources and time can be focused on teaching students.

The current facility poses significant technological challenges. Collaboration across town and school departments has produced creative solutions with beneficial outcomes, for example, establishing a wireless network throughout most of the school; properly installing interactive white boards with projectors in strategic instructional areas; and creating space for middle school students to have ongoing access to a set of computers near their classrooms.

With the challenges that come with accelerated enrollment across the schools, including facility demands, we have not been able to keep up with the advances of technology. The Devotion PTO is a strong supporter of technology and has provided significant funds over time to give students and teachers better access to a variety of technological tools (e.g., iPads and Smart Boards)¹⁰. The school system is in the first stage of addressing the serious issues of accessibility, sustainability, and flexibility of technology in the Public Schools of Brookline. Our decision to advance technology will allow us to provide

¹⁰ See Appendix H: *Devotion Technology Snapshot*

broader and more reliable access for students and helps us to get the right device at the right time into the hands of students; eliminate barriers (e.g., financial) to ensure access for all students; improve safety and security for students, staff, and families; and more regularly support students to learn effective, efficient, and responsible use of the Internet, and responsible and safe digital citizenship skills.

The new facility will support a variety of improvements in the school's technology, for example, but not limited to: a more robust and reliable wireless network to support multiple devices per user; multiple and strategically placed electrical outlets and drops for easy access, relocation and setup; sufficient space for technology closets; and well provisioned classrooms that redefine the current standard. We are planning for the standard learning space to include: a wireless access point and appropriate network drops; voice over internet protocol (VOIP) phone; a mounted projection/interactive whiteboard with enhanced audio system; two (2) classroom desktop computers with speakers and headphones; a district-issued teacher laptop; classroom tablet; and document camera. With this as the standard, there will be learning spaces that have more technology in the room and others possibly less. The technology in the room is dependent on the educational goals and functional demands of the space.

Technology provides an opportunity to transform learning, when used properly. To most effectively infuse technology into curriculum, instruction, and assessment, coordinators across the disciplines are guided by two models of educational technology: TPACK (Technological Pedagogical Content Knowledge) and SAMR (substitution, augmentation, modification, and redefinition)¹¹. Tools of technology can promote our intentions defined within our strategic plan goals, for example: technology's role in advancing rigor and relevance¹² through project-based/problem-based learning, and interdisciplinary studies. This is an area of curriculum and instruction in need of significant growth, and the new building will not only support these improvements but, with the proper 21st century school design, can actually promote growth in this area. The renovated Devotion School will improve collaboration, spark curiosity and inquiry, allow for learning anywhere and everywhere, and be user-friendly, with technology that is accessible, sustainable, and flexible. These are essential elements for long-term student-centered learning.

¹¹ See Appendix I: *TPACK (Technological Pedagogical Content Knowledge) and SAMR (substitution, augmentation, modification, and redefinition)*.

¹² See Appendix J: *Rigor and Relevance Framework* and *Rigor/Relevance Framework + SAMR + P21.org*. Students need to be engaged in rigorous intellectual tasks, defined by the cognitive challenges of the work, ranging from awareness at the most basic level to analysis, synthesis, and evaluation at the higher levels of cognition. Matched with relevant curriculum, students are able to think in complex ways and apply their knowledge to solve novel problems. Infusing technology and intentionally teaching 21st century skills magnifies the overall impact of the learning experience for students, as outlined in the document, *Rigor/Relevance Framework + SAMR + P21.org*



English Language Arts/Literacy

The K-8 English Language Arts program emphasizes explicit instruction in strategies of proficient readers and writers. These strategies are critical for effective reading and writing across the curriculum, which is a significant shift with the new standards of literacy.

Brookline was well positioned for the move to the Common Core State Standards. Through our rigorous Program Review process, an ambitious K-8 literacy initiative began in the 2010-2011 school year. This initiative provided a strong foundation with which to meet the demands of the new MA Frameworks. The literacy initiative, like the MA Frameworks, emphasizes reading and writing in non-fiction, particularly in the content areas of science and social studies. In addition, just as the Frameworks require students to read texts at ever increasing levels of difficulty, the Brookline initiative has focused on providing students access to a text gradient that accelerates their reading achievement.

Literacy instruction in Brookline is guided by *The Continuum of Literacy Learning, PreK-8* (Fountas & Pinnell), a comprehensive and detailed description of student proficiency in literacy across K-8. One of the many strengths of this guide is the broad definition of *Literacy Learning*, including:

- Interactive Read-Aloud and Literature Discussion
- Shared and Performance Reading
- Writing About Reading
- Writing
- Oral, Visual, and Technological Communication
- Phonics, Spelling, and Word Study
- Guided Reading (small-group reading instruction)

Schedules for grades 1 – 5 reflect a daily, uninterrupted 90-minute literacy block. During this protected instructional block, students receive small group reading instruction from their classroom teachers and participate in a variety of language arts learning centers, allowing students to refine reading and writing skills. Students who receive targeted literacy interventions do so during this block of time. Interventions may be provided by one of Devotion's four literacy specialists, a special educator, or an ELL teacher. In grades 6-8, students have a daily 50-60 minute block of English Language Arts instruction. Students requiring additional supports and literacy intervention receive targeted instruction from classroom teachers, special educators and ELL teachers during designated 45-55- minute instructional blocks each day.

Teachers use multiple assessments to measure student progress, for example the *Benchmark Assessment System (BAS)* and running records. In grade level data meetings, teachers examine whole class and small group instructional implications, as well as identify students and develop plans for individual literacy interventions. Tier two

intervention includes the *Leveled Literacy Intervention (LLI)* and *Reading Recovery* (grade 1).

