SMMA

Educational Program

Somerville High School

Prepared for Massachusetts School Building Authority
Feasibility Study
Preliminary Design Program (PDP)

March 1, 2016

Educational Planning and Visioning Process

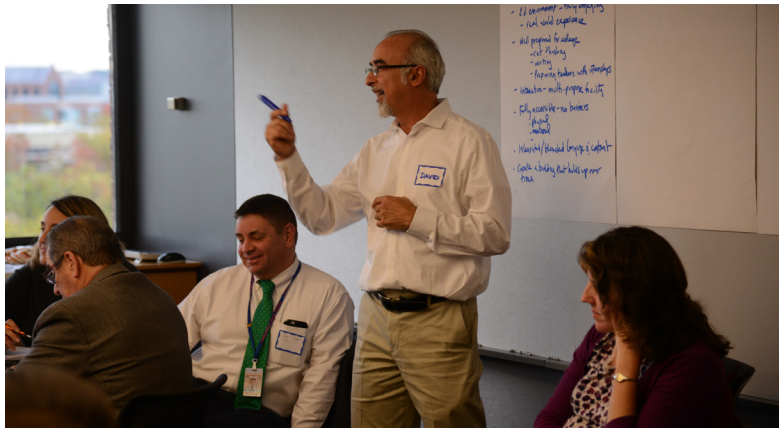
Beginning in the fall of 2015 Somerville Public Schools and Somerville High School (SHS), SMMA and New Vista Design began an in-depth educational planning process that informed the following Education Program document. As part of the Massachusetts School Building Authority's (MSBA) Preliminary Design Program (PDP) the Educational Program is the first step in the Feasibility Study process leading towards a substantially new or renovated Somerville High School. As one of the Commonwealth's oldest extant and continuously active high school structures SHS has served its community well, its multiple additions over the years have allowed for a dynamic and comprehensive offering of educational programs to be put into place to serve the very diverse socio economic student citizens of the community. However the sprawling structure last added onto in the early 1980's is at odds with todays' 21st century educational practices in which the school's core curricula departmental organization and Vocational programs (Chapter 74 - CVTE) desire a more collaborative and integrated project based inquiry that can serve the SHS student population in the broadest possible sense.

SMMA educational planners met with staff, administration and students over the course of two full weeks in September closely followed by an inclusive series of all-day visioning sessions in October and November that included City administrators, school administration, teachers, citizens and community groups including representatives from Tufts University and Lesley University. The educational planners and staff then reconvened in November and December to reconfirm the goals and objectives for a new SHS, the Educational Plan that follows is in its entirety the product of the SHS administration and staff reflective of their goals and aspirations for a building that will allow Somerville's ascension as a model for high quality inclusionary and comprehensive education for urban school districts.

In October and November of 2015, the Somerville High School Educational Working Group (EWG) – a group of approximately 30 Somerville Public School teachers, parents, district administrators, community partners and higher education partners – assembled for the purpose of educational visioning for the new Somerville High School. New Vista Design and Symmes Maini & McKee Associates (SMMA) facilitated two workshops, each a collaborative session designed to inform the Somerville High School design process. Participants were led through a step-by-step visioning process aimed at capturing their best thinking about Somerville High School's current and future educational goals and priorities, and connecting them to best practices and possibilities in innovative school facility design.

On October 20, 2015, the Somerville High School EWG participated in the first Educational Visioning Workshop. The workshop was four-hours long and explored the following topics:

- *Priority Goals* for the renovated/new facility
- *21st Century Teaching and Learning Practices* that are being influenced by digital technology and our changing economy
- *Strengths, Challenges, Opportunities, and Goals (SCOG Analysis)* associated with Somerville High School's current academic program as well as the vision for its new facility
- *21st Century Learning Goals* that distill the group's best thinking with regard to Somerville High School's current and future educational programming and priorities



Priority Goals

The following list of priority goals for the design of the new and/or renovated Somerville High School was recorded during the participant introduction section of Workshop One, with each participant offering one or more priority goal.

The Somerville High School program and/or new facility:

- Is a truly engaging educational environment
- Promotes real-world experience
- Prepares student well for college in terms of critical thinking and writing
- Prepares its teachers with professional development
- Is a multi-purpose and highly interactive facility
- Is fully accessible with no barriers: physical or emotional
- Will be created in such a way that it holds up over time
- Maintains its beautiful and old library and creates a satellite campus with wrap around services
- Is "IFFY"… interdisciplinary, integrated, innovative, flexible, futuristic and fun!
- Is an engaging, warm, welcoming space that meets ALL students needs, including safe and quiet "time out" spaces
- Is part of the larger community and still maintains its identity
- Supports teacher collaboration
- Supports adaptive and responsive teaching and learning: adapts and evolves to the changing needs of students and adults
- Is flexible and adaptable, allowing students to create and explore
- A space where kids want to be: access to projects and the ability to "make it their own"
- Maximizes opportunities for interactive learning and collaboration
- Facilitates and inspires creative expression and focused practice
- Has flexible and adaptable spaces in which a wide range of visual arts can be offered
- Has functional and integrated lab and workshop spaces, including outdoor classrooms, and weather stations, that support real science, STEM and STEAM
- Promotes and strengthens the school's partnership with TUFTS
- Puts vocational work on display
- Maintains safety and mimics present day work environments
- Facilitates the creation of community and the practice of inquiry-based and personalized learning
- Respects the historic building
- Is safe and secure, while also promoting community use
- Has more developmentally appropriate athletic and unified sports facilities
- Encourages students to own their educational experience and processes, and to develop as learners
- Promotes authentic and real-world application of learning
- Facilitates emergency response: preparedness, response and mitigation

The Following Priorities Were Added On November 9, 2015 During Workshop Two

- Robust technology
- Agile classrooms
- Performance Space
- Green Building
- Being at the "center of the community"
  - A touchstone place to go
- Support services and space for health organizations (some require more privacy)
- Spaces for teacher professional development
- Space for adult learners (staff, community, parents)
- Cafeteria that is nourishing and age appropriate education around food
- Promotion of health and wellness as a community resources
- Sustainability

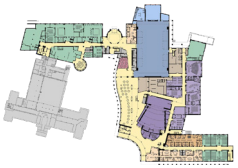
On November 9, 2015, the Somerville High School EWG participated in the second Educational Visioning Workshop. The workshop was seven-hours long and explored the following topics:

- *21st Century Design Patterns* that innovative schools throughout the country have put into practice in order to make their forward-thinking learning goals come alive on the level of facility design
- *DRAFT Guiding Principles 1.0* for design of the renovated/new facility
- *Blue Sky Ideas* for the renovated/new facility
- *Key Spaces and Adjacencies* for the renovated/new facility
- *Bubble Diagramming* for the renovated/new facility

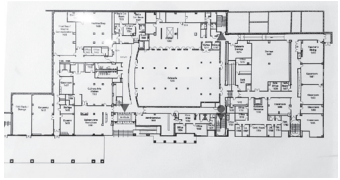
Essex Tech

Winchester High School

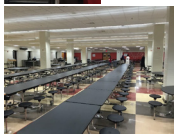
Quincy Comprehensive High School



Everett High School



first floor



Educational Working Group and Students Touring Recent High School Projects

Educational Program

2.1 Grade and School Configuration Policies

A. Current grade configuration

Somerville High School currently serves students in grades 9-12. The ages of students at SHS range from 13 to 22 years old. The current SHS Grade 9-12 configuration includes a small group of special education students whose IEPs call for education until they are 22 years old. They belong to either the Life Skills program or to the SHIP program which services students with complex medical/health issues.

B. Proposed grade configurations to be considered

While no changes are planned to the existing 9-12 grade configuration for the comprehensive curriculum at SHS, the district's special education day/alternative junior high school and high school (Next Wave – grades 6-8; and Full Circle – grades 9-12) are planned to occupy a portion of the new Somerville High School design as a separate educational program located in a substantially separate space within the building that includes a separate entrance. Students who currently attend Next Wave and Full Circle are housed in a separate building, the Edgerly, which is a 15-minute walk from Somerville High School. The design of the school is to serve 60% students on IEPs and 40% students who are at risk and need an alternative education model. Although some Full Circle students are independent enough to take classes in the CTE program at SHS or to participate in sports and extracurricular activities at SHS, the sheer distance between the buildings and commute time serves as a barrier for this to happen on any regular basis. Our current proposal aims to locate Next Wave/Full Circle within the new SHS building so that this group of students, if their education plans allow for it, can benefit from a more comprehensive school experience by having easy access to CTE programs, sports programs, clubs and extracurricular activities, a full-time nurse, and ELL services.

C. Advantages of proposed grade configuration

I. Describe District's Approach to Facilitating Student Transitions

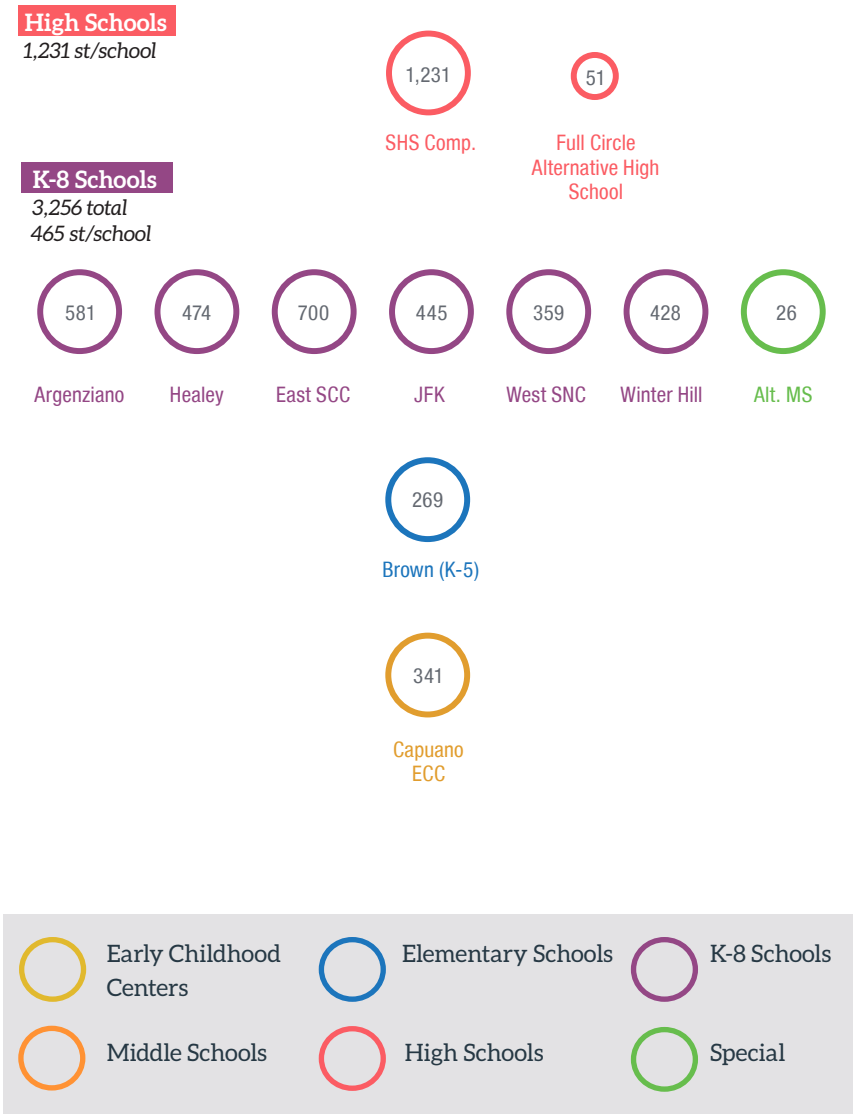
A transition plan is in place for rising 8th grade students throughout the district to visit Somerville High School and to attend a formal transition orientation during the summer months. These transitional experiences have been successful in helping SHS staff identify the academic, social and emotional needs of rising 8th graders so that they are able to make a more seamless transition to the 9th grade. Somerville High School also offers a Ninth Grade Experience (NGE) designed to provide a strong support structure to ninth graders as they ease into high school.

Ninth grade teachers function as a team and meet two times per week to determine strategies aimed at maximizing the potential of the students they teach, focusing on maintaining parental and support service contact. These teachers meet regularly with Housemasters, guidance counselors, adjustment counselors, and special education liaisons to ensure students are receiving the full spectrum of support they need to get a good start in high school. Biweekly meetings are also used to discuss student progress, develop curriculum materials, and to meet or talk by telephone with parents and guardians.

Additionally, for students attending Next Wave/Full Circle, there will be a transition plan in place as part of each student's educational plan for how and how often the student is able to access and participate in SHS resources and activities. This transition plan will include appropriate supports and mechanisms for monitoring each student.

II. If a Different Grade Configuration is Proposed Describe the Plans to Facilitate Transitions in the Proposed Configuration

The new design plan for Somerville High School proposes including the District's alternative programs, Next Wave and Full Circle, into a substantially separate section of the new building. Next Wave and Full Circle currently serve as the District's special education day and alternative education programs, serving students whose IEPs call for substantially separate placement. Next Wave serves grades 6-8 and Full Circle serves grades 9-12. Particularly for students in grades 6-8, there will be a transition component built into each student's education plan that will allow for a student's gradual participation in SHS's 9-12 educational program. This transition component may include participation in advanced courses, i.e. Algebra I, sports and other curricular activities.

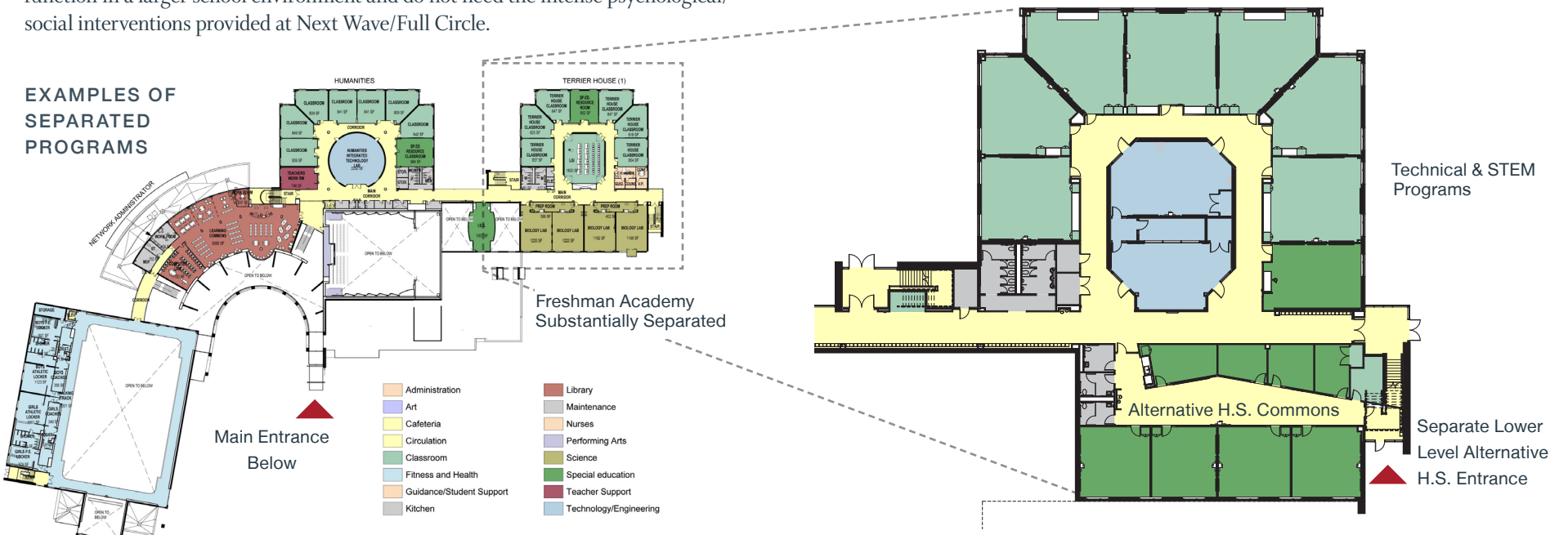


Transitions within the building between the distinct Next Wave/Full Circle and SHS education programs will be mitigated by housing Next Wave/Full Circle in a substantially separate section or wing of the building that includes a separate entrance, flexible classrooms that will accommodate an 8:1 student-teacher ratio but can also accommodate combined classes as well, therapeutic facilities to meet the specialized needs of students, a separate meeting space/conference room, an independent science lab/maker space to be utilized exclusively by NW/FC students, and other core educational facilities. The use of adjacent common areas such as the gymnasium, auditorium, or cafeteria will be coordinated through careful scheduling and supervision.

The highly specialized therapeutic program offered to Next Wave/Full Circle students requires a substantially separate environment in which students can work on gaining the skills to be able to function in a more inclusive environment. Placement of special education students into Next Wave/Full Circle is driven by IEPs that call for a substantially separate, smaller therapeutic educational setting. In contrast, special education students in the inclusion model at Somerville High School often need accommodations to help them access the curriculum, but are able to effectively function in a larger school environment and do not need the intense psychological/ social interventions provided at Next Wave/Full Circle.

The SHS Career and Technical program also entered into a new manufacturing job training partnership with Somerville Community Corporation in January of 2016 targeted at supporting young adults with their re-entry into the workforce. The Advanced Manufacturing Training Program (AMTP) targets Somerville residents ages 18-24 and focuses on preparing program participants for high-paying careers in the manufacturing industry. AMTP includes a full-time (500 hours) program which will be offered during the day with AMTP students learning alongside SHS students in the advanced manufacturing program, and a part-time (150 hours) evening program.

EXAMPLES OF SEPARATED PROGRAMS



West Springfield 9th Grade Academy

LOWER LEVEL

West Springfield Alternative High School

2.2 Class Size Policies

A. District policies, targets and guidelines by grade

Somerville School Committee policy does not address class size. The Unit A contract between the School Committee and the Somerville Teachers Association stipulates maximum sizes listed below, "to the extent possible, within the existing facilities." Due to the broad range of educational needs of students, the target maximum class size at SHS is 23, but will be lower for specialized programs as noted below. The wide range of educational needs and programs/ courses offered to most effectively meet the needs of Somerville High's student population requires smaller class sizes to facilitate more personalized instruction. Class sizes are also dictated by safety considerations based on the course, and space constraints in the current building classroom configurations.

Class Sizes			
Kindergarten (One Teacher)	30	Special Class	18
Grades 1-6	30	Bilingual	20
Grades 7-9	30	Physical Education	30
Grade 10	32	Vocational	20
Grades 11-12	30	Secondary Corrective Reading	15

B. Current average class sizes by grade

Because of the wide range of educational needs at every grade level, average class sizes by program more accurately reflect the complexity of Somerville High School's curriculum structure than average class sizes by grade. As noted above, actual class sizes are dictated by the wide range of educational needs of Somerville's student population, safety considerations based on the course (i.e., working with a kiln in an art course), and space constraints in the current building classroom configuration.