Although most of the reading and writing instruction takes place within the classroom environment and across content areas, smaller work areas are necessary to facilitate individualized instruction, including both 1:1 and small group settings for book discussions and peer editing. In addition, small work areas are needed to support individual and small group general education interventions in reading and writing, inside and outside the classroom. Devotion's four literacy specialists also need office space in which planning, coaching, direct instruction, and intervention can take place.

One resource of great significance in literacy learning is the school's book room. Building, rebuilding, organizing, and well provisioning all of our school's book rooms is a vital element of the literacy initiative. Spaces for book rooms are not readily available. The renovated school will provide easy access, for teachers and literacy specialists across the grades, to adequate space for the numerous sets of books required to meet the needs of all students. This dedicated space will offer a level of organization that makes receiving and returning books easy and not a burden of time.

Mathematics

The goal of the mathematics program in Brookline is to meet the needs of all learners so that they become critical problem solvers and reflective thinkers about mathematics in our evolving global, technological, and digital world. We also seek to stimulate interest and curiosity in the field of mathematics to develop students' passion and interest in a math career.

The mathematics program is grounded in the 2011 MA Curriculum Frameworks for Mathematics, in both Standards for Mathematical Content and the Standards for Mathematical Practice. Brookline's transition to the new standards started with focused attention on students' learning through the eight Standards of Mathematical Practice. In addition, for students in K-5, we increased the focus on the critical areas of *place value*, addition, subtraction, multiplication, division, fractions and decimals with an emphasis on understanding and application.

The most effective instruction for in-depth math content and deliberate attention to mathematical practices places different requirements on the physical space. Instruction varies, in that there are opportunities for individual learning, pairs and small groups, and whole-class instruction. Teachers need the space to change as instruction changes – furniture easily reconfigured for different groups, technology easily employed throughout the room, ample space so that students can spread out and use a variety of objects to manipulate and see the math, projection with robust Internet access to show real-life applications and simulations, examples of mathematical models, and sharing student work. Appropriate, safe and secure storage space is also critical.



The needs of the physical space in K-5 for math are mirrored in the middle grades. In grades 6-8, students continue this progression to geometry, algebra, probability and statistics, again focused on student learning and application. Brookline is fortunate to have selected math programs, *ThinkMath!* and *IMPACT Mathematics*, that align well with the new MA Frameworks. Because of this alignment, teachers use instructional materials with which they are already familiar, and are introduced to new resources for performance-based assessments (applications of math understanding) and opportunities to work with other teachers to integrate the disciplines and highlight STEM project-based opportunities.

Different learning support is provided across the continuum of learning across the grades. For students who struggle in the early grades, math specialists use the intervention program by Kathy Richardson. Upper grade intervention support is with the program by Marilyn Burns, called *Do the Math*. In addition, we are piloting a new adaptable universal assessment and instructional support program – *iReady* - in different grades across the schools, including Devotion. This will help us target student learning needs across the units of the math curriculum and across all grades. This level of detailed analysis will support more targeted instruction and map student progress over time.

Students who show mastery of grade level standards engage in extensions that take the math concept deeper and provide more learning of the concept. With the support of the Enrichment and Challenge Support (ECS) teacher at Devotion, students will engage in very challenging authentic projects that require a deep understanding of the topic, and they will be asked to apply and demonstrate their understanding of the math concept. As with all other examples, this type of creative investigation requires malleable educational spaces.

The three math specialists at Devotion School, who provide individual and small group support across all grade levels, currently share inadequate office space. The space is used for collaborative planning, coaching teachers, and intervention work with students. Currently they must access other inadequate spaces in the building, including classrooms, inappropriate hallway space, or other educators' offices, which then impacts the professional work of the educator in that office. For pullout services, the offices need to be well-equipped learning spaces with access to the appropriate technology that supports math learning and assessment. Teachers and students will benefit from the office size, storage facilities, flexible configurations of space, and location, as described in the building plan.

Performing Arts

The Public Schools of Brookline is proud to continue a tradition of a strong performing arts department. Each K-8 school has music instruction for all students across all grades.

In grade four, all students begin the study of a string or band instrument, and then choose to participate in band, orchestra, and choral ensembles in grade 5. In grades 6 through 8, students may continue with band, orchestra, or chorus or take classes in music production, guitar, or general music. Devotion hosts a variety of music concerts (choral and instrumental) throughout the school year. Additionally, students in grades 2 – 8 are involved in musical theater. Performances take place in the auditorium/multipurpose space, which has a capacity of 300 people. As such, we are limited in the number of classes and families we can invite to attend a performance, requiring us to schedule multiple show times. School Committee policy requires that all elementary schools have a multipurpose space with the capacity to seat at least 40% of its total occupancy.

Space challenges in performing arts were detailed in the section, SCHOOL SCHEDULING METHOD. The new building will have a tremendously positive impact on the performing arts department and, given the current locations due to such challenges, will improve other teaching and learning spaces as a result.

Physical Education

The physical education department provides instruction to all students across the grades, K-8. Students participate in quality instructional physical education programming twice a week, for 40-45 minutes each class. The curriculum is presented in accordance with the Massachusetts Frameworks and the National Standards for Quality Physical Education. The curriculum follows a developmental sequence from body management competence to fundamental skills to specialized skills, while simultaneously addressing physical fitness and social skills. Devotion has 2.9 FTEs for Physical Education, divided among three educators.