Fall Semester 2015 Class Size Averages by Department/Program:

- *Art Department* 15
- *Business* 14
- *English as a Second Language (ESL)* 14
- *English* 18
- *Re-Direct Program* 9
- *Health* 19
- *Mathematics* 18
- *Media*
  - Film Studies 13
  - TV/Media Production (Semester 2) 17
- *Music*
  - Chorus 29
  - Band 45
  - Orchestra 42
  - World Percussion 2
- *General Music* 13
- *Physical Education/Fitness* 18
- *Science* 18
- *Social Studies* 19
- *World Language* 17
- *Career Technical Education* Class sizes and staffing ratios in State – approved programs are regulated by Chapter 74 guidelines
  - Child Development 8
  - Cosmetology 16
  - CAD 8
  - Graphic Design & Visual Communication 10
  - Dental Assistant 6
  - Health Careers 9
  - Machine Tech 4
  - Computer Tech/Cisco 12
  - Carpentry 10
  - Culinary 12
  - Metal Fabrication 11
  - Automotive 8
  - Electrical 11
- *Special Education*
  - Study Skills 10
  - Resource courses 15
  - Life Skills 15
  - Transition 3
  - SHIP 3

C. Proposed changes and why or statement that no change are proposed

No changes to class size policies are currently being proposed.

Note: co-taught courses that include a subject area teacher and Special Education teacher are scheduled in the four major subject areas (ELA, Match, Science, Social Studies). Class sizes are not reported separately for these courses as they are representative of the department averages as a whole.

2.3 School Scheduling Method

A. Current scheduling methodology including advantages and disadvantages

The current scheduling structure for a school day at Somerville High School is broken down into six "blocks" for a total of thirty blocks per week. Each block is fifty-five (55) minutes in duration with the exception of the first block, which is sixty-seven (67) minutes long to allow for daily morning video announcements. Students have four minutes to transition from one block to the next. Students enroll in seven courses per semester with each course meeting for four blocks each week. This accounts for 28 of the 30 blocks. The advantage of the current scheduling structure is the built-in flexibility of the remaining two blocks per week, which are devoted to student support and enrichment, advisory, school-wide assemblies and student early release days for teacher professional development.

Block	Start	End	Monday	Tuesday	Wednesday	Thursday	Friday
1	7:55	9:02	A1	A2	A3	A4	B4
2	9:06	10:01	B1	D2	B2	B3	C4
3	10:05	11:00	C1	Rotating Extension Block	C2	C3	D4
4	11:04 11:34 12:04	11:34 12:04 12:34	D1	E2	D3	E3	E4
5	12:38	1:33	E1	F1	F2	F3	F4
6	1:37	2:32	G1	G2	Advisory/ Common Plan. Time/Associates	G3	G4

B. Proposed changes and why or statement that no changes are proposed

While the current scheduling structure offers some distinct advantages, such as the flexibility of two built-in blocks to allow for the delivery of student support and advisory programming and initiatives, we anticipate the need to make changes to scheduling as educational practices and the needs of students evolve in the years, and even decades ahead, in the new building. The current schedule could be further enhanced by building in additional flexibility, such as a before-school or after-school block that would expand students' scheduling options, thereby providing them with greater exposure to a wider range of courses. A building/layout that can support a more flexible schedule structure through thoughtful adjacencies, design of adaptable and agile classrooms and other learning environments, and improved transition flow will facilitate a flexible scheduling structure that better meets the needs of all students regardless of their primary academic pathway (CTE, standard, honors, AP, ELL).

Unlike most Vocational/CTE programs, Somerville High School does not do a week on/week off schedule or a block schedule, in order to ensure that ALL students, including those in the CTE program can take full advantage of academic courses such as Advanced Placement and world language course offerings. The use of smaller, discrete blocks of time in space that will allow for a variety of instructional approaches such as 1:1, small group, independent studies, flipped classrooms, etc. will enable and maximize a more personalized and differentiated approach to teaching and learning that the current SHS structure does not allow to happen.

Changes in scheduling are dictated in large part by evolving educational practices. In order to ensure that SHS students are receiving the most current and relevant education that prepares them for the demands of globally competitive markets, a building layout should allow for a variety of different scheduling methodologies, and be flexible enough to accommodate changing educational practices.

2.4 Teaching Methodology and Structure

(e.g., academies, departments, houses, teams, etc.)

A. Administrative and academic organization/structure

(e.g., academies, departments, houses, grade based cohorts, teams, room assignment policies etc.)

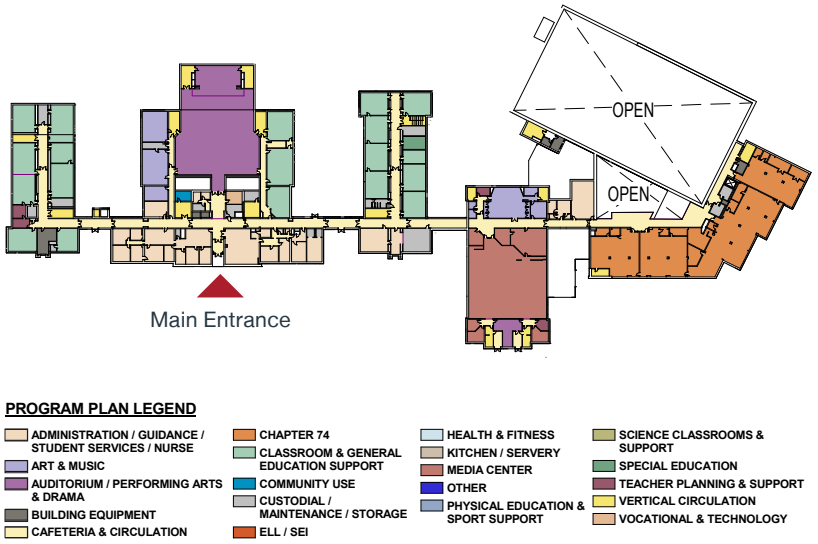
I. Current Organization

Somerville High School is a public, 4-year comprehensive high school with a House administrative organizational structure and a traditional academic departmental structure that includes the following departments: Visual Arts, Business Education, English, English Language Learner, Health Education/Family & Consumer Sciences, Library Media Services, Mathematics, Music, Physical Education, Science, Social Studies, Special Education, World Languages, Center for Career and Technical Education (CTE), and Athletics. Each department is located in a separate section of the building and is overseen by a supervisor/ department head responsible for department curricula and for the supervision, support and evaluation of all department staff members.

SHS currently offers an integrated structure of student support in the form of a House system. There are four houses, each consisting of a Housemaster/Assistant Principal, a Guidance Counselor, and a House Secretary. House staff members are located within the building in four house clusters that are distributed throughout the current building. Each includes separate offices for the Housemaster/AP and the Guidance Counselor, a reception area, and a conference room. Additionally, there is a Guidance Counselor for ELL students who, is based near the ELL Welcome Center, and a guidance counselor for freshman CTE students who is based in the CTE wing of the existing building. Students are assigned to houses alphabetically based on last name and are assigned to the same Housemaster throughout the duration of their SHS career.

Academic programming is offered based on grade level with students generally selecting a college prep, Advanced Placement, and/or CTE pathway. A Ninth Grade Experience (NGE) is offered to all freshmen to assist in their transition to high school; that experience includes a CTE exploratory experience.

The current Administrative/Academic structure also includes a number of team-taught inclusion classes for special education students offered jointly by the special education department and academic departments, a Redirect program to support high needs students who are not in Special Education, and an Advisory program for all students. In Advisory, groups of students meet with their advisor to strengthen skills that will help them improve their academic performance and social responsibility. Advisory incorporates academic guidance, planning, organizational skills, and community building.



Somerville High School,
Existing Level 1

Wellesley High School

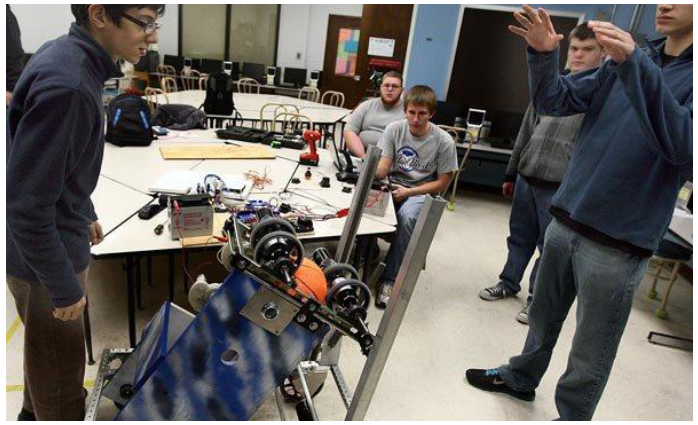
Academic Classroom Wings with adult connection at each floor level:

1 Teacher Support 2 Administration/Guidance House

EXISTING CTE CLASSROOMS

The Career and Technical Education program consists of six clusters, each containing one or more individual programs as follows:

- *Construction Cluster*: Carpentry, Electrical
- *Transportation Cluster*: Auto Technology
- *Information Technology*: Information Support Services and Networking
- *Manufacturing Cluster*: Architectural Design/Pre-Engineering, Machine Technologies, Metal Fabrication and Welding;
- *Health Care and Human Services Cluster*: Child Development, Dental Assisting Program, Health Careers/Introduction to Nursing Assistant Program;
- *Commercial Services Cluster*: Cosmetology, Culinary Arts, Graphic Arts & Visual Communications.



Quincy High School, Chapter 74 Programs

II. Proposed Changes and Why or Statement that No Changes are Proposed.

While the current administrative 'House' system offers an integrated structure of support within each House, the current building configuration does not allow for seamless integration of academic and support services, sharing of resources, ready access to additional support services available at the high school, or the opportunity to easily share professional expertise. Guidance and College & Career Readiness staff members are spread throughout the building, not all student support services are jointly located or adjacent to one another, and support programs are isolated from one another.

Proposed changes to the Administrative structure include the following:

- Thoughtful placement of administrative and student support services in adaptable, flexible spaces that could allow for the centralization of some administrative and student support services;
- Thoughtful placement of administrative and student support services which promotes a sense of connection and identity throughout the building, and provides for the informal supervision of students by non-teaching staff, which in turn allows students to use flexible student work areas more independently;
- Spaces and placement of spaces that will facilitate interdisciplinary work, professional collaboration, and communication between administrative and student support staff and teachers;
- Flexible classroom and conference meeting space to accommodate one-to-one or small confidential and non-confidential meetings, as well as larger meetings or professional development workshops of up to 15 people;
- Be in proximity to the Health Center and any other support services provided by the community

The current departmental structure does not facilitate interdisciplinary work or daily interdepartmental professional collaboration. Flexible classroom and spaces and thoughtful program adjacencies between specific core academic and career and technical education programs, coupled with centralized professional meeting and planning spaces, will allow for a wider range of educational program methodologies, increased and interdisciplinary teacher collaboration, larger group project work, and sharing of expertise and resources.

EXISTING CLASSROOMS

B. Curriculum delivery methods and practices

I. Current Practices – General Academics Covering Many Disciplines:

Many teachers are moving to more student-centered and personalized learning but are significantly influenced by current conditions that limit opportunities for more contemporary educational delivery methodologies. Teachers work to implement more contemporary educational methodologies in the best way possible, but are limited by inflexible classrooms designed for more traditional delivery methods, and limited technology due to building limitations. The English, Math, Science, Social Studies, and World Language departments design and implement curricula designed to help students master core academic content as well as develop important 21st century skills. Opportunities for authentic, relevant, real-world learning experiences are also woven into core instructional programs. Some of the existing limitations include:

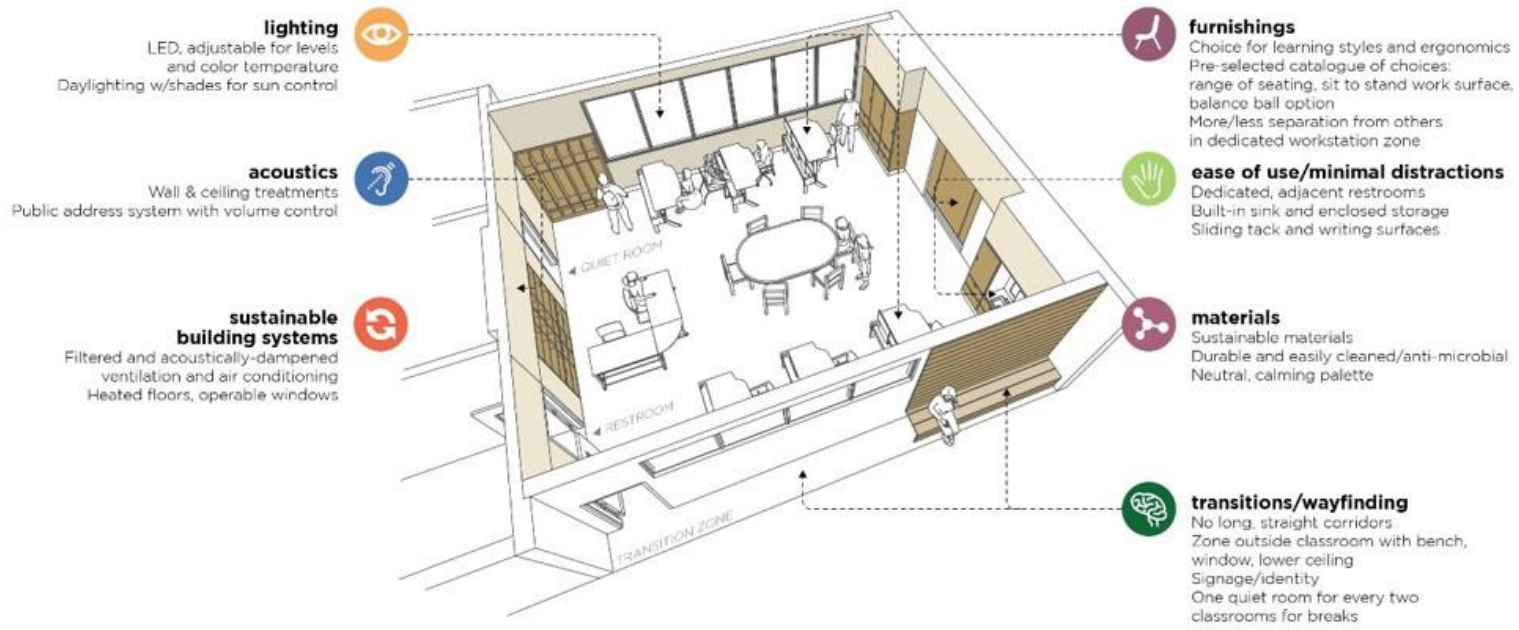
- Small classrooms that limit flexibility
- Single teaching wall in many classrooms, making differentiation difficult
- Lack of ubiquitous technology that would allow students to participate in interactive and engaging methodologies
- Departmental organization that limits interdisciplinary activity
- Traditional classroom to classroom adjacencies that limit communication
- A feeling of two schools sharing a campus (academic and CTE) with little academic cross fertilization

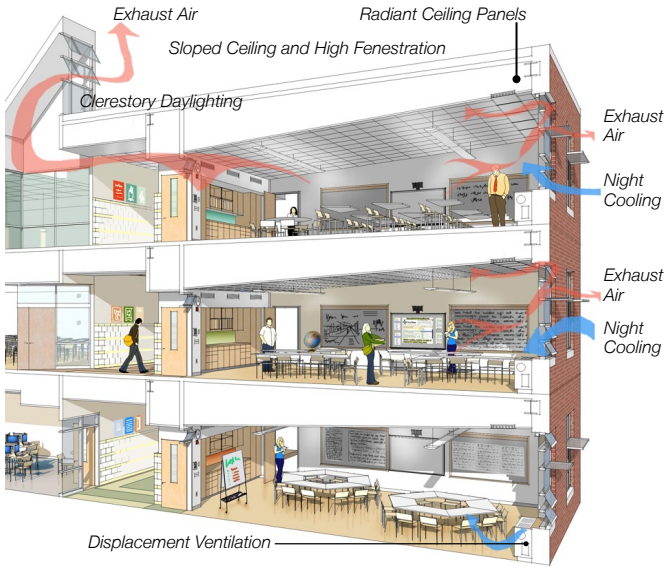
II. Proposed Changes and Why, or Statement that No Changes are Proposed

The goal is to move towards more student centric and personalized models that incorporate various educational delivery methodologies and which promote the development of 21st Century skills including: communication, collaboration, creativity, critical thinking, problem solving, global citizenship and others. Flexibility and adaptability within the classroom and through adjacencies are key elements to supporting a student-centered learning experience that is inviting, engaging, relevant, robust, and dynamic. In all classrooms, technology must be integral to teaching and learning. A future 1:1 ratio of laptops/devices to students should be assumed, as should the ubiquitous use of interactive technology throughout the facility.

The ability to store and charge devices within classrooms and other learning environments plays an essential role in the seamless integration of technology, providing opportunities for anywhere, anytime learning. The proper appointment of flexible, adaptable furniture including longer tables and standing-height tables that facilitate project work, as well as quiet nooks for independent work, are also critical in supporting scaffolding and differentiation.

CLASSROOM ELEMENTS

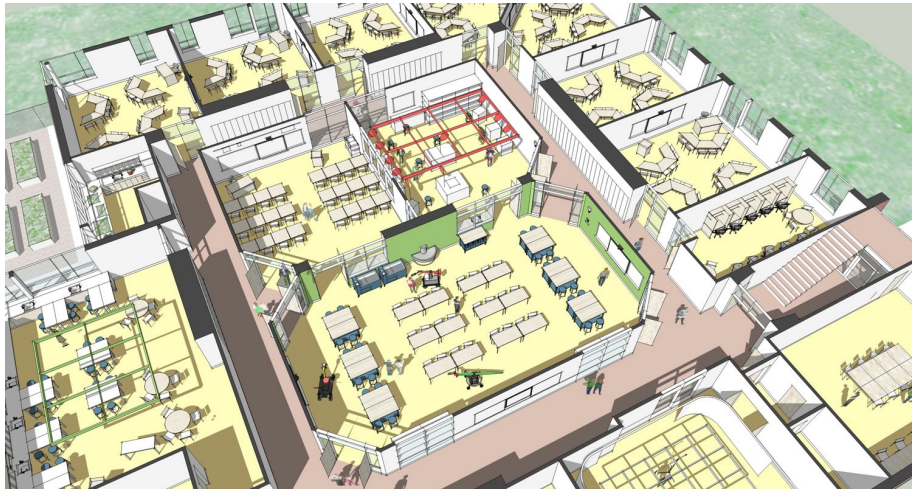




Students should be able to showcase their learning, growth, and mastery in a variety of ways including through written papers and reports, performing scenes and skits in class, participating in debates and simulations, creating projects, presenting orally or by using multimedia in front of peers. Throughout their studies, students also need to be able to make 'real world' connections through project-based assignments that are relevant to current issues, and through interdisciplinary opportunities to talk with and learn from professionals and experts from the community. Ample wall space, exhibition space, storage space, lecture space, and flexible classroom spaces that can support small- to large-group instruction (100 or more students) are all elements that can further enhance instructional practices.

Organization and building elements that can contribute to these goals include:

- Interweaving of some CTE programs with academic teaching spaces
- Adjacencies of spaces that encourage communication between students and teachers
- Adjacencies of space that encourage interdisciplinary and project-based learning
- Classrooms of the proper size and appointments that promote flexible and changing use of the rooms
- Multiple teaching walls in learning environments that allow for student to student and small group teaching, and differentiation within a classroom
- Lightweight, ergonomic, and flexible furniture that contribute to the points above
- Spaces that can support burgeoning collaborative high-tech programs and extra-curricular activities available to all interested students at the school such as the FIRST Robotics Team, which is advised and supported by a collaboration of math, science and CTE teachers
- Transparency to and from classrooms to flexible student work areas, to allow for informal supervision of students as they work in more independent and small group contexts
- Multiple venues for the ongoing exhibition, showcasing and presentation of high quality student work



North Middlesex Regional High School,
STEAM Fab Lab at the Center of the Classroom pod

C. English Language Arts/Literacy

I. How Curriculum is Delivered

See paragraph 2.4.B.I. for a general description of current curriculum delivery.

II. Proposed Changes and Why, or Statement that No Changes are Proposed

See paragraph 2.4.B.II for a general description of proposed changes and why.

D. Mathematics

I. How Curriculum is Delivered

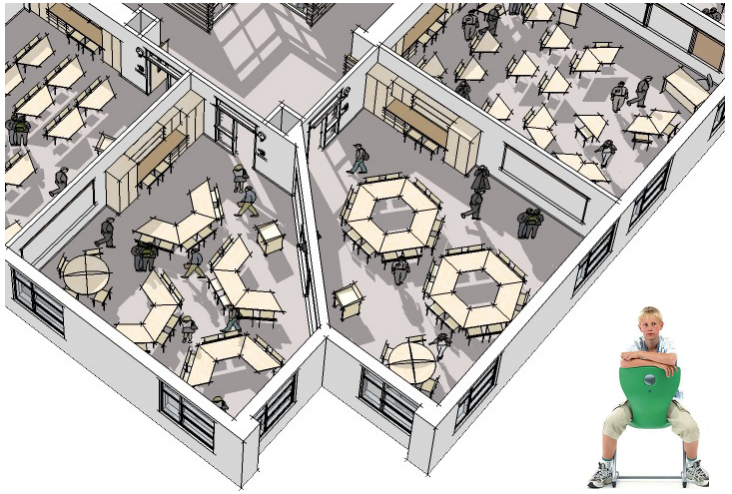
See paragraph 2.4.B.I. for a general description of current curriculum delivery.

Additionally, in math and science students work collaboratively to conduct experiments and use manipulatives and a variety of technology to explore, understand and explain abstract concepts, create projects, solve problems, and complete activities.

II. Proposed Changes and Why, or Statement that No Changes are Proposed

See paragraph 2.4.B.II for a general description of proposed changes and why.

The daily integration of current technology and resources, including the move toward a one-to-one laptop model, that would allow students to build hardware as well as program software in Makerspace-type flexible learning environments, would greatly enhance how curriculum is delivered in math classes.



Grafton High School,
Five sided type classrooms




EXISTING SCIENCE LAB/CLASSROOMS

E. Science

I. How Curriculum is Delivered

See paragraph 2.4.B.I. for a general description of current curriculum delivery.

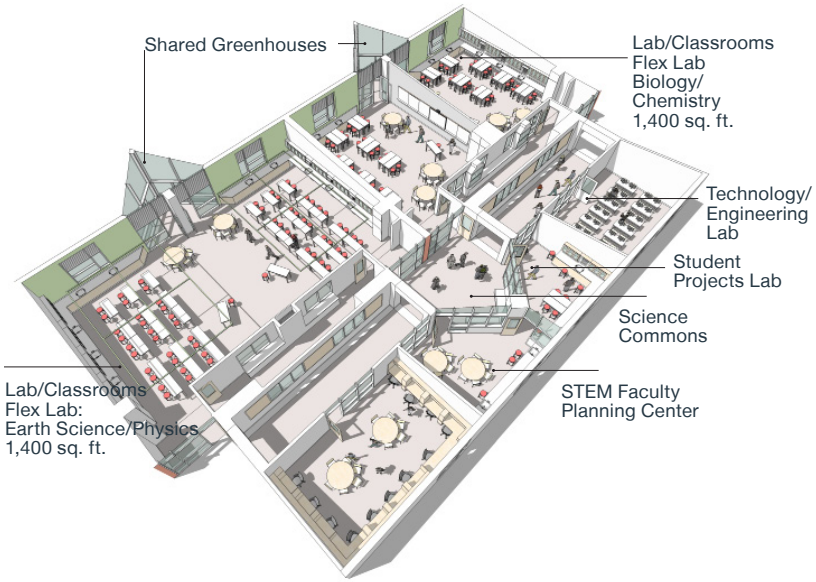
Science labs currently include traditional fixed benches that take up much of the room. Most lectures are conducted within these same (undersized) rooms. Though there is a desire to move from lecture and discussion mode to experiments, the room sizes make the transition difficult. Inflexible and traditional placement of fixed furnishings, such as laboratory tables, limit group sizes because of safety concerns. The sizes of the rooms are also not conducive to collaborative interdisciplinary project work.

II. Proposed Changes and Why, or Statement that No Changes are Proposed

See paragraph 2.4.B.II. for a general description of proposed changes and why.

Additionally, Computer Science classes require a space with interactive whiteboards, tables that can be arranged in flexible groupings, adequate storage for portable technology and devices, and laptops for every student. Flexible, Makerspace-type spaces would provide students with the opportunity to build hardware as well as program software, and work with community partners regularly to gain real-world exposure and experience.

Science and engineering classrooms need to be flexible spaces to accommodate lecture and lab work and that would enable more academic cross pollination with other programs, particularly Math and CTE. Appropriate program adjacencies are critical to supporting this interdisciplinary work. Lab work and student research will be integrated into all lessons rather than the traditional separate lecture and lab portions of class. As already stated, the flexibility between a lecture and lab space is vital to provide for seamless integration of the two. Rooms need to be equipped with proper safety equipment, several sinks, peripheral and/or ceiling utilities, ample storage including cabinets, gas lines, fume hoods, and cutting-edge life and physical science lab equipment.



Flexible Science Labs

F. Social Studies

I. How Curriculum is Delivered

See paragraph 2.4.B.I. for a general description of current curriculum delivery.

II. Proposed Changes and Why, or Statement that No Changes are Proposed

See paragraph 2.4.B.II for a general description of proposed changes and why.

Social Studies students would benefit from proximity to the Graphic Design & Visual Communications program and the Culinary Arts program. Interdisciplinary projects could include developing posters, maps, graphs, and other types of media, or creating meals from different cultures and historical periods. Social Studies students would also benefit from sharing space with the Art and Music departments, allowing for interdisciplinary art and music projects that support what students are learning about history.

G. World Languages

I. How Curriculum is Delivered

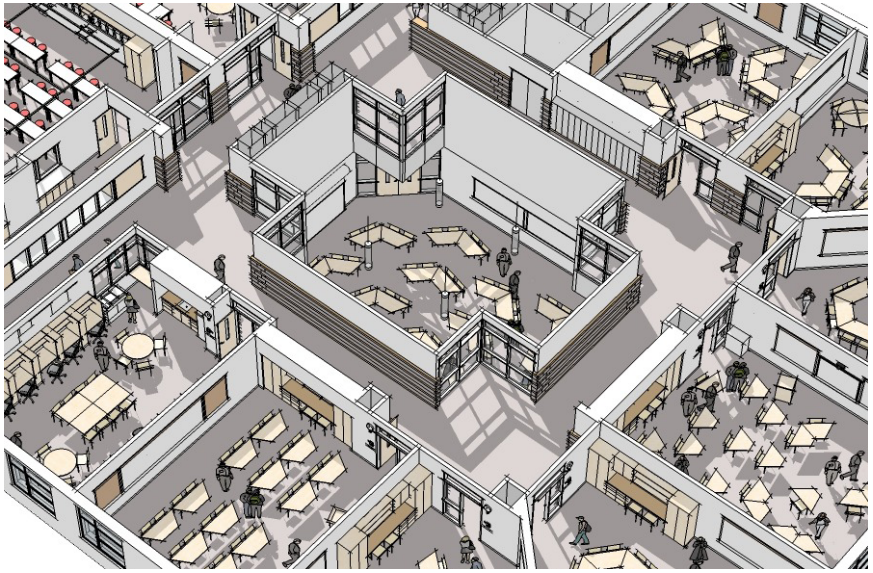
To some degree, current practices follow those described above in paragraph 2.4.B.II.

This is strongly supplemented by our language lab as described below. The language lab is a vital instructional space that allows students to master all modalities of the language acquisition process.

II. Proposed Changes and Why, or Statement that No Changes are Proposed

We build a strong community within each classroom. Students and teachers consistently collaborate, take risks, and make connections to the real world. Thus, it is important that classrooms are warm, bright, flexible, and inviting, instead of impersonal and institutional.

In all classrooms, technology must be integral to teaching and learning. Access to technology throughout class is crucial and there should not be access barriers for either students or teachers. The ability to store and charge devices within each classroom plays an essential role in the seamless integration of technology. Personal technology provides opportunities for anywhere, anytime learning.

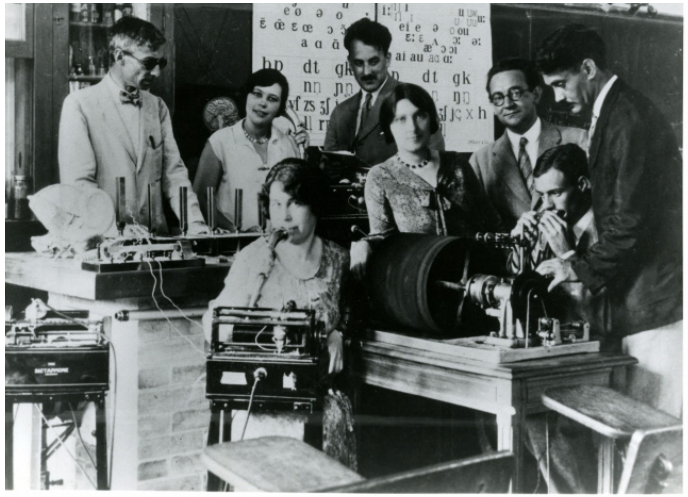


Large Group Instruction at Humanities Pod

III. If Considering Language Labs Describe the Types of Activities Anticipated for the Space, How It will be Staffed, Equipped

Somerville High School currently has a language lab that it considers as an integral part of its current and future programs. World Language instruction at SHS is strongly enhanced through the language lab, a virtual space that allows students to individually or in pairs rapidly access the Internet and speak and record oral activities, and interact one on one with the teacher. The teacher is able to archive the student's recordings, create a zip file, and email the student's recordings to their email or mobile device.

The lab is an instrumental part of the SHS World Language curriculum and is staffed and used on a daily basis by all 9 World Language teachers. The language lab allows students the opportunity to master all domains of language acquisition. In addition, students in the Advanced Placement Language and Culture course take their AP exams in the lab. The lab should be equipped with a minimum of 30 student computers, 2 computers for teachers, mobile partitions for testing, and the ability to project teacher and student work on an interactive board.



Historic Equivalent

Modern multi-purpose space with distance learning capability

H. Academic support programming spaces

(e.g. ELL academic coaches etc.)

I. How Program is Delivered

English Language Learner Program

The primary goal of Somerville High School's English Language Learner (ELL) Program is to provide an educational environment that ensures that students whose first language is other than English participate fully in the school community and the community at large in order to reach his/her full potential and be prepared for the successful transition to college or career. The academic program for English Learners at Somerville High School includes a leveled sequence of English as a Second Language (ESL) courses offering explicit instruction in all of the language domains (listening, speaking, reading, writing, grammar) and placing a strong emphasis on the development of academic language proficiency. All English Language Development curricula are aligned to the World-Class Instructional Design and Assessment (WIDA) Standards as well as the 2011 Massachusetts Curriculum Frameworks and the Common Core State Standards.

ELL students are enrolled in "sheltered" content area courses in core subject areas such as math, history, science, social studies, and health to provide meaningful access to grade level curriculum as students become proficient in English. In addition, the ELL Program provides native language (Spanish and Portuguese) content support classes in math. Teaching methods and instructional strategies in these courses are highly interactive and include comprehensible input provided through visual and graphic displays and multimedia sources.

The ELL Program also provides specialized support classes for low-literacy students and students who have experienced gaps in formal schooling. These courses focus on academic language and skills that can be applied across the content areas. For ELL students who are identified with learning difficulties, there is a Resource ESL class with individual students' needs being addressed one-to-one by a dually certified (ESL and Special Education) teacher.

Teachers assume shared responsibility for the achievement of ELL students, and cross-disciplinary school-wide teams that include the ESL teachers, content-area teachers who teach English language learners, counselors who specialize in the needs of ELL students, and key staff members from the Welcome Center who speak the students' language, work closely to ensure success of all ELL students. These teams meet to create individualized supports for students who need to succeed academically. They meet regularly to align curriculum; plan integrated, cross-content projects; address student concerns; and monitor student progress and to ensure that ELL students have access to an array of learning resources and services.

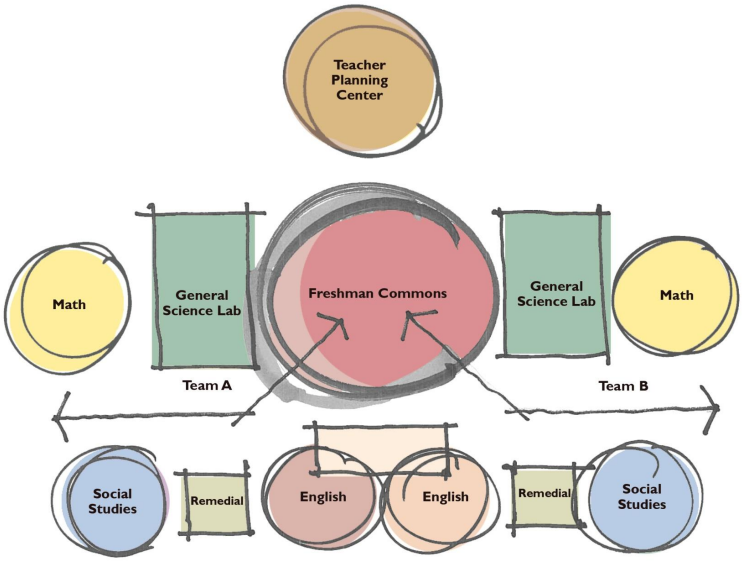
The English Learner Welcome Center and the SAFE (Students Accessing Formal Education) Program at Somerville High School provide critical academic and social support to this population of students. A description of these support services follows:

English Learner Welcome Center

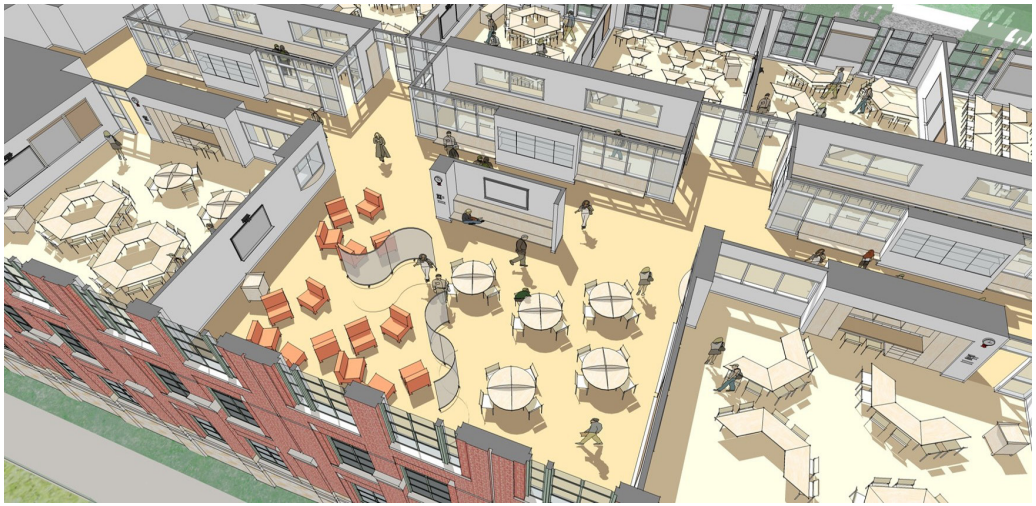
The Welcome Center is a support center for English Learners and their families providing tutoring, enrichment, and resource and referral. Multilingual staff members enroll new ELL students, conduct initial language and academic assessment, discuss school information with students and family members, and assist in orientation to SHS. Support to students is available at the Welcome Center on an ongoing basis including before and after school. The ELL Welcome Center is currently co-located in the SHS Guidance office in order to access counseling resources. Additional services that are available to students through the ELL Welcome Center include the ELL Wrap-Around Coordinator (mental health), Safe Harbors (housing), COPE (pregnancy and parenting), and services made available through city and community partnerships.

SAFE (Students Accessing Formal Education) Program

Students with Interrupted Formal Education (SIFE) are offered a cluster of courses to prepare them academically for full engagement in Somerville High School curriculum. A SIFE student's course of study is determined by the ELL guidance counselor after a thorough review of educational history. In addition SIFE students are offered academic tutoring before and after school at the ELL Welcome Center, and may enroll in the Summer ELL newcomer program to receive intensive English Language development and Math instruction. SAFE Program teachers and the ELL Welcome Center staff meet on a regular basis to review student's academic progress and need for additional social supports and community resources.



Organizational Diagram



Freshman Academy Commons Space

Ninth Grade Experience (NGE)

The goal of the ninth grade experience is to assist incoming ninth graders in adjusting to high school standards, expectations, and routines through a variety of educational and social opportunities. The ninth grade team consists of twelve teachers, three from each core academic department (English, Mathematics, Science, and Social Studies), who work closely together to build community and maximize student potential.

The ninth grade team meets together twice per week to address the needs particular to ninth grade students. The team works closely with the guidance counselors and Housemasters to identify specific student needs, plan interventions, and celebrate student successes. They also utilize weekly meeting time to communicate with families and create engaging and relevant interdisciplinary projects and units.

Students' needs are served through this program by providing the ninth grade teacher team with the time, resources, and flexibility to implement the program. The ninth grade experience allows ninth graders to form a strong foundation for successful high school careers and beyond.

Newcomer Experience Support Team (NEST)

NEST is the ELL component of the Ninth Grade Experience and is designed to assist ELL ninth grade students in adjusting to high school standards, expectations and routines through a variety of educational and social opportunities. The implementation of the NEST program is targeted to foster academic success, improve attendance, reduce drop-out rates, and provide services needed for an acute population. The NEST Team consists of five teachers, and ELL and content SEI teachers who work closely together to build community and maximize student potential.

The NEST team meets together weekly to address the needs of ELL 9th graders, utilizing triggers and analyzing data. The team works closely with the ELL counselor, wraparound service coordinator, and therapist, as well as the Housemasters to identify specific student needs, plan interventions, and celebrate student successes. They also utilize weekly meeting time to community with families and create engaging and relevant interdisciplinary projects and units.