The PE department shines in its use of technology to enhance teaching and learning. Teachers engage students with the use of, for example, Polar Heart Rate Sensors, multiple iPad apps for instruction, monitoring, taking pictures and videos, and the web-based *Fitness Gram* assessment. While the desire and knowledge for appropriate use of technology is present, teachers struggle with continuous robust wireless access, lack of safe, secure, and easily accessible storage, and the inability of the technology to work properly when there is too much background noise. The renovated facility addresses these issues.

As described in the earlier SCHEDULING section, currently, there are only two gyms – one full-sized and one “small.” Two classes must “double up” in the large gym in order to accommodate all of the instructional sessions. Another significant challenge is the lack of ample and appropriate storage space for large equipment and general PE supplies.



Science and Engineering

The Brookline science department continues to build upon a rich history of science teaching and learning. The Program Review process highlighted areas of improvement based on the current research in the field, including integration of science, technology, engineering, and math (STEM), inquiry-based learning, continued emphasis on science practices, and the addition of the practices of engineering.

In order to make learning more rich and meaningful for students, science and engineering practices are integrated throughout the Brookline K-8 curriculum. This approach is recommended and modeled by the national Next Generation Science Standards (NGSS) and the draft Massachusetts Science, Technology, and Engineering (STE) Framework, both of which integrate science and engineering practices within each grade level.

According to *The Framework for K-12 Science Education* (the basis for the NGSS), “[t]o support students’ meaningful learning in science and engineering, all three dimensions [content, scientific and engineering practices, and crosscutting concepts] need to be integrated into standards, curriculum, instruction and assessment.” Furthermore, “Engineering and technology are featured alongside the natural sciences (physical sciences, life sciences, and earth and space sciences) for two critical reasons” (1) to reflect the importance of understanding the human-built world, and (2) to recognize the value of better integrating the teaching and learning of science, engineering and technology.”

Teachers implement hands-on, inquiry-based science and engineering curriculum that requires flexible space. The spaces – indoor and outdoor – need to allow for and promote creativity and innovation. Labs need to be well provisioned in order for students to advance an idea, investigate a line of inquiry, and design and test solutions to real-world problems. Science labs need ample space for students to work and for the safe storage of science materials and supplies. Specific needs of a science lab are in addition to the general design and development of other contemporary teaching spaces – wall space for visuals, projection area(s), technologically versatile, natural light, flexible furniture, etc. Overall, the renovated Devotion School needs to bring the science lab spaces up to the standards of Brookline’s science program.

Currently, there are two adjacent science labs, which have recently lost storage space to the creation of a classroom. A third science room is located in a converted classroom (grade 6) with no running water/sink and no windows; this does not constitute a science lab. The deficiencies of these spaces are a determining factor, as teachers seek to design meaningful and inquiry-based scientific experiences for students.

The building plan provides for effective science lab spaces and meets all regulations as outlined.

Social Studies

The K-8 social studies department has been deep in curriculum revision and renewal. Across the grades, the curriculum coordinator, in collaboration with teacher-teams, is developing new units of study and common assessments at multiple grade levels. Skills and habits of social scientists are a thread throughout the revised curriculum. Professional development accompanies each new unit of study. Examples of content include: civics, physical and human geography, economics, and US and world history. Along with content, teachers are developing strategies for explicit literacy instruction, including how to make difficult primary texts accessible to all students. Each new area of learning includes the identification of natural connections to other subjects to support the development of interdisciplinary units.

Teachers continue to incorporate more technology into social studies teaching, enabling them to access real-time data, utilize digital textbooks and atlases, and support the development of digital literacy that includes Internet research, online student learning activities, and diverse instructional strategies to accommodate all learning styles.

The social studies curriculum and instruction demand physical spaces similar to the other subjects – flexible, accessible, safe and secure storage, and wall space for visuals and student work displays.

Visual Arts

The Public Schools of Brookline has a vibrant visual arts program that provides students repeated opportunities to develop observational skills, decision-making skills, and craftsmanship using art as the visual language to communicate ideas and demonstrate understandings. The visual arts program has a K-12 continuum of key understandings, concepts, and processes as the framework for its curriculum. The department continues to collaborate with other coordinators and teachers to create more interdisciplinary units in the K-8 curriculum. There are examples of this creative integration at the Devotion School. Currently, however, displays of student work are very temporary and not well positioned for sharing.

Currently, the two visual arts classrooms are using a subdivided former industrial arts wood working shop. One of the “classrooms” includes a hallway/corridor that students use during class time. Each classroom has two sinks, but lack proper storage space for materials. One classroom has a kiln room. The other classroom was once a woodshop, and retains its woodworking equipment. Both classrooms have limited amounts of natural lighting. The renovation can provide what’s needed: three art classrooms, one art room for each grade level cluster, with ample natural light and with enough space for the largest class to sit a maximum of four students per table. Also, the visual art classrooms need a separate storage closet for material/equipment storage as well as teacher preparation. The visual art classrooms require ample storage capacity within the



classroom for artwork in process. The layout of the classroom should separate the worktables from preparation/sink areas. Multiple sinks at appropriate student height, and furniture and amenities (i.e., sinks), scaled to meet the needs of the grade level clusters, are required. A separate kiln room attached to the classroom is required. A contemporary visual art classroom needs a technology/media station (computers with photo/video software and Internet access) set-up to serve 4-6 students located away from paints and clay preparation.