Redirect Program

Redirect is a General Education tutorial program for students who would benefit from additional academic and social/emotional support. Students use the class to work on academic assignments, develop organizational skills, and set performance goals. Organizational skill building is integral to the class and use of a planner is required. The teacher/counselor provides tutoring and reaches out to faculty and family to assist students in tracking their assignments and progress. Students are referred to the program by the Student Intervention Team (SIT).

In-School Suspension Program

The in-school suspension program is a short-term program that allows students to recalibrate and reintegrate in a safe and supportive setting. The program is staffed by a full-time teacher and is structured so that students have the opportunity to catch up on work. Current capacity is 14 students, with an average of 8-10 students in the program at any given time. The program also provides opportunity for peer tutoring support, and teachers often stop by to offer students extra help.

II. Proposed Changes and Why, or Statement that No Changes are Proposed

English Language Learner Program

To meet the diverse needs of all ELL students requires taking a holistic look at the entire ELL department to create a student-centered learning community and a shift in three key dimensions:

- Teaching and learning
- System structure
- Culture

Within this community, it is important to have an environment where students and teachers work collaboratively to create multimedia presentations, and then present and deliver information to groups and initiate substantive dialogue. This can happen when there is space and time for common planning, teacher's conference and work area, flexible students' work area, project preparation space, and a computer room. Furthermore all support groups like the Welcome Center, and wrap-around services should be close at hand and readily available. Proposed changes and program enhancements include:

- Expansion of SAFE programming at flexible hours during the day
- Programming for over-age ELL students (possibly co-located with adult education programs)
- ELL Wrap-around Coordinator office and meeting space with a "trauma-sensitive" safe space for refugee, unaccompanied minor, and SIFE students
- Space for common planning and cross-departmental collaboration
- Quiet and private space in Welcome Center/ELL Suite for Language and Academic assessments.

Ninth Grade Experience (NGE)

No changes to this program are currently proposed.

Newcomer Experience Support Team (NEST)

No changes to this program are currently proposed.

Redirect Program

The SHS Redirect Program will evolve into a more formalized, non-special education academic support center in which students can enroll as a school day course and which would include a formal program of support to meet the individual needs of students. Better use of data and trends that will allow us to best allocate resources to students. The Redirect program would be located within close proximity to academic and student support services to facilitate easy access to additional support services.

In-School Suspension Program

We envision this program evolving into a more comprehensive flexible support program that can also be used as a longer-term re-integration program for students who have been out for medical or other issues.

Afterschool Academic Support

A variety of flexible, technologically equipped, comfortable medium to large spaces where groups of students can receive additional afterschool academic support would alleviate inequities in technology resources available to students at home, and provide an extended learning opportunity for students. Spaces should be able to accommodate students with different learning needs, including special

Prominent display of Quincy High School's 81 Nationality Flags

Somerville High School, More than 50 nations represented

I. Student Guidance and Support Services

(social support, METCO, after school programs, anti-bullying programs etc.)

I. Current Services and Programs

School Counseling Department

SHS currently supports a comprehensive school counseling and college and career readiness curriculum for all students. The mission of the School Counseling Department is to facilitate the academic, personal/social and career development of all students through a School Counseling Program that is comprehensive, preventative and developmentally appropriate. Students receive counseling programming via advisory and through individual, small and large group meetings with all counselors.

Currently, school counselors provide overall coordination of academic, post-secondary and social/emotional support for all students. These services include: new student enrollment, 8th to 9th grade transition activities, individual academic advising, monitoring of graduation and post-secondary requirements, overall post-secondary and college application support, letters of recommendation for colleges, scholarships and other enrichment programming, college tours, Post-secondary/PSAT Day, scheduling, crisis intervention and student safety assessments, re-entry meetings and development of transition plans, short-term counseling, referrals to enrichment programs, referrals to community, mental health and school resources, a Career and Technical Education Exploratory class, redirect classes, adjustment counseling, PSAT/SAT/AP, MCAS and ACCESS testing oversight.

Counselors are integral members of IEP Teams and the SHS Student Intervention Team. Counselors oversee the referral, development and management of 504 accommodation plans. They actively work to facilitate communication between the home, community resources and school faculty in order to support student's high school overall success and graduation plan. In addition, Advisory curriculum lessons are created by the College and Career Readiness Director and delivered by teachers and counselors.

The School Counseling Department also supports a variety of other programming outside of the school day including a Post-Secondary Planning night, College and Career Day, the College Fair, FAFSA Day, SHS Scholarship Awards Night, and After the Acceptance Night.

The Civic Campus of Somerville High School

Current Structure

Currently, Somerville High School counselors are spread throughout the building. Four (4) counselors are located within each of the 4 Houses and are not housed near the two administrators that oversee the school counseling programming, making it difficult for counselors to collaborate and provide consistent services for all students. Ongoing communication, professional development and supervisory support are imperative in the school counseling field, and counselors do not currently have easy access to other counseling professionals in the high school.

School counseling offices are located throughout the school on various floors. There are four house counselor offices on the third and fourth floor, a CTE counselor located in the CTE wing of the building, an ELL counselor in the Guidance Suite, and a regular education Adjustment counselor on the fourth floor. A Guidance Suite on the first floor houses the School Counseling Director, the College and Career Readiness Director, a secretary, a College and Career Readiness room and two conference rooms. These conference rooms offer space for special education meetings and school-based counseling. One of these conference rooms also serves as a storage room for student files.

SHS Mediation Program

The SHS Mediation program is staffed by SPS and several community health agencies. It is currently located in a small office suite adjacent to the Main School Administrative Office, houses a full time Director and one full time staff member, and includes several small meeting rooms to hold mediation sessions.

Anti-Bullying and Other Positive School Culture Initiatives

The School's Culture Committee is made up of a diverse set of SHS community members. The committee plans Somerville High's culture initiatives. Other school-wide initiatives include annual administration of a culture survey among both students and staff.

II. Proposed Changes to Services and Programs and Why or Statement that No Changes are Proposed

All counselors would be located in a Counseling Suite within close proximity to the ELL Welcome Center, SHS Mediation Office, School Resource Officer (SRO), Health Center and other support services provided by the community. The School Counseling Suite should include a secretary workspace and waiting room and a College and Career Readiness (CCR) Media Center/room equipped with computers and with enough space to have the ability to meet with small groups of students to deliver lessons. This CCR room should have a window into the counseling suite/waiting room so that students can use the space independently. There should also be a registrar's office with a sliding window into the waiting room for assisting students/families and a large locked room for storage of confidential student information including all records/cumulative files, transcripts and state/college testing materials. The envisioned School Counseling Suite would also include:

- Conference room to accommodate meetings of 12-15 people.
- Four small conference rooms for school-based counseling meetings.
- Space to accommodate other community resources, counseling interns, small group testing, and the Mediation Program.
- One bathroom.
- Common area/work space for photocopier/printer/other equipment.
- Offices for the School Counseling Director, College and Career Readiness Director.
- Multiple flexible office spaces for school counselors and a regular education adjustment counselor. Offices should be large enough to hold meetings of up to 5-6 people, and should each be equipped with multiple computers/work stations that can be used by students.

The vision behind this School Counseling Suite is that student support resources would be available in a centralized location, within close proximity to other school resources. Students would be able to come to one office to work on college and career activities and receive social/emotional support at any given time. Counselors would be able to provide a comprehensive program for all students as ongoing collaboration and communication would be fostered by being together within one space.

Teacher Learning Center

- *Touch-down desks*
- *Collaboration areas*
- *Visibility to monitor corridors*
- *Kitchenette*
- *Technology and display*
- *WiFi*

2.5 Teacher Planning

A. Existing teacher planning spaces and scheduled planning times and how they support delivery of curriculum

(differentiate between professional development time as discussed below and teacher planning time that teachers have every day, opportunities for lesson sharing, "lessons learned" from new teaching methodologies, interdisciplinary opportunities, etc.)

In our current schedule, teachers have six of hours of planning time per week, one hour four days per week and two hours one day per week. During those planning times, teachers most often use their classroom space, if it is available. If their regular classroom space is not available, they find an alternative space to work. There are no existing spaces specifically designated as "teacher planning spaces." Alternative spaces that teachers find to work include department offices, computer labs (if not being used by a class), the library, or other empty classrooms.

In addition to the six hours of planning time per week, teachers also meet in Professional Learning Communities (PLCs) approximately once every other week, or about two hours per month. PLCs have been organized around grade level/subject teams to work on curriculum, instruction, and assessment. Again, there is no dedicated space for this work; teachers meet in classrooms during PLC time.

For small, interdisciplinary teacher or administrative team meetings, we have a small meeting room called Gallery 81 and the sign-up for that space is in the main office. That space is used for a variety of functions including meetings, interviews, conferences, and small staff celebrations. It is usually in high demand, but is not a particularly comfortable or professional space.

B. Proposed changes to planning time and number of spaces and why or statement that no changes are proposed

The PLC structure has proven particularly fruitful at SHS. This time for teachers to work in teams must be protected, if not increased. In addition to working in grade/subject level teams, it would be ideal to create space/time for teachers to work in additional teams, such as cross departmental/grade level teams, SEI/ELL teams, and Special Education/Support teams. It would be ideal to have numerous flexible, comfortable spaces in which teachers could work and collaborate on a regular basis; spaces that incorporate elements that encourage collaboration and productivity, such as easy access to mobile devices, wall space, data boards, phone, computers and/or an interactive board where teachers could create instructional materials, analyze data, and review student work together. These spaces would ideally be located throughout the school and in close proximity to the classrooms in which teachers are teaching.

C. Current professional development practices

Currently, teachers and counselors at SHS have, by contract, two hours per month of department and/or school-wide professional development time. For the past two years, most of the professional development time, about 75%, has been organized at the department level. Much of the time has been given to teachers to develop curriculum and common assessments, and to employ a data-cycle to analyze student work and design targeted instruction/intervention based on demonstrated student need. In departments, staff members also work as a full group on best practices and vertical alignment of curriculum. There is no dedicated space for this work; teachers meet in classrooms.

The school-wide professional development time for the past two years has been organized and run by the school's standing Culture Committee. This committee is comprised of twelve teachers and two administrators who use a data-cycle approach to assessing and improving school culture. When the entire SHS staff meets, we generally re-arrange furniture in the library or sit uncomfortably in the cafeteria, as these are the only appropriate spaces that can accommodate approximately 150 staff members for an active meeting. The only other space in which the full staff gathers is the auditorium, which is appropriate only for passive meetings.

Hudson High School,
Large group instruction spaces used for Professional Development

D. Proposed changes to professional development and why or statement that no changes are proposed

(include retraining and/or additional certifications of staff who will be changing grade levels or disciplines as a result of proposed changes and associated timeline)

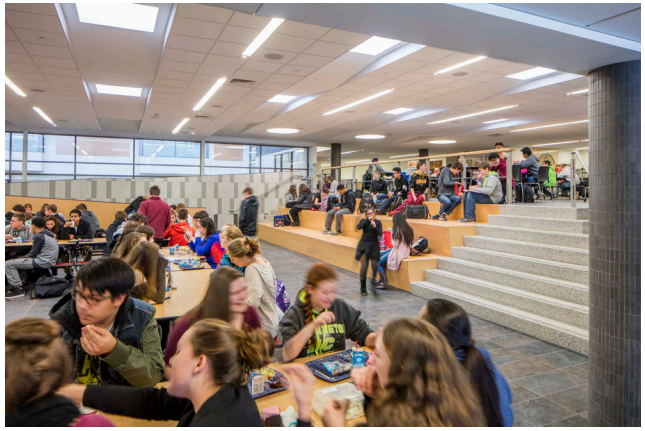
The addition of numerous comfortable spaces in which teachers can work collaboratively during PD times would maximize the impact of professional development work. Ideally these spaces would have elements that encourage collaboration and productivity, such as easy access to mobile devices, wall space, phone, data boards, or an interactive board so that teachers could create instructional materials and review student work together. Such spaces would be flexible enough to accommodate small group PD or large group PD organized by various content, grade-level, or project-based work assignments. Additionally, the school also needs spaces equipped with flexible furniture and various educational technology that can accommodate all 150 staff members in a working environment, as well as a space large enough to accommodate all teachers for large group presentations. Since PD may take the form of video conferences, web-based seminars, or live presentations, it is important the PD spaces allow for personal and virtual interaction, a variety of breakout spaces, and visual and tactile displays.

2.6 Pre-Kindergarten

(SPED only, tuition programs, locations, full day, half day, if applicable); Not Applicable

2.7 Kindergarten

(full day, half day, locations, if applicable); Not Applicable



2.8 Lunch Programs

(number of servings, district kitchen, full service kitchens, warming kitchens, etc.)

A. How program is delivered

The Somerville High School kitchen and cafeteria is located in the basement of the school. Due to design constraints, the SHS kitchen currently serves as the backup central production kitchen for the district but should serve as the district's primary production kitchen. The SHS food service program currently delivers approximately 100-150 breakfasts per day and an estimated 650-700 lunch meals per day. Food is received from vendors via a service delivery dock area located at the back of the building and is either stored or prepared right away. Students scan their ID's as they retrieve their breakfast or lunch.

SHS's lunch program is delivered in three half-hour blocks (11:04-11:34, 11:34-12:04, 12:04-12:34). Students go to one of three service lines for their lunch -- one for 'grab and go' meals, one for main entree meals, and one for the salad bar option -- and proceed to one of seven check-out stations. Students can eat in either the main café across from the kitchen that can accommodate approximately 300 students, or in one of two smaller café's on either side, each of which can accommodate up to approximately 100 students. None of the current lunch spaces offer any type of natural lighting, and are furnished with traditional long school cafeteria tables, providing very limited flexibility in seating arrangements.

The school lunch service also provides bag/boxed lunches for students going on field trips. A separate snack area stocked with healthy food options is also available adjacent to the cafeteria spaces.

B. Proposed changes and why, or statement that no changes are proposed

The Somerville High School kitchen and cafeteria should be a place where students can not only enjoy a nutritious meal and re-energize for the day, but also a place where students can comfortably connect and interact in a space that inspires community-building.

The kitchen should be designed as the district's central main production kitchen and include ample storage (refrigerators, freezers, dry stock room) to accommodate up to 1,500 students. Updated cooking equipment that meets current food service requirements would help ensure that we are meeting food safety standards, and providing students with the best possible food service.

Ideally, the design/layout of the space would offer more college-style dining with multiple meal options and lines, which would relieve wait time. The space should be bright, comfortable, welcoming, and offer multiple and varying types of seating areas where students can congregate, work, or relax.

The space should also be equipped with state-of-the-art technology to (1) relieve congestion during checkout through more advanced, wireless registers, (2) allow for prominent electronic display of menu options, and (3) provide opportunities for students to stay connected with the outside world and learn about school projects via electronic programming displays. Additional proposed changes are the addition of a dumpster and proper disposal system, as well as a recycling and composting area to support efforts to improve school sustainability.

EXISTING TYPICAL CLASSROOM

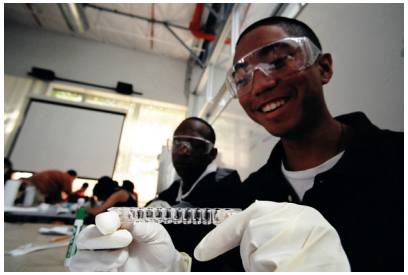
2.9 Technology Instruction Policies and Program Requirements

(labs, in-classroom, media center, required infrastructure, etc.)

A. Description of existing educational technology, how it is managed by the district, how it is used in the classroom, and overview of professional support and training offered to staff

The SPS Technology department manages the technology hardware and use throughout the district, and currently leverages wired and wireless infrastructure with a blend of stationary computers and mobile devices, such as Windows laptops, Chromebooks, iPads, as well as BYOD. Currently, most departments have their own computer lab that they share building-wide. The school also has a limited number of shared Chromebook and iPad carts available for use. Most classrooms are equipped with fixed projectors and interactive whiteboards.

The Technology Department also works in partnership with district and school departments in managing software, and offers various levels of support and training, from individual support to group workshops. The Department also utilizes a “train the trainer” method working with teachers who become experts and then help provide technology support and development to teachers within their department or across the school.



B. Proposed educational objectives being pursued as part of potential project, description of how updated equipment and systems would be managed and maintained by the district, how the equipment and systems would be used in the school, and plans for professional development, or a statement that proposed equipment and systems align with current equipment, systems and practices which are to be continued

Somerville High students and teachers have benefited greatly from the use of technology throughout the day. We are looking to build upon our successes and blend more mobile devices into the school, working toward a true 1:1 program for the new building. The Technology Department would continue to manage the devices, along with a robust wireless infrastructure to support the demand, and work with all school departments to align a curriculum that supports a 1:1 program. Ideally, the new Technology office areas at Somerville High would be constructed to provide Student Internship opportunities where students can operate portions of the Technology Help Center as well as provide support to mobile devices in the classrooms. The space should be more conducive to walk-in support and have adjacencies to areas for group Professional Development opportunities. Classrooms will benefit from having projection capabilities and interactive boards.

Technology will be used prominently and ubiquitously in the new SHS. The expectation is that students will use a wireless device accessible to them throughout the day to access the curricula, to receive instruction (blogs, video, media creation, applications, etc.), to create digital content, and to perform on a variety of assessments. Simulated labs, flipped classrooms, virtual classrooms, video conference, and digital content creation will be a frequent experience for all students. Much like a college campus, such activities will take place in classroom spaces, media spaces, common spaces, open spaces, cafeteria spaces etc. Technology both as content and tool will enable, support, and prepare our students with a personalized learning experience and global learning experience.

In order to realize this technology vision, staff will need to stay current with how to integrate evolving technologies. The District will be adopting an aggressive schedule of offerings presenting technologies both as content (e.g. specific applications, coding) and as a tool to be integrated into lesson planning, instructional delivery, and assessment. PD will happen local to the school, within the district, and at partner organizations i.e. Tufts, MIT, Harvard. Since the fundamental principle in the District is that technology should be used to strengthen teaching and learning and to solve educational problems, the use of technology will always be tied directly to teaching and learning with a vision toward future use and global education. The use of technology by teachers and students will be in support of STEAM principles and project-based learning as integrated throughout the teaching and learning landscape at SHS.

EXISTING MEDIA CENTER

C. Media Center/Library

I. Current Programming and How it is Delivered (Central Location or Distributed)

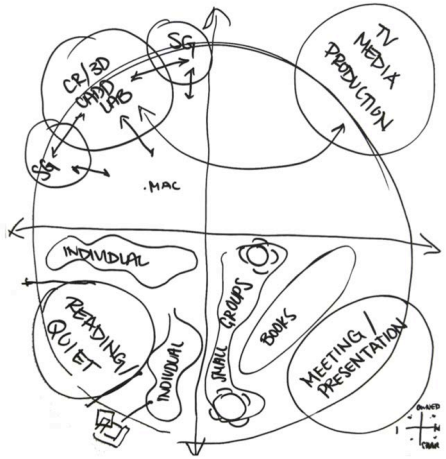
The SHS Library Media Department offers classes in TV Media Production and Film Studies through an Apple Mac Lab running Final Cut video editing software. Each class is a semester long with multiple sections depending on enrollment. The Library Media Department at SHS is also responsible for running morning announcements out of the SHS TV studio, a small space located on the first floor just outside the main entrance to the school auditorium. The current space is significantly undersized, limiting the amount of educational programming that can safely and effectively occur in this space. The studio houses three cameras, a teleprompter and a Tricaster TV switching board that allows for the merging of live video switching, broadcast graphics, virtual sets, special effects, audio mixing, recording, social media publishing and web streaming. Morning announcements and other school messages are broadcast daily from this studio. Both students and SHS staff utilize this studio as much as possible on a daily basis, given the space limitations.

The Library Media Center is composed of a centrally located large space which was formerly the high school gymnasium and an additional space known as the Media Lab or Innovation Center, where students and staff can work on technology rich projects using Apple Macintosh Computers and audio and video equipment. This space meets an essential need for students who do not have access to technology at home. The Library Media Center also serves as a meeting space for the school administrative team and is often used for professional development. It is also utilized for out-of-school-time city meetings. The space is equipped with a Smart Board and 30 desktop PC's for student and staff use. Classes utilize the space and its technology on a sign-up basis. There are also 22 Chromebooks in the Library for student and class use, with an additional 35 Chromebooks currently on order for use in the library this year.

II. Current Staffing, Professional, Paraprofessionals, IT Specialists, Volunteers etc.)

The Library is currently staffed by one full time library media specialist and one full time library utility aide who manage the circulation of books and technology, and the collection and space. The library is staffed before and after school hours by teachers and staff members who receive an additional stipend for this out-of-school-time work.

Current staffing also includes one full-time TV Media Production Teacher who teaches Film Studies/TV Media Production classes, and is also responsible working with students to produce and deliver the school morning announcements.



Media Lab Visioning Diagram

III. Current Hours, Scheduling of Use During School and Non-School Hours for Group and Individual Use.

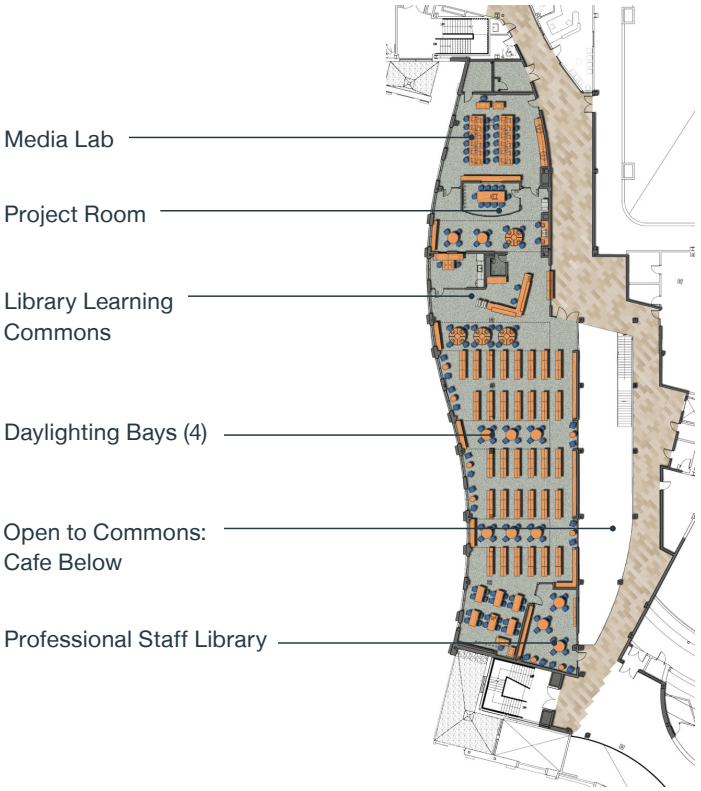
The library is currently open for school-related use Mondays through Fridays from 7:00 AM until 4:00 PM except on school holidays. Scheduling of the library during non-school hours is handled through a central facility registration system managed by the district's central office. The library is periodically used during the school day for a variety of other school-related activities, including for MCAS and Access testing for ELL students, concussion testing by the Athletics department, and for various school events such as Club Fair, College and Career Fair and musical instrument rentals. Other City departments often use the library for meetings during non-school hours.

IV. Proposed Changes and Why, or Statement that No Changes are Proposed

The use of the school library during the school day for activities such as MCAS testing that require closing the Library and/or Media Center reduces the availability of a critical educational learning space to the broader student body. A design that incorporates a separate space that can be closed off for such purposes in an appropriate location within the new school design would ensure the most efficient use of the Library and Media Center as a continuous educational space and resource for all students.

The new Library Media space should offer a comfortable and inviting environment with varied and flexible work areas, and be equipped with the proper technology to support thorough research and creative work. The space should be a place where students and teachers can work independently and in groups (small and large) and access the resources they need to produce their best work, therefore would need to have the flexibility to accommodate quiet work needs and interactive group projects. The inclusion of a MakerSpace in the Media Center would allow for the practical application and lab environment students will need to test their creativity, collaboratively problem solve, build and design their ideas, and produce their projects.

The environment should include good lighting, ample natural light, windows that open but which also have shades to darken rooms for presentations, and ample charging stations for portable connectivity. The space should also include varied types of seating areas including open carpeted graduated seating, comfortable chairs for independent reading and studying, a terraced seating area for students to stretch out and use their laptops, and cafe style high-top tables and stools for small group work.



Humanities Academy	
ACADEMIC PROGRAMS FLEXIBLE CLASSROOMS	English, Social Studies, Languages (Students from over 81 nations are represented including a large Chinese immersion program serving the City's 25% Asian Population)
SPECIFIC LABS	• Writing Laboratory • Language Lab
CORE GATHERING SPACE	Learning Commons Library Media Center • Overlooks Center Courtyard
INTERDISCIPLINARY LINKAGE	Learning center and English language learners • Drama and Music • Students use the Culinary Arts spaces for world foods study

The Library could be further enhanced as an active learning space for students and staff members by incorporating other currently existing programs/elements of the school as part of the new Library Media Center, including the following:

- Incorporate the TV studio as part of the Library Media Center, transforming it into an innovation lab that has its own entrance and classroom space equipped with computers for video editing;
- Build in small group instruction and large group instruction areas that are separated from reading and quiet study areas and research areas;
- Include a Professional Development space equipped with computers to train teachers and other staff members, that could also be utilized for small group instruction/meetings;
- Add a Makerspace for STEAM-related activities, including working with equipment such as 3-D printers.

V. Narrative Description of the Types of Educational Activities Anticipated for a Media Center(s) Over the Course of a Typical School Day;

During the school day, students will utilize the Library Media Center to check out print and digital media, laptops and other devices, work on independent and collaborative research projects, and work on media-rich projects (including blogging, podcasts, green screens, video editing, and music production). Teachers and staff members will also utilize the space for professional development and staff meetings. Students and other community agencies can use the space in the evenings to showcase individual or group dance, theater or musical performances, or for community meetings.

Activities will vary on any given day in the Library Media Center, from large classes coming in to individual students looking for a quiet area to read, complete homework and projects, and conduct research using multiple devices. The space will be particularly busy before school, after school and during the three lunch periods, making the need for flexible, adaptable spaces within the Center important to ensure that the space can be used for a wide range of activities, all of which support a strong, engaging, 21st-century focused learning experience. The Library Media Center should function not only as a critical educational space during the school day, but also as a safe and inviting place where students can meet for an after-school activity or merely to socialize and re-energize.

EXISTING ART CLASSROOMS

2.10 Visual Art Programs

(in-classroom, specialized area)

A. How curriculum is delivered, number of periods per academic cycle, and number of students participating in art programs

The current art department offers a large compliment of classes covering a diverse range of skills and techniques for students at Somerville High. The art curriculum integrates twenty-first century skills and all academic subjects to provide a 'well-rounded education' for the diverse student population in Somerville. The current enrollment is 600 students and has been subject to increase changes each semester for the past few years. Each of the four Art Teachers sees students 4 times per week during each semester, for 55-minute blocks (except block 1 which is 67 minutes).

The art department offers a wide range of courses aimed at students of varying abilities and interests. Currently, there is a wet photography darkroom and art computer labs which serve current and future curriculum. All students have the opportunity to explore the visual arts and enrich their academic and life experiences. In addition, students who wish to pursue careers in art are offered specialized courses and portfolio preparation. Students who wish to pursue an independent study in art should contact the art department supervisor. We currently offer 16 electives for students to take during their four years at SHS. We also have a Chapter with the National Art Honor Society which provides student members avenues for recognition of artistic talents and opportunities for leadership roles as visual arts students. Students provide community service through spotlighting the visual arts' program and through community work, such as painting murals for the City Hall break room and the SHS cafeteria, and creating scenery for school plays.

B. Proposed changes and why, or statement that no changes are proposed

In order to offer students a high-quality program and meet the growing demand for this program of study for students in grades 9-12, visual arts space needs to be designed and equipped to accommodate a wide range of projects. All Art rooms should have windows that can be opened in order to allow for ventilation and the use of natural lighting for creative development. Studio art rooms should be equipped with appropriate filtration for clean air and ventilation, and classrooms should be adaptive to meet the needs of all students and accommodate courses for Skill level students that need adaptive facilities.

Dark Room

The following spaces have been identified as key to ensuring a robust, state-of-the-art visual arts program. These spaces currently exist, but each is currently undersized and deficient in functionality that would allow student experimentation and expression to flourish:

- *Photography Lab:* Should include both a studio space and a dark room facility with large sinks. Studio space should accommodate student computers with digital projection capabilities.
- *Ceramics Room:* Classroom studio needs to incorporate a kiln room, large sinks, and active storage area. Typical equipment would include potters wheels, pug mill, raw clay, glazes, slab roller, and drying racks.
- *Computer Art Lab:* Should include graphics-capable student computers, a teacher computer with digital projection capabilities, as well as a large-format professional printer and 3D printer.
- *Studio Art Room(s):* Multimedia art rooms for 2D and 3D artwork, with student computers and digital projection capabilities in each room to enhance student usage.

The development of visual arts skills is greatly enhanced by the opportunity for students to showcase their work. A neutral color scheme and school design that incorporates multiple display options for 2-D and 3-D student work throughout the facility would not only support student visual arts development, but would promote a strong community culture that builds student pride and represented by student creativity.

EXISTING PERFORMING ARTS SPACES

2.11 Performing Arts Programs

(music, dance, drama theater, in-classroom, specialized area)

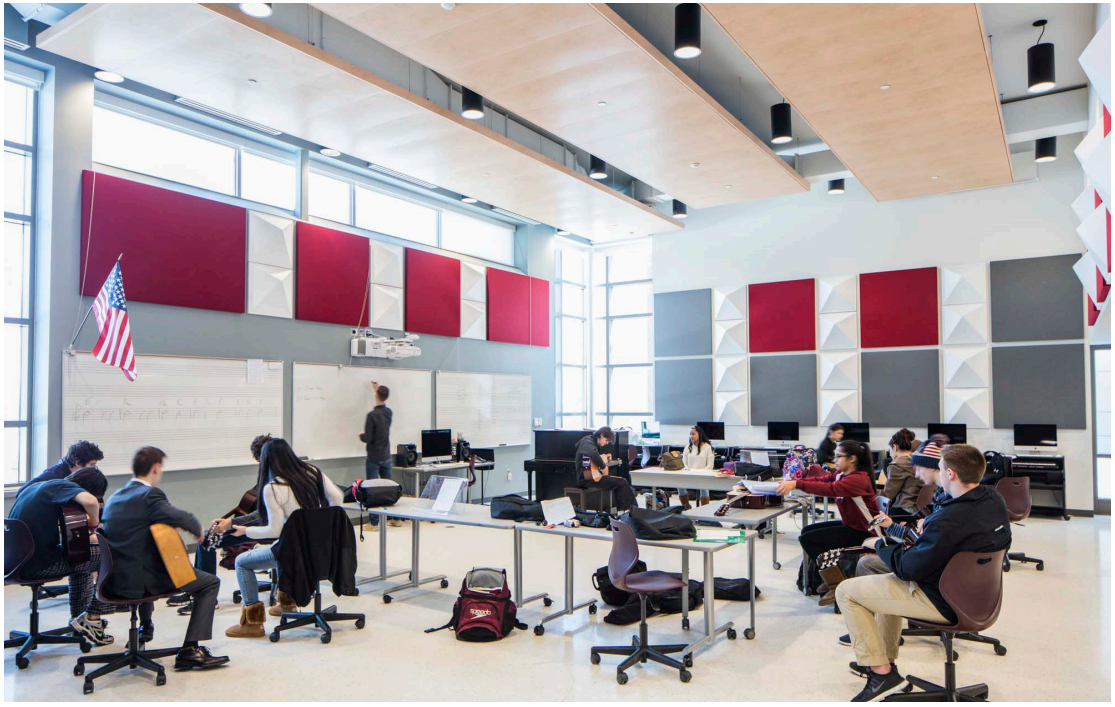
A. How curriculum is delivered, number of periods per academic cycle, and number of students participating in music programs

Somerville High School's Music Department's mission is "to inspire and guide every student in active music making through the use of a sequential and creative curriculum that nurtures the human spirit and promotes cultural understanding." A diverse menu of course offerings and an approach to "tiered learning" is designed to inspire students and faculty to practice a growth mindset in relation to students developing sequential skills that foster continuous improvement and musical skills that promote applied music literacy in a creative and joyful environment with an outcome that will lead to continued participation in music for life. The SHS music program differs greatly from more "traditional" high school programs in that SHS ensembles and classes are open to every student. There are no audition requirements and students are accepted at every level of musicianship.

Curriculum in the SHS Music Department is delivered by highly qualified teaching artists through the use of a sequential and tiered skills based model. The curriculum focus is rooted in the concept of "Authentic Learning", meaning that skills learned are directly related to the creation of organized sound. Constant synthesis of learned skills inspires students to take risks by improvising, as well as creatively moving to the next tier of proficiency. For the majority of SHS ensembles, learning is measured through the development of musical skills expressed in elements of effective communication, teamwork, and respect and understanding of diversity of cultural expression in the school community and in the world.

Currently, the music department has 378 students enrolled for the 2015-16 academic year with approximately 35% of students taking multiple music classes. All full year performance ensembles are operating at maximum capacity (75 choral students, 55 band students, 51 orchestral students). Our three ensemble rooms are used for 26 periods weekly. Music students share a technology lab with TV Media/Production which the Music Department occupies for music technology programming for 8 periods weekly. Another small classroom functions as the Intro to Guitar, Advanced Guitar and Jazz Band learning space. The Music Department also has access to an audio/visual room with sound equipment for traveling performances and recording, and a music technology learning space equipped with 14 iMacs for writing and recording music.

The music department space also has two distinct elements that operate outside of the school day. The first is that district middle school ensembles use our SHS ensemble rooms for their weekly rehearsal. There are 95 students in the All-City Middle School Chorus, 65 students in the All-City Middle School Orchestra and 45 students in the All-City Middle School Band. There is also an All-City Chamber Orchestra that has 25 students. Secondly, the SHS annual musical and drama production group uses the SHS ensemble rooms and the school's sole auditorium from September until April. More than 60 students are involved in the musical production and over 50 students are involved in the drama production. Currently, there is no adjacent space to the auditorium for use as a prop/dressing room. Both productions have used the high school library to assemble their sets and to practice blocking for their productions.



B. Proposed changes and why, or statement that no changes are proposed

In addition to the need for a music and performing arts learning environment that can provide large group and small group opportunities, the SHS Music Department has tremendous need for instrument and music storage. Each space utilized for music instruction and performances currently has very limited storage space for an estimated 2,500 instruments and other performance equipment.

The SHS Music/Drama Faculty, in order to appropriately allow for creative expression and provide students with a robust music program, proposes the following changes in the new SHS building design:

- *Multiple music ensemble rooms* with an average capacity of 75-100 students adjacent to each other and situated around the perimeter of a main auditorium, with adjacent offices for ensemble teachers. Adequate storage for instruments, equipment and uniforms adjacent to each ensemble space would be ideal, including a string instrument storage space where temperature can be controlled locally. Small break-out/practice ensemble rooms attached to the larger ensemble rooms that can be monitored from the main ensemble room would allow for proper preparation prior to performances.
- *Large, modern auditorium* with sloped seating, professional level sound reinforcement, and a functional stage that allows ensembles to be setting up behind the curtain while another ensemble is performing. Proximity to a space for set, prop and costume construction, with adequate storage, allowing for a rich, full production learning experience. The auditorium space should also include adjacent dressing rooms, additional storage for audio/video equipment (microphones, monitors, cables, etc.), and be within close proximity to the City Cable editing/storage room.
- *An informal space that offers "Black Box" functionality* which can be used for drama classes, musical/drama rehearsals, full faculty meetings, professional development, smaller performances, presentations, and cultural events. Adjacency to an area/room for costume changes and space for prop storage would be ideal.
- *Guitar/Jazz Ensemble room* with a 25-30 student capacity for alternative performance ensembles. The room should be sound-proofed and include adequate storage for acoustic/electric guitars, basses and drums
- *A flexible space to accommodate a Music Technology/Piano Lab* for up to 20 students for electronic keyboarding and music technology classes, with appropriate storage for mid-sized electronic keyboards
- *Music Practice Rooms* – multiple small music practice sound-proofed rooms that would each accommodate 1-2 students for more individual instruction/study
- *Music Department Main Office* equipped with technology stations that can be utilized by students and teachers for performance planning, music project research, interdisciplinary projects, and professional development.

Wellesley High School,
Performing Arts Program

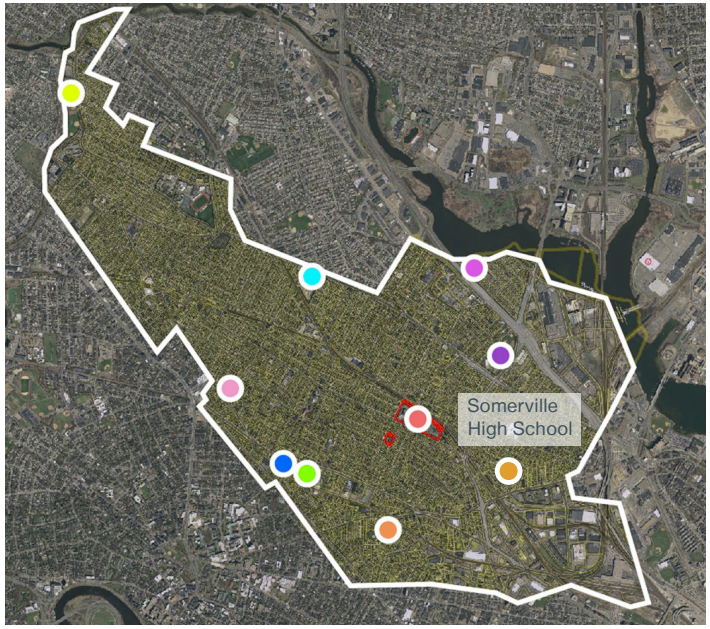
2.12 Physical Education Programs

A. How curriculum is delivered

The focus of the Somerville High School Physical Education program is on whole student wellness. The suggested Health and Physical Education path for students to fulfill their graduation requirements currently includes the following grade-level requirements:

- Freshman: Health I
- Sophomores: Physical Education
- Juniors: Health II
- Seniors: Physical Education

Currently, SHS Health and Family/Consumer Science classes are taught in four general classrooms with limited lab space and equipment, and inconsistent technology. Fashion courses are taught in a separate room equipped with sewing machines. We currently offer three sections of Physical Education (PE) each block. Each section has 15-28 students.