There should be ample space for whole-class demonstrations and exhibiting exemplary artwork on the walls. In the corridor outside the visual art classroom, as well as in corridors throughout the school, there should be ample wall space designed for student artwork to be exhibited, including a 3D wall case centrally located in the school. Displaying student work throughout the school is essential for a variety of reasons. One reason is that it builds a sense of pride and ownership of the space and the school. A second reason is that an authentic viewing audience is a natural motivator for students; and, finally, displaying quality evidence of student learning provides multiple examples of high expectations for all students. This is especially important in visual arts.

World Language

As is true in many schools, 7th and 8th grade students in Brookline elect to study either Spanish or French as a World Language. World Language classes meet five days per week for 50-55 minutes.

Brookline is fortunate to also have an elementary world language program. The K-6 World Language Program is based on current pedagogical research about effective approaches to language acquisition. It meets the rigorous expectations of the Massachusetts Foreign Languages Curriculum Framework as well as the nationally established standards for foreign language education. The overall goals are:

- To acquire proficiency in speaking, listening, reading and writing the target language;
- To acquire an understanding of and appreciation for other cultures;
- To reinforce learning of the general curriculum content through the study of a world language; and
- To develop students as language learners

Grade K-6 World Language is Content-Enriched FLES (Foreign Language in the Elementary School), which provides a sequential language learning experience that aims to develop language proficiency, appropriate to each grade level. Content-Enriched FLES programs are those in which language lessons reinforce concepts from other subject areas: social studies, science, and math, and English language arts. Integration among the subjects is essential.

The Brookline Elementary World Language Learning Expectations are based upon the “5 Cs” of the National Standards for Foreign Languages: Communication, Cultures, Comparisons, Connections and Communities. World language teachers, together with the K-8 Curriculum Coordinator for World Languages, continue to develop a proficiency-based curriculum grounded in culture as the program achieves full implementation. The curriculum and assessments focus on what students can *do* with the language, and reflect the proficiency descriptors of the National Performance Guidelines for K-12 Learners.

World language teachers conduct lessons almost exclusively in the target language (Spanish or Chinese), with an emphasis on functional communication activities based in real-life situations. Lessons are carried out using songs, games, books, and other interactive activities that provide students immediate opportunities to practice the language. Material is introduced in thematic units of School and Community, Family, and Climate (K- 2); and Community, Leisure Time, Climate, and Food (3-5). Students in Grade 6 continue to further their learning in these themes while transitioning to a more formal middle grade program model.

Three Elementary World Language teachers at Devotion School instruct students in grades K-6. All three teachers share office space for planning, collaborating with teachers, and communicating with parents. All three teachers travel from individual classroom to individual classroom, with five minutes of transition time.

The Elementary World Language program can be improved with the spaces being created through this renovation. For example, classes can come together in larger spaces for large group presentations and activities, or instruction in small groups. Smaller groups can be made up of classroom peers or a mix of students from different classes, as a way of further developing the sense of team across the grade level. With each classroom better equipped with technology and proper storage, EWL teachers would not have to push their overloaded cart from class to class and take time away from teaching for set up and breakdown of equipment. Efficiencies of this manner would allow for more instruction and more time for the EWL and classroom teacher to touch base at the end of a lesson, whether to talk about their next common planning period, attend an IEP meeting, or exchange quick observations about a particular student during the lesson.

English Language Learners (ELL)

The English Language Learners (ELL) program provides services to students whose primary language is not English and who are not yet proficient in English. The program provides support at each school, with services focused on students’ English language acquisition, literacy development, social integration, and academic achievement.



The ELL program supports a significant number of Devotion students. With a population of 119 students, our ELL program serves 14 % of the student population. Small groups of students meet with ELL teachers several times per week both in and out of the classroom for direct English instruction. Devotion is home to the district-wide Hebrew ELL population, with two full-time teachers to instruct these students. Devotion has two additional teachers (totaling 1.8 FTE) to serve non-Hebrew speaking ELL students. ELL classes range in number of students served at one time. Small group instruction is the approach used in all four classes.

The ELL program serves students outside of the classroom and, therefore, needs its own space. Like special education, housing the ELL programs in the general vicinity of the grade level clusters is intentional. Wall space and storage is also important, given the use of visuals and the need for storage of the general education program materials made available to the teachers and students in the ELL classrooms. ELL classrooms will be reflective of other learning spaces – flexible, well provisioned, and accessible.

Special Education

In 2013-2014, 15.2% of Devotion students had special needs. This includes both students from the Devotion School district, as well students from across the district who are placed in one of the district-wide Therapeutic Learning Centers (grades K-8) located at Devotion.

Inclusion is a core belief and practice in the Public Schools of Brookline. This educational model challenges schools to meet the needs of all students by educating learners with disabilities alongside their non-disabled peers. The environment necessary to nurture and foster inclusion is built upon a shared belief system between general and special education, and a willingness to merge the talents and resources of teachers. An inclusive education helps prepare students with disabilities for an integrated adult life and builds understanding and acceptance within the broader community.

The Devotion staff is very proud of their success with some of our most vulnerable learners. Devotion houses the district-wide *Therapeutic Learning Center (TLC)* for K-8 students diagnosed with emotional and behavioral disabilities. The TLC is a special education and supportive service-based program for students with a history of emotional disabilities that impact their learning.