EXISTING FIELDS DISTRIBUTED ACROSS SOMERVILLE

B. Proposed changes and why, or statement that no changes are proposed

The following proposed changes detail the existing program structure and delivery, and the reasons for the proposed program changes.

Wellness Center

Health classrooms in close proximity/attached to fitness room and gymnasium. Currently, SHS Health and Family/Consumer Science classes are taught in four general classrooms with limited lab space and equipment, and inconsistent technology. Fashion courses are taught in a separate room equipped with sewing machines. Health Education classes are transitioning to Wellness courses, incorporating fitness concepts. As such, students will be using fitness equipment, large open spaces (gymnasium), and other physical education equipment during health/wellness classes. Ideally, these classrooms would be connected to the Multi-functional lab space described below for easy access.

Flexible grouping and fitness based furniture for health classrooms and transitional. Upon moving to Wellness courses, the health classrooms will include fitness-based furniture to allow for exercising in the classroom. Research shows that more movement and less sitting better prepares students for learning. Equipment may include stand-up desks with elliptical climbers underneath, stationary bike-desks, and yoga balls.

Modern P.E. and Wellness Facilities

Multi-Functional Lab Space

As we transition into Wellness courses, classes will incorporate more inquiry-based and scientific activities. This includes dissecting muscle samples, using manipulatives, analyzing cells and other samples under microscopes, spaces to investigate bones structures, joints, and the human body. This space will also be used for CPR/First Aid trainings. It would be ideal for the classrooms to be connected to the lab to facilitate easy access, and adjacency to the Science classrooms might facilitate interdisciplinary work.

Multi-Purpose Room

Due to lack of space, current physical education course offerings must be held in the fitness room, weight room or field house, which limits our ability to offer a wide variety of courses in which students have expressed an interest. A flexible multi-purpose room would allow us to offer dance, yoga, Pilates, plyometrics, and meditation. An Introduction to Dance course will begin in the 2016-2017 school year and will run on the stage in the auditorium. The stage is not an ideal size for this program, and scheduling the only large meeting space in the building is problematic. Additionally, having students practice dance on the stage can create safety concerns that would be alleviated with a multi-purpose space where students could perfect their form on a safe, floor level space before performing on the stage. This multi-purpose space could also be utilized to serve students with Adaptive Physical Education accommodations in smaller, more intimate spaces. The space should be in close proximity to the gym, fitness center, health classrooms and lab.

Large Multi-Use Fitness Center

Space constraints not only significantly limit enrollment in weight training and fitness education courses, but also create safety concerns for students and staff. The current weight room and the fitness room only allow for 20 students per class. One large flexible fitness center that can accommodate 50+ students at a time would allow us to increase the enrollment for these classes and be able to incorporate both free weights and cardio machines for both classes. Currently, if a student is enrolled in Weight Training and wants to use a cardio machine, the student needs to leave one space and walk through a hallway to get to the other space, creating both safety and supervision concerns. The Fitness Center should also include space and equipment for other workouts, including kettlebells, box jumps, training ropes, and medicine balls. The fitness room should be in close proximity to the health classrooms, lab, and gymnasium and could be designed to allow for use by members of the Somerville community during non-school hours.

Gymnasium

We currently offer three sections of Physical Education (PE) each block. Each section has 15-28 students. The space currently used is equivalent to three basketball courts, with two courts being 42'x75' and one auxiliary court being 60'x75'. The space is sufficient for some activities, but not all. A large gymnasium is needed for maximum capacity and to mitigate safety concerns when implementing specific activities. Within the cross courts should be one main floor for athletic competitions. Currently, the gym also houses equipment for physical education and athletics in two storage rooms.

Additional gymnasium storage space is an important consideration as the current two storage rooms in the gymnasium are inadequate to store all of the physical education and athletic equipment needed for effective program delivery. Additionally, the large volume of traffic in this space during school and non-school hours requires a high-impact multi-purpose floor. PE has integrated technological devices to measure students' resting and target heart rates. Students use the monitors not only in the fitness room but also as a warm up; as they train for their presidential fitness exams or the cooper walk/run test. This activity is done on the existing 6-lane track that surrounds the gymnasium floor. The track is also used for other activities within the lifetime activities, athletic and community events.

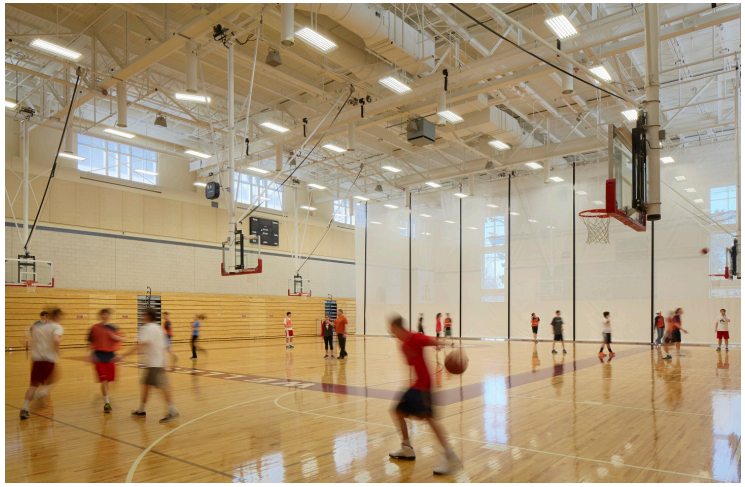
Locker Rooms

There are currently two locker room spaces located off of the gymnasium area. Each space also houses the physical education staff offices, showers, and a bathroom. A locker room that has secure lockers, privacy areas, showers, and is attached to the gymnasium will address many safety issues. There is also a need for two team rooms to be used for meeting spaces as well as locker room spaces for competitions. Locker room accommodations should also include unisex or transgender changing spaces. Currently, we only have two changing spaces -- separate boys' and girls' locker rooms. There is a need for an additional office space/bath shower space for sporting event officials. This space should be separated from the team rooms for privacy and safety reasons.

Physical Therapy & Athletic Training Treatment Space

SHS does not currently have a space that is conducive to physical therapy or athletic training. Both programs operate in tight quarters in a physical education space, with treatment space in an area that was designed for storage located close to the Field House. There is no designated space for Physical Therapy. A large enough space that can accommodate physical therapy to serve student-athletes in all athletic programs, a growing Sports Medicine course, and the athletic training program can also allow us to provide an effective, proactive approach to injury prevention and assessment. The appropriate location is in or adjacent to the fitness room, and the space should include adequate storage for physical therapy and training equipment and supplies.

EXISTING FIELDHOUSE



Suitable colors and finishes

Dilboy Field

Brooklyn Boulders less than .5 miles from SHS

Wellesley High School, Climbing Structure

Outdoor Space

There is currently no outdoor space designed for physical education programming for SHS students. A flexible outdoor space for wellness and physical education programming and for use by athletic teams for practice when weather conditions allow would help alleviate current field scheduling challenges and would allow us to offer additional activities and courses. The space could also serve as an additional community space when not in use for school programming.

Project Adventure/Rock Climbing Activities

Existing ropes course and climbing wall at the school are out of date and not up to code, therefore we are no longer able to incorporate this vital aspect into our Lifetime Activities class. An updated ropes course and rock climbing wall would allow us to offer an Adventure to Fitness class that will provide students with cooperation skills, team-building experiences, and which would serve as another avenue to inspire students to lead a healthy lifestyle. This type of course directly influences students who might not be interested in other fitness programs currently offered, and allows us to provide a variety of options to meet the varying interests of students.

Technology

We are currently piloting heart-rate monitors in two of our Fitness classes. The monitors allow us to quantify effort levels. They are a motivating factor that allows students to exercise efficiently and effectively. With Wi-Fi access in the gymnasium, we would be able to use the monitors for all activities in the gym. This would allow a student to practice a skill in a particular sport or activity and receive real time feedback in regards to how much more effort they need to exert to achieve maximum levels of fitness.

Adjacencies and Proximities

Having physical education and health classrooms be adjacent to the multi-functional health lab will promote and facilitate increased use of all spaces. Additionally, having classrooms adjacent to the fitness room and gym will allow staff to provide hands on practical instruction.

2.13 Special Education Programs

(in-house, collaborative, facility restrictions)

A. Review the special education rubric included in appendix 1 and describe where existing program and spaces align with the rubric, where they do not, and potential changes to remedy in the proposed project

The Somerville High School Special Education program is multifaceted and consists of a wide range of programming and services to meet the needs of students as determined through the IEP team process. The program is implemented in inclusionary, pull out, self-contained, and community based models. Although the majority of students are supported in an inclusionary model, some students require a more intensive and specialized level of support that is best met in a substantially separate setting. All students are included as appropriate through a thoughtful process of planning and support(s).

B. List current special education programs serving students in the proposed project including the number of special education students currently served in each program

SHS currently offers the following special education programs:

- Self-contained Life Skills program for students with severe physical and significant intellectual disabilities, serving 8-10 students up to age 22 in grades 9-12, which offers a modified curriculum with a focus on pre-vocational experience and adaptive living skills.
- A self-contained SHIP (Somerville High School Intensive Program) classroom for students in grades 9-12 with severe, often multiple disabilities and/or medical frailties. The program includes a full-time nurse and necessary medical equipment. The program has a focus on life skills, pre-vocational, and adaptive living skills.
- A self-contained Transition Life Skills program for students from 18-22 years old. The program focuses on life skills, post-secondary employment, independent living, travel training, vocational, and adaptive living skills.
- Resource Room ELA and Math program serving 10-12 students with moderate special needs in grades 9-12, who require substantially separate programs with modifications to the facility and to core content.
- *Study Skills* programs. Resource Rooms for students with moderate special needs in grades 9-12, serving 10-12 students. Focus on executive functioning, remediation, educational planning, and becoming independent learners.
- *Team Core Academic Classes* (ELA, Math, Science, History and Social Sciences). Students are team- taught by general educators and special educators within the general education setting.
- *School Adjustment Counseling* programs for students in grades 9-12 offers students with individual/ small group counseling, social skills/social thinking development, and crisis management support.
- *Related Special Education Services include:*
  - Occupational Therapy - sensory and fine motor, individual and group
  - Physical Therapy - gross motor, motor planning individual
  - Speech Therapy - speech and language therapy individual & group
  - Vision services - visual planning, tracking, orientation and mobility
  - Assistive Technology - augmentative and assistive technology

C. List Deficiencies in the Existing Program that have been Identified Locally or Through State Review

- Lack of Special Education Department Head at SHS
- Appropriate classroom based toileting facilities for Life Skills and SHIP classrooms
- Functional daily living facilities model apartment that includes (but is not limited to) a kitchen with sink and refrigerator, washing machine and dryer, and shower
- Vocational/Job Readiness work space

D. List Specialized Programs and Collaborative Spaces/Program Located in the Current School.

- Specialized special education programs currently located at Somerville High School include the following. Program descriptions are included in section 13b above.
- Self-contained Life Skills program
- Self-contained SHIP (Somerville High School Intensive Program) program
- Self-contained Transition Life Skills program
- Study Skills programs
- School Adjustment Counseling programs
- Collaborative special education spaces/programs currently located at Somerville High School include:
- Team-taught Core Academic Classes
- Life Skills Vocational Class taught by a special education teacher in collaboration with staff from the SHS CTE program
- Occupational Therapy - sensory and fine motor, individual and group
- Physical Therapy - gross motor, motor planning individual
- Speech Therapy - speech and language therapy individual & group
- Vision services - visual planning, tracking, orientation and mobility
- Assistive Technology - augmentative and assistive technology
- Cambridge Health Alliance/Teen Connection program
- Student Mediation program
- ELL Welcome Center

Life Skills Suite Spaces

Apartment Environment and Context:

- *Bedroom*
- *Bathroom*
- *Kitchen and Dining*
- *Laundry*
- *Living Room and Classroom*

E. List Proposed Programs Any Program/Service Needs that the District Hopes to Address in the Proposed Project

The following proposed programs and services will address identified deficiencies and enhance special education services to SHS students:

- SHIP Transition Program for students up to age 22 to address a 48-month age gap in current program services. The SHIP Transition Program will require a full-time nurse in a program separate office with necessary medical equipment including a large wheelchair access toilet room with a changing table that allows for adult assistance; a ceiling built lift for moving, changing, and lifting multiple physically handicapped non-ambulatory students.. The program focus would be on life skills, post-secondary employment, independent living, travel training, vocational training, and adaptive living skills.
- There needs to be a dedicated space for a Transition Specialist who works to prepare SHS Special Education students for college, career (vocational), and life success. The Transition Specialist requires an office space along with a flexible space to instruct students 1:1 or in a small group format.
- Special Education Department Head office and conference room to meet with staff, parents, and other departments to work collaboratively to meet the specialized needs of students.
- A Life Skills/SHIP Apartment Model. Various special education programs require a separate space designed to provide a simulated daily living environment. The apartment should include a kitchen, living area, a large toilet room that allows for adult assistance, and a shower. This room would also be used by related service personnel when working with students in the transitional programs to help students develop and apply functional skills and increase independence within a natural environment.
- A High Functioning Autism Spectrum Disorder Resource Room/Classroom, moderate needs. The district has identified a high level of programming need for students with high-functioning autism/ spectrum disorder with an emphasis on social skill development. This program requires a classroom space with a break-out room that allows for students to engage in small group activities as appropriate with access to smaller setting spaces to access a safe zone, sensory activities and individual/small group therapies. Additionally, this program requires a small private space that can be used for individual counseling or family meetings. This program should be located in close proximity to the Sensory Room.
- An Autism classroom (nonverbal), severe needs. SPS currently has an autism program for students in grades K-8 that will be expanding programming as our middle school students move up to the high school. This program will require a classroom space with a break-out room that allows for students to engage in small group activities as appropriate with access to smaller setting spaces to access a safe zone, sensory activities and individual/small group therapies. This program should be located in close proximity to the Sensory Room.
- A Therapeutic Classroom for students with emotional anxiety, with an attached therapeutic office/workspace. SPS has identified a high level of programming need for students with significant school phobia and anxiety at the high school level. This program requires a classroom space with its own separate entrance and a break-out room that allows for students to engage in small group activities as appropriate. Additionally, this program requires a small private space that can be used for individual counseling or family meetings.
- A Sensory Room for Occupational Therapy. This room is needed for students diagnosed with autism and/or sensory processing disorder or sensory integration disorder. Sensory processing disorder is a neurological condition in which a person responds inappropriately to sensory signals. These students require a therapeutic space for sensory which can be overwhelming and that often prevents the brain from getting and interpreting sensory information. Inappropriate reaction to bright lights, loud noises, motion, and other sensory experiences can trigger anxiety, motor problems, behavioral disturbances, and cause difficulty learning. The Sensory Room would have stations with active areas, calming areas, and various types of sensory activities. Rooms often have dim lighting, soothing colors, vestibular swings which hang from the ceiling and other sensory devices.

F. List programs/services that will continue

The following special education programs and services will continue. Program descriptions are included in paragraph 2.13.B above.

- Self-contained Life Skills program
- Self-contained SHIP (Somerville High School Intensive Program) program
- Self-contained Transition Life Skills program
- Study Skills programs
- School Adjustment Counseling programs
- Team-taught Core Academic Classes
- Related Special Education Services including:
  - Occupational Therapy - sensory and fine motor, individual and group
  - Physical Therapy - gross motor, motor planning individual
  - Speech Therapy - speech and language therapy individual & group
  - Vision services - visual planning, tracking, orientation and mobility
  - Assistive Technology - augmentative and assistive technology

G. List programs that will be eliminated

None.

H. List programs that will be added or enhanced as a result of the proposed project

The Next Wave and Full Circle special education day and alternative education programs will be enhanced as a result of moving over to the new Somerville High School. NW/FC students will benefit from access to additional resources and educational programs available at SHS, including CTE classes, modern language, athletic programs and additional after-hours support programs and activities.

SHIP Grades 9-12 & SHIP Transition Programs will be enhanced by the use and access to a sensory room, model apartment, and transitional specialist for transitional post-secondary planning.

All SHS Special Education programming will be enhanced by the addition of a Transition Specialist and vocational planning work area to help students with a wide range of disabilities focus on post-secondary planning (college and career readiness, independent living and group work settings, vocational planning, transition to adult agencies), working with all collateral agencies for improved post-secondary outcomes.

The addition of the SHS Special Education Department Head will significantly improve the level of support and alignment with SPS goals for all students and increase inclusive and integrated opportunities for special education students.

The addition of the Life Skills/SHIP Apartment Model will make a significant difference in students' ability to apply skills learned in a natural setting that simulates a daily living environment. The apartment would also be used by related service personnel when working with students in the Transitional programs to help students apply functional skills and increase independence within a natural environment.

The Addition of the High Functioning Autism Spectrum Disorder Resource/ Classroom will support SPS' identified need of programming for students with high functioning autism/spectrum disorder with an emphasis on social skills development.

Students are team taught by general educators and special educators within the general education setting. The addition of a special education work space near/ attached to team core academic classes (ELA, Math, Science, History and Social Sciences) will offer the flexibility of grouping and allow students access to multiple modalities of instruction. This will help to minimize distraction and create a variety of teaching opportunities and environments that support student learning.

SPS currently has an autism program for students in grades K-8 diagnosed with autism that will be expanding programming as middle grades students move up to the high school. The addition of an Autism classroom for nonverbal students on the severe spectrum will help students be more successful within their community and with their typical peers.

The addition of a Therapeutic Classroom for students with emotional anxiety with a separate entrance and an attached therapeutic office/workspace will help to meet the SPS identified high level of programming need for students with significant school phobia and anxiety at the high school level.

The addition of a Sensory Room (Occupational Therapy) is needed for students diagnosed with autism and/or sensory processing disorder or sensory integration disorder and will allow students to access a therapeutic space for sensory that can be overwhelming to these students, and which prevents the brain from getting and interpreting sensory information.

Four special educators at SHS currently do not have a work space/office to share or work collaboratively. Special educators at SHS have a core area of academic focus (ELA, Math, Science, History) and would greatly benefit from work space for collaboration with their co-teachers, for testing students, and to conduct meetings. The addition of work spaces for special educators would greatly enhance their ability to meet the needs of students with a wide range of special needs. These office spaces would serve 2 special educators in the core academic area.