This integrated program provides the following services as deemed necessary by each individual student's IEP:

- Direct instruction in a separate setting or in a general education setting
- Support in general education
- Continuum of services from fully included to direct instruction in a separate setting

- Adaptations of the educational environment
- Positive behavior intervention plans
- Instruction in relaxation techniques
- Counseling

In addition, the program provides a variety of educational supports, such as: reduced student to teacher ratio; full time school social worker dedicated to TLC; paraprofessional support while included in general education classes; and weekly group lessons targeting social skills and social thinking. TLC classes are divided into three grade level clusters (K-3, 4-6, 7-8), and program staff is extensively trained in Social Thinking Curriculum and Collaborative Problem Solving. In addition, staff members are transitioning to the use of the Quality Behavioral Solutions (QBS) Safety-Care program. All students served by the TLC are included with their peers in general education classes, receiving some pullout academic supports as outlined in their educational plans. Students in the TLC often receive other related services, including occupational therapy, speech and language therapy, and counseling. Our special educators serve not only as liaisons, but also as case-managers for students in order to bridge the gap between home and school-based services.

In addition to our TLC classes, our Learning Centers (LC) and Comprehensive Learning Centers (CLC) support students with special needs. The CLC Programs are designed for students with varied disabilities who require a higher level of services. The CLC classes have a low staff to student ratio allowing for increased individualization. Students may receive higher levels of direct, specially designed instruction in academic areas within the Comprehensive Learning Centers. A high level of case management and coordination of services is provided by the CLC teachers. Although these programs are building based, when necessary other elementary schools may access these programs as district-wide options.

Student Services are defined as school psychologists, inclusion facilitators, learning center teachers, social workers, speech/language pathologists, occupational therapists, physical therapists and nurses. In many cases, these positions are shared among more than one school, but together they represent a team-based approach to supporting students and families in need at the elementary level in Brookline. Related service providers include two speech/language pathologists, an occupational therapist, a physical therapist, a psychologist, a Board Certified Behavior Analyst (BCBA), and a social worker. Also, there are educators specializing in supporting deaf/hearing impaired students and vision-impaired students to access the curriculum.

Special education services throughout the district address the needs of identified learners with disabilities between the ages of three and twenty-two, who require specialized instruction to support access to the curriculum. A wide range of services is provided to meet the individual needs of students, from academic intervention to related services in areas such as speech therapy, occupational therapy and physical



therapy. Availability of therapeutic services for students requiring special education intervention in the realm of social, emotional and adjustment areas is present at all schools and levels. Staff works closely with families in ensuring that necessary services are identified and provided to students in accordance with applicable mandates. A strong and positive relationship exists between the district staff and the Special Education Parent Advisory Council with benefits that accrue to school system, students and families. Strong collaboration with general education staff is a concerted effort to provide services to students in the most inclusive manner, which benefits all students within the class setting. Providing consultation, collaboration and professional development opportunities to both regular education and special education staff across the district is an active approach to further the joint efforts of all teachers to provide students with special education services in the most inclusive setting, which is appropriate.

Devotion School offers instructional spaces for pullout small group and individual instruction provided by learning center teachers, and inclusion facilitators, who support inclusion for students with significant disabilities.

The physical structure of the school building can detract from or promote these feelings. The Devotion building plan provides both breakout rooms for privacy and open spaces for groups to gather, with clear lines of site. Special education classrooms need to be flexible and easily reconfigured, given that different students are served in the same space at different times. In addition, accessibility to a wide variety of technology options is essential. Assistive technology plays a critical role in supporting engagement and learning for students with special needs. Different devices for different purposes need to be available with supports for quick set-up and secure storage.

Special education learning spaces are spread among general education classrooms. The location of the classrooms allows staff to communicate and collaborate fluidly throughout the day on student needs and programming. The number of students in these classrooms is monitored to ensure a lower class size is maintained to allow the flexible learning requirements of the students. The four Learning Centers at Devotion resemble large office spaces, for 1:1 or small group instruction. The three Comprehensive Learning Centers require a bit more space, resembling a small classroom. In this space, the special educator will conduct small group instruction, social skills groups and collaborate with other related service providers to provide services to students. The three Therapeutic Learning Centers are designed as a "suite" in order to accommodate multiple tiers of student needs. There must be space for academic support, community building and social skills instruction, a calming area for relaxation, and a safe space for students to de-escalate when in crisis.

The physical environment impacts learning. This is especially true for our students with disabilities at the Devotion School. It is important that every student has an authentic sense of belonging and feels safe in their school. Clustering grade levels, spreading

special education teachers throughout the school, and providing services to students in close proximity to their cohort peers are examples of how the design of the school is supporting the academic and social emotional learning goals for Devotion students with special needs.

SOCIAL EMOTIONAL LEARNING AND BULLYING PREVENTION PROGRAM

It is the mission of the Public Schools of Brookline (PSB) to ensure that every student develops the skills and knowledge to pursue a productive and fulfilling life. To truly live this mission, it is essential that our schools are safe, welcoming, respectful and nurturing. Such a culture is created when everyone in the school is aligned to requisite beliefs, values, and behaviors. Children need to learn these beliefs, values and behaviors, and adults need to model, guide, and explicitly teach them to children using intentional strategies in order to establish a culture conducive to learning. This is essential because learning is inextricably linked to school culture.

Culture is a complex element within a school. In Brookline, we have created a comprehensive social emotional learning and bullying prevention and intervention program to nurture school culture and provide the knowledge, skills, procedures and processes required to foster positive student behavior in support of learning. With the effective implementation of the comprehensive program, we envision all Brookline schools reflecting a safe, welcoming, respectful and nurturing school culture that supports the development of all children through their preK-12 experiences.

The Olweus Bullying Prevention and Intervention program is our K-12 school culture and anti-bullying program. *Responsive Classroom* (K-5) and *Developmental Designs* (6-8) represent the core social emotional curriculum in Brookline. Both RC and DD programming require classroom meeting areas to conduct “morning meetings” (grades K-5) and advisory (grades 6-8). Each classroom should have an area zoned for these class meetings and other similar functions. Many staff members have also been trained in Marie Garcia Winter’s *Social Thinking* curriculum and lead Tier II instruction with small groups of students.

Overall, the school needs to provide gathering spaces to promote social engagement among students and adults. The new Devotion School will facilitate and encourage connections among grade levels and across the disciplines, be welcoming by design, and show evidence of collaboration, respect, and high expectations with student work prominently displayed throughout the school. All of which support the social emotional learning of students.

OUTDOOR SPACE FOR PHYSICAL ACTIVITY

Outdoors, Devotion has a number of play areas including an adjacent baseball diamond, basketball courts and tennis courts, maintained by the town Parks and Recreation



department. This outdoor space is used mainly by the school during school hours, but is shared with local recreation programs and neighbors after school and on weekends. A number of neighborhood athletic groups use the outdoor space when school is not in session. In addition, playground areas are available for student use on school property. The "Front Playground" abuts Harvard Street and is considered the main playground for the Kindergarten classes. There are two climbing structures and two slides at this play site. There is also a large sand play area, and two bike racks. Kindergarten students also have access to a small paved area with two hopscotch grids painted on the pavement. Students in grades 1 – 3 have access to a second playground space. In this space, a large play structure offers two slides, "Monkey Bars," and other climbing opportunities. Adjacent to this structure are foursquare grids painted on a small paved area. The Devotion School Garden, maintained by staff and students and integrated across the K-8 science curriculum, resides in this section of the playground. Students in grades 4 and 5 access a third playground space. There is another large play structure in this area, offering "Monkey Bars," two slides, connective bridges, and climbing areas. There are three tire swings in this play space. Grades 4 and 5 also have access to a large hot-top play area that contains two basketball hoops, three hopscotch grids, and five foursquare grids. Our students in grades 6-8 use the adjacent open fields, baseball diamond, and basketball courts during recess time.

PROFESSIONAL LEARNING AND TEACHER PLANNING

Pursuit of our educational goals requires shifts of different degrees in curriculum, instruction, and assessment, which, in turn requires new learning for educators. Professional learning is a very high priority in the Public Schools of Brookline. Professional learning has moved from the traditional staff development workshop or attendance at a conference to ongoing, continuous learning. Professional learning takes on a variety of forms in Brookline, depending on the objectives of the learning. Much of the learning is job-embedded, ongoing, and collaborative. One strategy to accomplish this form of professional learning is instructional coaching. Brookline supports the following roles: Educational Technology Specialists (ETS), Librarians, Math Specialists, Literacy Specialists and Literacy Coaches, Enrichment and Challenge Support (ECS) teachers, and Inclusion Facilitators and Inclusion Specialists.

The adult culture reflects the characteristics of a professional learning community: shared norms and values; a focus on student learning; making professional practice more visible; collaboration; and, inquiry, reflection, and analysis. There are conditions necessary for supporting an adult culture reflective of a professional learning community, some of which are supported in the new facility. Conditions include, for example: space/time to meet, physical proximity, interdependent teaching roles, and

communication structures¹³. Educators need the appropriate and well-provisioned spaces to gather to analyze data and determine next steps for instruction, study classroom videos, participate in a webinar, review student work, vet online resources, and read and discuss the contemporary literature of the profession. The building plan creates spaces that will be available throughout the day and are adaptable to the adult learning activities.

As designers of learning, much of teachers' time is spent planning with colleagues to create the best learning experience for all students. Because of its value, we deliberately and intentionally create planning and collaborative time for teachers.

ROOM ASSIGNMENT POLICIES

Below is a description of current room assignments and how the Devotion School is organized due to space limitations:

Classroom space and needs for our special education programs varies. The four Learning Centers (LCs) provide instructional services within the general education classrooms; however small instructional spaces for individual and small group instruction are required. These spaces should be easily accessible from the general classrooms. Small classroom spaces are needed for each of our three Comprehensive Learning Centers (CLCs). Students will come to the CLC for core instruction, social curriculum, and other services throughout the day. Finally, our three Therapeutic Learning Centers (TLCs) provide our students with a small classroom learning space, a separate relaxation area for calming and social skills work, as well as a space for students to safely and privately de-escalate when in emotional crisis. Our current TLC suites have 4-5 small office/classroom spaces within their respective suits to meets the range of needs presented by the students served.

Currently there are three floors in the Devotion School with the bottom floor below grade referred to as the basement level. There are six classrooms, two Therapeutic Learning Centers, and one Comprehensive Learning Center located on the basement level, along with core subjects of music and physical education. The basement level is also home to our Occupational Therapy room, and offices for one of our two Vice Principals, our three Physical Educators, and our Director of Guidance. The Devotion Cafeteria is also located on the basement floor. Our cafeteria currently has the capacity to seat only two grade levels during a lunch period, thus requiring us to schedule five lunch shifts. Our 2nd grade and 6th grade students begin lunch at 10:45 am, and our Kindergarten and 1st grade students don't eat until the last lunch period, at 12:40 pm.

Three Kindergartens, two grade 1, and two grade 2 classrooms, as well as a Learning

¹³ F. Newmann, University of Wisconsin-Madison, 1994. Fred Newmann and his colleagues were pioneers in the research showing the impact of adult culture on student learning, when the culture reflects the characteristics of a professional learning community.