Conference spaces for meetings with special education teams, teachers, parents, and outside agencies are essential for education planning and collaboration.

OT/PT Space

I. List programs or services that will be moved from within the district (from which school they are being moved) as a result of the proposed project

Next Wave Junior High School (grades 6-8) and Full Circle High School (grades 9-12) currently serve as Somerville's special education day and alternative education programs. Both are designed to meet the special academic, social, emotional, and behavioral needs of adolescents who, for many reasons, are unable to experience success in the traditional education settings. By combining the clinical concept of a therapeutic community with the educational concepts of individualized and specialized integrated learning experiences, Next Wave/Full Circle affects academic, social, and personal successes for very high-risk students between the ages of 12 and 21. The proposed project will move Next Wave/Full Circle to a wing or separate part of the newly designed Somerville High School.

J. Previous coordinated review

I. Provide the Date of the Last Coordinated Review Program and List Any Issues and/or Problems Identified in that Review

- The most recent Coordinated Program Review was completed December-March of the 2014-2015 School Year. The following issues/problems were identified in that review:
- The need to provide Professional Development for general education around the IEP process and improve inclusion practices and meeting the needs of diverse students.
- Age Span Requirements - some programs and classrooms with more than 48-month age span.
- Determination of Placement - increase in participation of general educators in team meetings and education planning
- Team Meeting Attendance - increase in participation of general educators in team meetings and education planning
- Age of Majority - emphasis on transition planning and improved post-secondary outcomes aligned with IEP development.

II. Provide the Current Status and/or Remedy of Those Issues Identified as Part of the Review

Work is already under way to address all areas of concern identified in the latest CPR, including professional development to strengthen understanding of IEP process and inclusion practices.

The creation of work spaces both near/attached to team classes will provide greater ability for special educators and general educators to plan for the needs of all students in inclusive settings. Concerns regarding professional development and determination of placement will be addressed through the combination of special educators and general educators working together throughout the IEP process, and will be enhanced by locating special educators' office/work spaces in proximity to related core academic teachers. The addition of a SHS Special Education Department Head will support collaborative work with general education department heads around professional development and inclusive practices, which will in turn help increase Team Meeting attendance, resulting in an improved placement process.

The development of the SHIP transition program along with new programming for students with Autism and High Functioning Autism Spectrum Disorder, and the addition of a therapeutic classroom for students with emotional anxiety will support planning for students with relation to Age Span Requirements and Determination of Placement.

The addition of the Life Skills/SHIP Apartment Model, SHIP Transition classroom, and Transition Specialist will work to meet the requirements with regards to Age of Majority with an emphasis on transition planning and improved post-secondary outcomes aligned with IEP development.

West Springfield High School,
Example of remote student participation via robot

K. List specialized programs and collaborative spaces/program that will continue, be eliminated or added as part of the proposed project

Somerville High School is committed to inclusive education and offering co-teaching opportunities in four major content areas. The existing building does not support the needs of special education co-teaching teams to be able to be flexible enough to provide individual, small group and whole class instruction in a room next to or near their general education classroom to access extra support and accommodations as needed. The addition of a special education work space in the areas of the four main core subjects (ELA, Math, Science, History) will offer the flexibility of grouping and allow students access to multiple modalities of instruction. This will help to minimize distraction and create a variety of teaching opportunities/environments that support student learning and will help move SHS toward an inclusion model for special education students.

Currently special educators at SHS do not have a work space/office to share or work collaboratively. Special educators at SHS have a core area of academic focus (ELA, Math, Science, History) and would benefit from workspace for collaboration with co-teachers, testing students, and for meeting with students. The addition of this space would greatly enhance their ability to meet the needs of students.

L. List special education day school programs that the district currently provides or participates in, and whether the programs will continue in the proposed project

Next Wave Junior High School (grades 6-8) and Full Circle High School (grades 9-12) currently serve as the district's special education day and alternative education programs. Both are designed to meet the special academic, social, emotional, and behavioral needs of adolescents between the ages of 12 and 21 who, for many reasons, are unable to experience success in the traditional education settings and who require a substantially separate educational setting. Next Wave/Full Circle programs are currently housed in a separate building with very limited access to current Somerville high School resources. Next Wave/Full Circle will continue to operate as an independent educational program but will be housed in a wing or separate part of the newly designed Somerville High School so its students have an opportunity and access to the resources, programs, and supports SHS has to offer.

EXISTING CHAPTER 74 CLASSROOMS

2.14 Vocations And Technology Programs

A. Current offerings

(separately list Chapter 74 programming and non-Chapter 74 programming)

Current Career and Technical Education program offerings at Somerville High School include the following, with current enrollment noted in parenthesis.

Chapter 74 Programs:

- *Advanced Manufacturing* (10)
- *Automotive* (41)
- *Architectural Design/Drafting* (14)
- *Carpentry* (31)
- *Cosmetology* (39)
- *Culinary Arts* (41)
- *Dental Assisting* (13)
- *Early Education and Care (22)*
- *Electrical* (35)
- *Graphic Design and Visual Communications* (24)
- *Health Careers* (34)
- *Information Support Services and Networking* (25)
- *Metal Fabrication/Welding* (30)

Non-Chapter 74 Programs:

- *Business* (140)
- *Exploratory, Grade 9* (186)

B. Non-Chapter 74 Programming Vocational / Technical / Enrichment / STEM Programming

I. Describe Program (Design, Robotics, Maker Spaces, etc.), Activities, and how it is Coordinated with Other Curriculum as Applicable.

The following non-chapter 74 programs are offered at the SHS Center for Career and Technical Education and are available to all Somerville High School students. Students can access these programs through the Guidance Department, or through the Program of Studies under the CTE Exploratory program.

- Career Center -- used six blocks per day, five days per week by all CTE students assigned
- OSHA-10 -- Every SHS CTE student becomes either OSHA 30 or OSHA 10 certified. This is an industry credential.
- Career-talent interest assessment -- Completed throughout the CTE students' lessons, with most of the assessment conducted during the exploratory process.
- Academic integration with Math and English Departments
- Resume writing support that assists students in gaining the necessary communication skills in every program
- College applications/preparation support
- Business: Entrepreneurship, personal finance, softs-skills, framework (140 students per week)

These non-chapter 74 programs and services address the following program strands:

- 4: Employability and Career Readiness Knowledge and Skills
- 5: Management and Entrepreneurship Knowledge and Skills
- 6: Technological Knowledge and Skills

II. How Curriculum is Delivered, Number of Periods per Academic Cycle, and Number of Students Participating in Program

Curriculum delivery:

- Grade 9: 4-blocks per week
- Related theory: (classroom instruction)
- Grade 10: 1-block per week
- Grade 11: 2-blocks per week
- Grade 12: 3-blocks per week

Lab/Practical shop time:

- Grade 10: 3-blocks per week
- Grade 11: 6-blocks per week
- Grade 12: 9-blocks per week

Center for Career and Technical Education (CTE) afterschool use:

- CTE-Safety committee – 30 students
- CTE-SKILLS USA – 30 students
- Culinary: Future chef's – 15 students

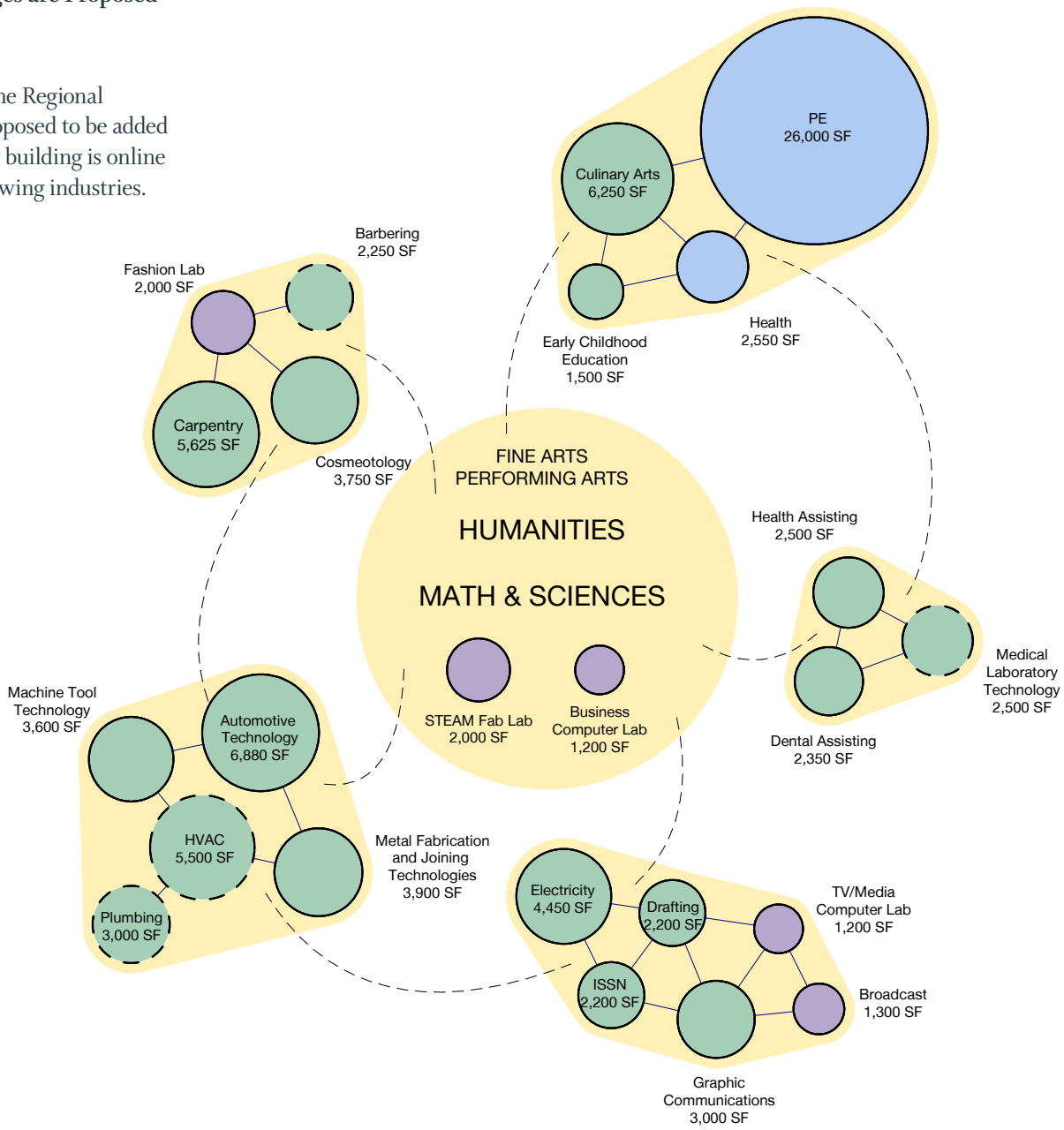
The number of students currently participating in each program is noted above under the "Current Offerings" (section 14.a.)

III. Proposed Changes and Why, or Statement that No Changes are Proposed

Chapter 74 Programs

Through research in employment trends and local data from the Regional Employment Board, the following four programs would be proposed to be added to the currently existing menu of CTE programs once the new building is online to continue providing students with skills and expertise in growing industries.

- Barbering
- Plumbing
- HVAC
- Medical Occupations



IV. Describe General Program Requirements Including Equipment, Practices, Safety Measures, Training, Partnerships and Support.

All 13 chapter 74 approved programs have a complete list of equipment. Each of the 13 programs follows the Massachusetts State Frameworks in strands 1-6. Students must pass safety strand 1 and follow a program specific safety plan before proceeding to strands 2-6.

CTE-Program Area	Certifications	Articulation Agreements	Partnerships
Automotive Technology Chapter 74 approved	ASE-Student, OSHA-10, Chapter 74	Universal Technical Institute, Ben Franklin Institute, Massachusetts Bay Community Colleges, New England Tech	Somerville DPW, Herb Chambers Motors, Valvoline
Carpentry Chapter 74 approved	OSHA-30, Chapter 74	Local 55 Apprenticeship Union, Local 22 Laborers Union, Massachusetts Bay Community Colleges, Bennett Street School, New England Tech	Assembly Row, Block 6, Somerville Housing Authority, Boston Closet
Dental Assisting Chapter 74 approved	Dental Assisting Association, OSHA-10, Infection Control, Chapter 74	Middlesex Community College	Tufts University, several local dentist offices
Early Education and Care Chapter 74 approved	OSHA -10, Mass EEC, Chapter 74	Massachusetts Bay Community Colleges, New England Tech	City of Somerville Public schools, k-8, Somerville YMCA
Graphic Design and Visual Communications Chapter 74 approved	OSHA-10, Adobe, Chapter 74	Massachusetts Bay Community Colleges, Suffolk University, New England Tech, Ben Franklin Tech	City of Somerville,

CTE-Program Area	Certifications	Articulation Agreements	Partnerships
Health Careers Chapter 74 approved	CPR, First Aid,	Bunker Hill Community College, New England Tech,	Courtyard Nursing, Strongwater Farm, STAND-Students Taking Action On Nursing Diversity
Information Support Services and Networking ISSN Chapter 74 approved	CISCO – Academy, OSHA-10, Chapter 74	Massachusetts Bay Community Colleges, New England Tech,	City of Somerville,
Machine Technology Chapter 74 approved	MAC-WIC, OSHA10, Chapter 74,	Massachusetts Bay Community Colleges,	Gillette, Greentown Labs, Dale
		New England Tech, Ben Franklin Tech	Engineering, Lytron Inc,
Metal Fabrication and Welding	OSHA-10, Chapter 74	Local 7, Local 17, Local 22, New England Tech, Ben Franklin Tech	Local 7, Assembly Row
Architectural Design/Drafting Chapter 74 approved	OSHA-10, CAD, Solidworks	New England Tech, Ben Franklin Tech, Massachusetts Bay Community Colleges, Wentworth Tech	Gale Associates
Cosmetology Chapter 74 approved	OSHA-10, Massachusetts State Cosmetology License, Chapter 74	Massachusetts Bay Community Colleges	Christina's, Michael's on Newbury, Supercuts, Sportclips

Additional program-specific requirements include the following:

- *Health Careers* -Grade 12 - Required for the Certified Nursing Assistant CNA license
  - Internships with Courtyard Nursing in Medford on Monday and Thursdays for 3-blocks
  - City of Somerville, working with school nurses on Fridays, 3-blocks
- *Early Education and Care* - Grade 12 - Required for EEC credential license
  - Internship with City of Somerville elementary schools, 9-blocks per week
- *Dental Assisting* - Grade 12 - Required for Dental chair and XRAY licenses
  - Internship at Tufts University School of Dentistry in Boston on Fridays, 3-blocks
  - Internship with local dentist one day per week, 3-blocks
- *Co-operative education*: Several programs, averaging around 10 students

C. Chapter 74 Programming

I. Existing Programming, Current Enrollment, and Capacity per Program

An aggressive five-year recruiting plan is in effect and has produced positive results in increased enrollment in various CTE programs. An annual Career and Technology Fair with authentic interaction has resulted in, and continues to produce increasing enrollment in CTE programs.

During Exploratory, Somerville High School students explore all 13 CTE areas and spend one block of each cycle being assessed for talent and interest. Students follow a specific exploratory outline that includes safety, talent and interest assessment, hands-on competencies, career opportunities, and reflective writing and shadowing. Each student explores for four blocks per week, from September to June, for a total of 144 hours.

A scope and sequence plan is designed for all 13 CTE programs. Each program varies, but the basic requirements for a chapter 74 certificate include passing all 3 years of 75% or better in 80% of the priority 1, 2 and 3 competencies in strands 1-6, OSHA-10 certification, completion of the business course, and secondary certification where applicable.

- *Advanced Manufacturing* (current enrollment 10; capacity 40)
- *Automotive* (current enrollment 41; capacity 60)
- *Architectural Design/Drafting* (current enrollment 14; capacity 40)
- *Carpentry* (current enrollment 39; capacity 60)
- *Cosmetology* (current enrollment 31; capacity 50)
- *Culinary Arts* (current enrollment 41; capacity 60)
- *Dental Assisting* (current enrollment 13; capacity 60)
- *Early Education and Care* (current enrollment 22; capacity 40)
- *Electrical* –(current enrollment 35; capacity 50)
- *Graphic Design and Visual Communications* (current enrollment 24; capacity 50)
- *Health Careers* (current enrollment 34; capacity 50)
- *Information Support Services and Networking* (current enrollment 25; capacity 40)
- *Metal Fabrication/Welding* (current enrollment 30; capacity 50) – need additional teacher for capacity
- *Exploratory, grade 9* (current enrollment 186; capacity 250)

9th Grade Exploratory Students

Student Run Restaurant Culinary Arts

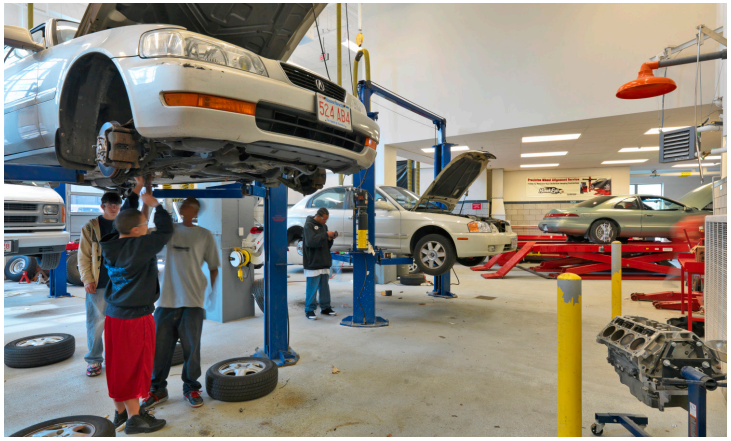
II. If the District is maintaining the Same Curriculum and Offerings a Statement Confirming the District's Intentions.

Somerville High School will maintain its existing 13 programs with curriculum aligned with the Massachusetts State Frameworks. The SHS Center for Career and Technical Education has also proposed the addition of four new CTE programs when the new building comes online. A letter from the Regional Employment Board indicating the demand for skilled employees in these new areas is appended for reference.

For further documentation associated with the existing and proposed Chapter 74 programs, refer to the attached Chapter 74 Programming Submission located at the end of this Section.

III. Schedule of Implementation for the Proposed Programming Regarding Staffing, Curriculum Development and Project Program Enrollment from Start to Full Implementation.

The schedule of implementation for the proposed programming is currently in development and will be submitted as a supplement to the PDP submission.



Quincy High School, Fashion Lab

2.15 Narrative Description Of The Types Of Educational Activities Intended For Core Academic Spaces Over The Course Of A Typical School Day

Refer to Appendix 2 for sample table for use for elementary, middle, and K-8 schools and provide a projected master schedule for high schools and middle high schools;

A. Narrative description of core academic educational activities intended inside the general classrooms. include how the activities support delivery of the educational program

The SHS academic curriculum will help students master core academic content as well as develop important 21st century skills including creative and critical thinking, communication, technology and media literacy, collaboration, and leadership. In order to help students develop engagement with their community, opportunities for authentic, relevant, real-world learning experiences should be woven into all core classes. Building a strong community within each classroom will allow students and teachers to consistently collaborate, take risks, and make connections to the real world. Thus, it is important that classrooms are warm, bright, and inviting, instead of impersonal and institutional.