Center and an office/instructional space for one ELL teacher, are housed in the “1950s wing” of the building. Last year, one of our 1st grade classrooms was recently added to meet the demands of our increasing enrollment, however the only space to convert was a former learning center, and as a result this one 1st grade classroom was significantly smaller than our other primary grade classrooms. As such, we had to cap the enrollment in this classroom at 16 students. This year, enrollment drove a reduction of one section, allowing the return of the earlier classroom configuration. This wing does not physically align with the rest of the building, as it has only two floors. One floor is built at ground level, and the other directly above it. When looking at the intersection of the original structure and the 1950s wing, some of the Kindergarten, Grade 1 and Grade 2 classrooms seem to have been built on floors one-and-a-half and two-and-a-half.

On the other side of the original structure, sits the “1970s wing”. This wing of the building houses Grades 4 – 8, and was originally built in an open concept design. Three of the four 4th grade classrooms are on the second floor of this wing. Due to space constraints, one 4th grade classroom is not in proximity of the others, but is on the other side of the building. All four 5th grade classrooms are on the 2nd floor of the 1970s wing, as well as two of the four 6th grade classrooms. Additionally, on the second floor of this wing, there is one learning center, an office for the ECS resource teacher, and one ELL office. In the middle of all these classrooms and offices, we have built a “mini computer lab.” This area, subdivided by half-wall cubicles, holds nine desktop computers and provides small group instructional space for staff and students to work. Also on the second floor are the two Art rooms and a cluster of office spaces divided by temporary walls and doors. We call this space “the village.” The village is home to our three EWL teachers, our three math specialists, one reading specialist, and our METCO liaison. This space is inadequate for our needs. The office areas are too small, and because of the portable nature of the design, none of the offices have ceilings. This is a problem for staff who wish to assess a student and, therefore, require a quiet work space, or for a teacher and parent who need to discuss a confidential matter. The 3rd floor of the 1970s wing houses our two remaining 6th grade classrooms, our 7th and 8th grade science labs, and classrooms for each remaining 7th and 8th grade core content course – ELA, Math and Social Studies. Also, an additional classroom is used as shared space for our middle grade Spanish teacher, French teacher, and Health teacher. This one room is not adequate for the number of classes scheduled, so Foreign Language and Health classes are often conducted in other core content classrooms. The 3rd floor space also has a “mini computer lab”, as well as a learning center, a speech therapy office and a social worker’s office.

The original structure on the second floor is home to the main office, including the principal’s office and team facilitator’s office. Additionally, a guidance office, the nurse’s suite, the psychologist’s office, our second vice principal’s office, two second grade classrooms, one fourth grade classroom, a reading specialist’s office, and two Hebrew ELL teachers reside on the second floor. Our library, full-size computer lab, teachers’

lounge, and teachers' workroom are on the main level, as well. The library resides in a space that was originally designed as an auditorium. It serves all the students in the school for both instruction and research.

On the third floor of the original structure sits the auditorium/multipurpose space, one literacy specialist office, four third grade classrooms, two Comprehensive Learning Centers, one Therapeutic Learning Center and a guidance office.

Overall, the Devotion School has clustered classrooms in neighboring proximity of one another, and attempted to work within the space constraints posed by the architecture of the design.

Some of the special education instruction occurs within the regular education classrooms, however we retain a need for 10 separate learning center classrooms, with three of these designed as suites to accommodate the varying degrees of need within our Therapeutic Learning Centers.

Due to lack of space and fire code restrictions, there is no opportunity for the entire school to gather for school assemblies. Currently, the gym and/or auditorium/multipurpose room is used for school assemblies that need to occur at three different times, one for grades K-2, another for grades 3-5, and a third for grades 6-8.

The building plan overhauls this patchwork configuration of the current facility and addresses multiple challenges described above. Clustering grade level classrooms provide close proximity for collaboration, communication, and flexible grouping. Other valuable spaces such as art, music, technology lab, and library/information center would ideally be within close proximity to the general classrooms to provide ease of transition from space to space as well as limit the transition time between classes to maximize the time spent in the classrooms. The broader Devotion School community uses core spaces such as the gymnasium, auditorium/multipurpose space, and cafeteria, therefore, ease of access for the public is important. The cafeteria will ideally be located on the first floor with direct access to the play spaces for time before or after lunch.

LUNCH PROGRAMS

The mission of Food Services is to provide healthy, tasty, high-quality, sustainable, affordable meals to the students and staff of the Public Schools of Brookline. Breakfast and lunch are served at all nine schools in the district. As part of the National School Breakfast and Lunch Program, we follow guidelines set by the USDA regulating what qualifies as a healthy breakfast and lunch. Meals are cooked from scratch, using real food, and we are continually looking for ways to improve our school meals.

Parents set up online lunch accounts and pre-pay meals. All students have an individual PIN number. A students' account can indicate a specific allergic warning or set restrictions on choices by parents.



There is one cafeteria in the existing Devotion School. This poses significant challenges for scheduling, dining, transitions and staffing support. Presently, the Devotion School runs five lunch sessions. The number of lunch sessions requires a significant number of staff to provide adequate supervision. This poses a challenge to us, given the constraints of the current collective bargaining agreement, and our need for a robust student supervisory plan in alignment with our anti-bullying initiative.

Currently, Devotion School has a staff of one kitchen manager and three attendants who work in a full service kitchen. Lunch service begins at 10:45 am, with the last lunch concluding at 1:05 pm. The number of students within each lunch ranges from 172 to 217 students. Each lunch period includes two grade levels, with lunch shifts that have complex, overlapping transitions. Each lunch period utilizes one serving line, where students use a PIN number system when purchasing their lunch. The current cafeteria is inadequate in terms of space and sound issues, and one lunch line is not sufficient for serving such a large number of students in a timely manner.

TRANSPORTATION POLICIES

The Public Schools of Brookline provides bus transportation for K-8 students residing more than 2.0 walking miles from their districted school. These students are transported at district expense. All students in Grades K-6, who live less than 2.0 miles from their school, are responsible for their own transportation. The district does make exceptions for students whose needs are “safety” related. K-6 students who live 2.0 miles or more from the school may opt to purchase a bus pass in accordance with the MBTA fee schedule. Special education transportation services are separate from regular bus transportation.

The Devotion Elementary School has one district bus to transport students with special needs to and from the Therapeutic Learning Center program and one Boston bus for METCO students. Students who utilize the bus are dropped off in our bus drop-off lane between 7:30 am and 7:40 am daily. Monday through Thursday, school dismisses at 2:30 pm; on Fridays, students are dismissed at 1:40pm due to weekly professional collaborative time for teaching staff. Due to the fact that the Devotion School site has limited driveway space, there is no live student drop-off or pick-up on the site. Many students walk or bicycle to school or parents park nearby on local streets and walk the remaining distance to the school with the students. The school staff provides safety and supervision on the school property during arrival and dismissal times. The town Police Department provides crossing guards in the vicinity of the school.

FUNCTIONAL AND SPATIAL RELATIONSHIPS AND ADJACENCIES

The Edward Devotion School serves the vibrant Coolidge Corner neighborhood and is the largest of Brookline's K to 8 schools, with a population of 838 students. It enjoys an international reputation: historically, it is the public school that President John F.

Kennedy attended; academically, it welcomes students from all over the world, and socially, it reflects and respects human diversity.

Functional and spatial relationships and adjacencies are the key to the successful design of the new facility. These relationships between classrooms and programs in the school define the programmatic, functional, spatial, and environmental requirements of the educational facility and become the basis for the design at the next phase. Devotion School depends on adjacencies for communication, collaboration, flexible grouping, and teaming. Providing learning areas both in and outside classrooms for small group work, individual tutorial spaces, and additional instructional break out rooms are critical in a school with a focus on integrated classrooms at grades K-8, requiring specialized instruction and an emphasis on inclusive practices.

Community is a core value among students, staff and parents. Devotion School is a warm and inviting place for children, staff and families. A priority for the students, staff and Devotion community is to bring a “small school” feel to a large elementary design. The PTO and parent volunteers are actively involved in before, during and after school programs. Devotion requires a welcoming main office and community arrival space that accommodates the high morning influx of families who walk or get dropped off by parents at school arrival, as well as the active dismissal procedures. The students, faculty and parent community value and require a space for the entire school to gather, both as a common space to gather and celebrate learning and as an area to spotlight the arts through assemblies and performances. A functional dining facility with a reasonable capacity is a need of the school. After school, we provide space for a K-4 extended day program that operates until 6:00 pm. Approximately 100 students participate in this program daily Monday through Friday. Community gathering space is necessary, as well as smaller spaces for homework support, small group activities and gross motor play. The Devotion After School Enrichment Program (DASEP) conducts a series of clubs after school Mondays through Fridays until 6:00 pm. This program offers students in grades K-6 club options that require use of space to engage in art, drama and sports activities. The Steps to Success program, which supports students of low income, offers an After Hours University, which also requires space for students to receive homework support and tutoring, as well as enrichment club options and gross motor activities. The Devotion School also hosts a variety of intramural athletic programs, including flag football, volleyball, basketball, and floor hockey. These teams utilize outdoor field space and the large gym for programming. The new design should include a large gym with space for bleachers to accommodate spectators during athletic events.

The Devotion School is a relationship-oriented community, that practices and values inclusive partnerships and mutual support in all aspects of the school community. This is the overall spirit of the school that will drive the design of the facility.



SECURITY AND VISUAL ACCESS REQUIREMENTS

The new school facility will continue and enhance the safe drop off of students with safe secondary access for emergency needs. The Devotion School requires:

- Access Control utilizing a security access fob device by authorized staff.
- Visual Security of the main entrances utilizing a video monitoring/recording system that will be monitored at the school secretary's desk.
- Safe staff parking
- Safe visitor parking
- Safe pathways for pedestrians and bicyclists coming from varied directions to the school
- Safe bus access systems that do not interfere with drop off and pick up traffic
- Safe recess grounds and play fields that can be properly supervised by staff and protected from vehicle traffic
- Visual access of the driveway, garage and parking lots
- Safe access for kitchen, facility and shipping / receiving separate from school traffic to the main entrance
- Safe and appropriate access to the perimeter of the building and play fields

Maintaining safety of the current facility is a top priority and a challenge. One example immediately observable is the main lobby. The main lobby lacks sufficient square footage, resulting in the lobby being very congested during arrival, dismissal, and mass movement times of the day (e.g., lunch time). In addition, the administrative office space for the principal and two vice principals is inadequate. Administrative offices may be spread throughout the building to provide passive supervision.

FINAL STATEMENT OF INTENTION

Brookline's burgeoning student population shows no signs of abating. Our current kindergarten class will graduate from high school in 2026. Education literature is replete with evidence of the need to change traditional instruction in schools to better match the learning that is required for students now and in their future. It is our mission *to ensure that every student develops the skills and knowledge to pursue a productive and fulfilling life, to participate thoughtfully in a democracy, and succeed in a diverse and evolving global society.* **It is our intention that our educational mission and goals drive the building renovation plan that supports the best practices of teaching and learning in an elementary school of this size at this time, and for the future of all Devotion students.**