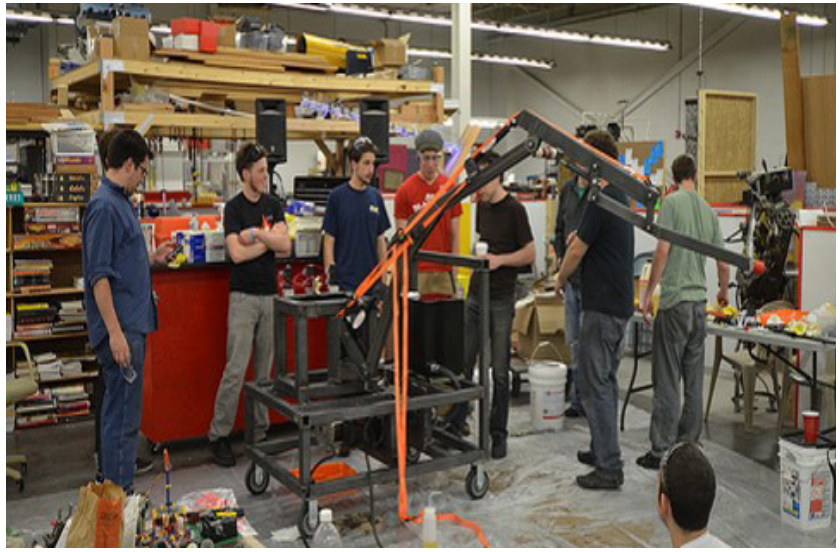
Lessons delivered in classrooms will be student-centered and engage students in tasks that involve collaboration, problem solving, and application of knowledge. As a result, instructional practices will change frequently throughout class. At the start of class, a teacher may demonstrate a concept or skill by using direct instruction or flip the experience by using an online, blended model. During this time, the teacher or projection is the focus of the lesson and the configuration of the class reflects that. Then, the teacher differentiates and personalizes learning by splitting the class into pairs and/or small groups. The furniture shifts quickly. Students collaborate and they explore the task by sitting in small groups with their peers. Other students stand and move around to write on paper or boards located on the walls, some students utilize technology, and other students move into centers or zones and explore personalized learning stations. Once again, the furniture shifts. The students continue to collaborate, take initiative, and dig deep into their learning. At the end of class, the teacher brings the class back together for a whole class debrief and the space shifts once again. Flexibility and adaptability within the classroom are key, and ample space is needed in the room to allow for multiple configurations throughout a lesson and the course of the day.

The SHS curriculum contains a variety of assessments that require students to showcase their learning, growth, and mastery. The end of the unit assessments are relevant, robust and complex and vary by student readiness, interests, and learning style. Students write papers and reports, perform scenes and skits in class, participate in debates and simulations, create projects, and present orally or by using multimedia in front of their peers. Additionally, in math and science, students work collaboratively to conduct experiments, use manipulatives to explain abstract concepts, create projects, solve problems, and complete activities using technology including graphing calculators, computers, iPads, and lab probeware. In order for students to participate in authentic learning experiences and project based assessments, classrooms need longer tables and standing-height tables so that students can work on inventive, real world projects and products. Once again, flexibility, mobility, and adaptability of a space for all disciplines is essential to practice and hone 21st century skills and learning.

In all classrooms, technology must be integral to teaching and learning. Access to technology throughout class is crucial and there should not be access barriers for either students or teachers. The ability to store and charge devices in every classroom plays an essential role in the seamless integration of technology.

Classroom furniture needs to be adaptable, flexible, and mobile. The furniture should include student desks that can move easily and configure into multiple groupings that will allow for scaffolding and differentiated instruction. When differentiating, the teacher will work one-on-one with a student or with a small group while the other groups are engaged and applying their knowledge. Ample space to work independently without disruption from other groups is essential for students. In order to accommodate group work, centers/zones, projects, individualized instruction and small group re-teaching, the room should be large enough so that students and teachers are not in close proximity. Classrooms need to be large enough to accommodate flexible grouping for large classes.

Currently, many teachers have limited space in the classroom and do not have multiple areas to collect and anchor ideas in their rooms on whiteboards, large post-its, etc. When teachers and students are collaborating or presenting their work, multiple large writing spaces on the wall are needed. Especially if classrooms are going to be shared by multiple teachers, there needs to be ample wall space so that student thinking such as anchor charts can be displayed throughout units and ample storage space including multiple teacher desks to accommodate the needs of at least two teachers. This is in addition to a central location where work is projected from a computer or device.

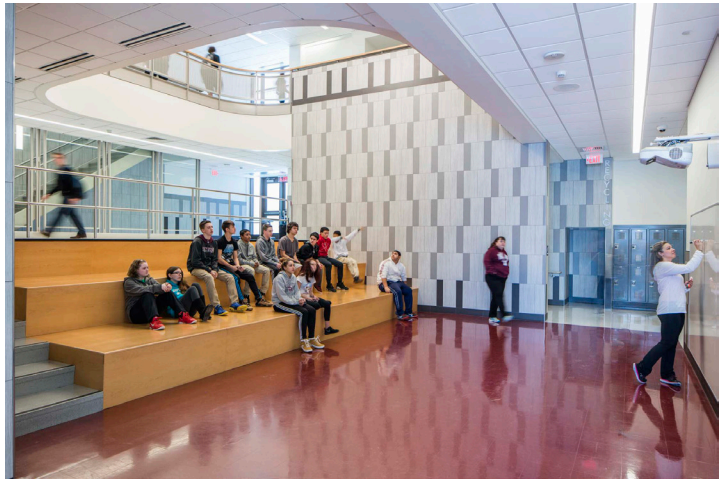


B. Narrative description of core academic educational activities intended outside of the general classrooms (including outdoor learning area)

I. Include Spaces Needed to Support that Activity, how the Activities Support Delivery of the Educational Program, how the Spaces would be Used by Students and Scheduled and Monitored by Staff, and Desired Spatial Relationships and Adjacencies.

In an ideal educational environment, learning should be happening in all areas of the school building, not just inside the four walls of a classroom. All building spaces should be utilized as learning environments, including presentation/lecture halls, the auditorium, hallways, common spaces, the cafeteria, and outdoor spaces.

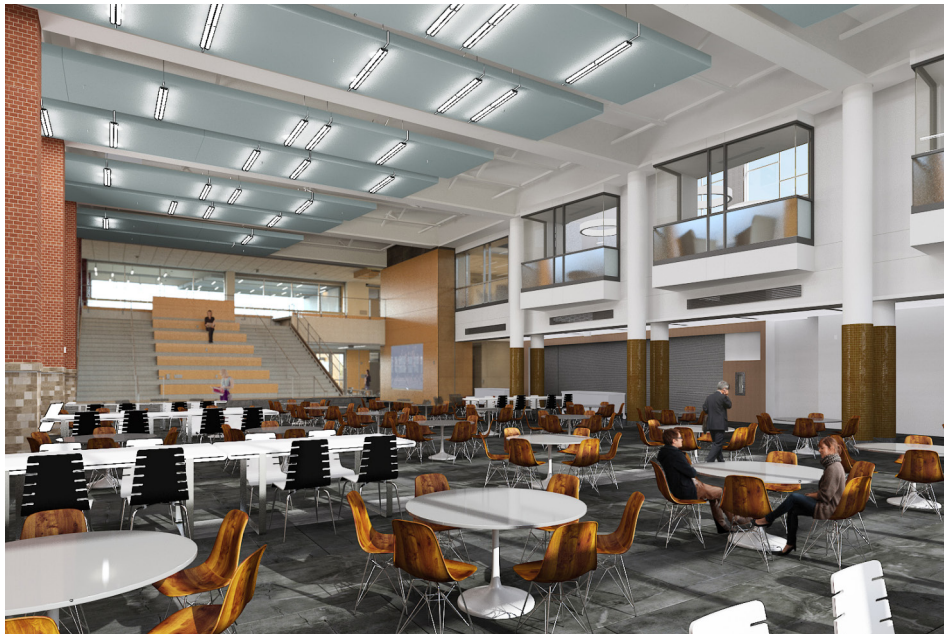
Teachers consistently collaborate and want to combine classes to teach and support their students. In order to do so, a space that accommodates at least two classes (40 or more students) is necessary. A larger space (100 or more students) is also needed to accommodate student presentations, exhibitions, performances, and guest speakers. Because of our desire for students to connect the curriculum to the real world, we frequently bring in guest speakers; we have brought in multiple speakers to one event and have had students choose which speaker they would like to hear. These types of events are powerful, but require multiple medium to large spaces that can comfortably accommodate 150-200 students. In addition, a formal presentation space will be used for authentic assessment experiences in which students could make presentations and defend their work to larger groups and members of the community. Multiple spaces that can accommodate medium to large groups would allow us to expand our connection to the community.



Hallways and common spaces throughout the school can become places to inspire learning and creativity. Exhibition spaces in the hallways are necessary to showcase student work and 2-D and 3-D projects and common spaces can be utilized for collaborative work both during and outside of class time. Students who would like a small nook or "quiet" space to reflect on their own learning or complete a self-directed learning task should be able to find multiple spaces to do so throughout the building. Sufficient transparency should be provided to allow for views in and out of classrooms so that teachers can monitor students as they work independently and in small groups when outside of, but in close proximity of classrooms. Blinds can be provided to block these views when desired.

Cafeterias and Commons

The Somerville High School cafeteria should be a place where students can not only enjoy a nutritious meal and re-energize for the day, but also a place where students can comfortably connect and interact in a space that inspires community-building and continuous learning. Students may choose to continue working on their studies in an Internet café-style environment, or sit with a peer group to work collaboratively on a project during a "working lunch." Ideally, the design/layout of the space would be more like college-style dining with multiple seating and environment options.



Outdoor Spaces

Currently, we have very little outdoor spaces for students. Outdoor spaces could be used for multiple functions including biological and environmental studies and data collection, physical education and athletic teams, and as a common space for classes or student groups to meet throughout the school day.

Desired site adjacencies to consider include locating spaces utilized for external out-of-school-time programming -- such as the gymnasium, auditorium, and cafeteria -- together to limit access only to those areas during non-school hours and to facilitate non-school related usage, security, and scheduling

2.16 Transportation Policies

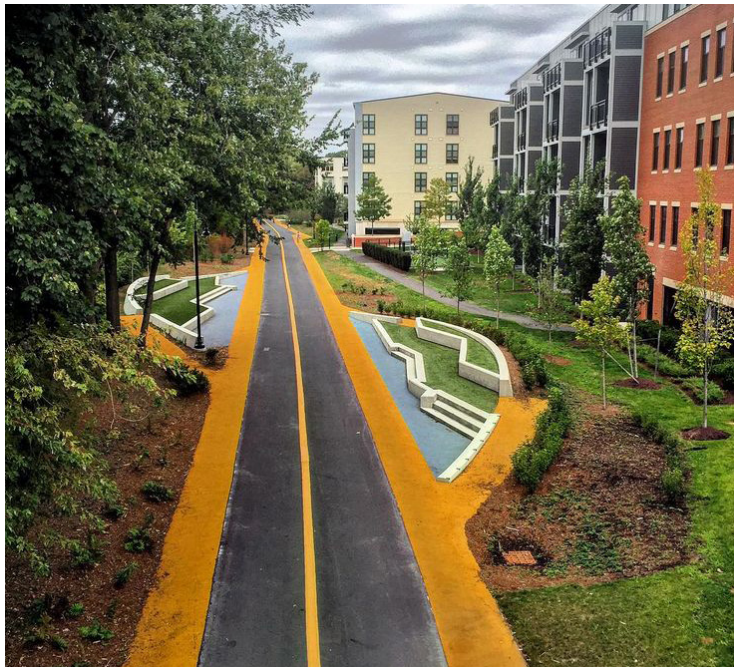
A. Current services and practices

Students generally walk, take public transportation, or are driven to and from school. Transportation to and from the high school is provided by the district only to students in homeless situations who are living outside the district and to special education students who have transportation services required in their Individual Educational Plan.

Transportation services for homeless students is provided by small van or cab, and arranged by the District Homeless Liaison. The number of homeless students attending Somerville High School varies throughout the year. Large yellow school buses are chartered for athletic events and field trips throughout the year. In addition, the school department owns 2 activity buses and several vans that are parked at the high school and are used for day or evening events.

B. Proposed changes and why, or statement that no changes are proposed

While no changes to the current transportation policies are proposed, it's important to note that the proposed Green Line extension will have some impact particularly on foot traffic in the area. The Green Line extension does include plans for a station at Gilman Square that would likely result in increased foot traffic coming up the hill from Medford Street, an important consideration in foot and auto traffic flow design around the building.



Community Path

2.17 Functional And Spatial Relationships

A. List and describe desired educational adjacencies and why

The new building should be designed in such a way that the designation of most academic classrooms, offices, and other spaces can be changed over time to accommodate important programmatic changes that may be needed, and to ensure the most efficient utilization of learning spaces. That being said, there are some programs with specific needs and requirements that may be more locked into a specific location once the building layout is created. This includes science and engineering labs/workshops, art rooms, and Career and Technical Education (CTE) spaces.

In terms of proximity and adjacencies, we would like to see greater integration of the science, math, and CTE departments, perhaps forming a STEM suite or wing within the building. Additional consideration should be given to the possibility of incorporating Arts into this complement of educational adjacencies to support STEAM programming. The biology and life-science based classes could benefit from being able to work more closely with Health Careers and Health and Physical Education programming, the chemistry classes could benefit from being able to work more closely with Culinary Arts, and the physics and engineering classes would benefit from being able to work more closely with Pre-Engineering/CAD, Machine Shop, and Metal Fabrication. Additionally, there could be great collaboration between math and science teachers if the classroom spaces were situated closer to one another. For example, natural partnerships include AP Physics with AP Calculus and AP Biology with AP Statistics. Being able to form meaningful interdisciplinary relationships is not only impacted by the physical space and proximity but also by the schedule and administrative support for teacher collaboration.

To further the integration, another potential use of taking advantage of the proximity and adjacencies could be the creation of a Humanities or Creativity Wing where English Language Arts, World Languages, Social Studies could collaborate with Culinary Arts, Graphic Communications and Visual Design, Music and Arts. Interdisciplinary projects and opportunities for hands on learning would flourish in these non-traditionally linked areas.

Our current building is organized by a single excessively long corridor which results in a remarkable amount of time to get from one end of the building to the other. We hope that the layout of the new building will allow for more proximities by utilizing a configuration other than a straight line. This new organization will foster closer academic relationships via commonalities, themes and connectedness.

B. List and describe desired site adjacencies and why

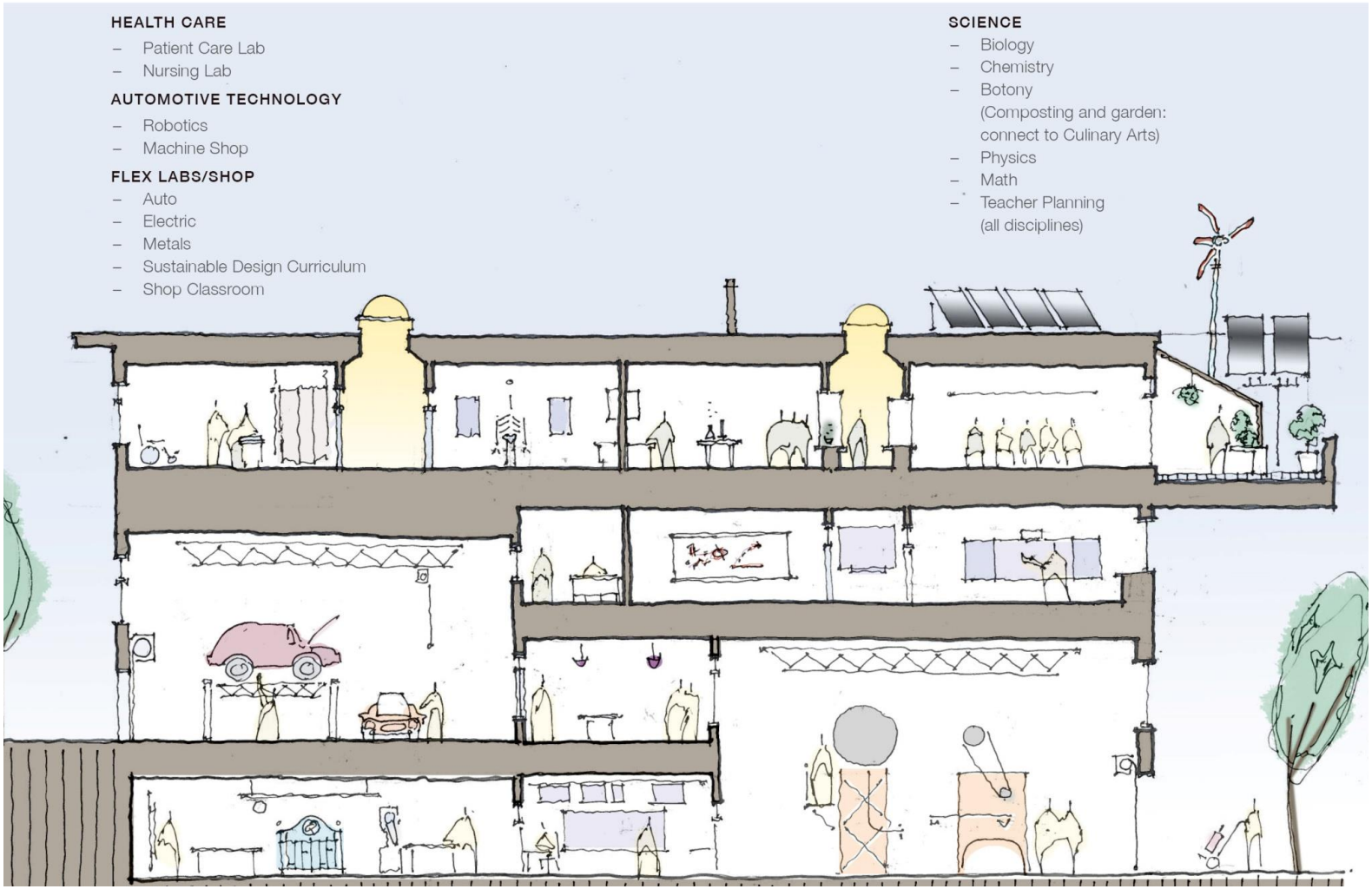
Desired site adjacencies to consider include locating spaces utilized for external out-of-school-time programming -- such as the gymnasium, auditorium, and cafeteria -- together to limit access only to those areas during non-school hours and to facilitate non-school related usage, security, and scheduling. Common areas should allow for independent and separate access by the two distinct educational programs that will be housed at the high school – the Next Wave/Full Circle special education/alternative education programs serving students in grades 6-12, and the existing SHS comprehensive program for students in grades 9-12 – to facilitate transitions by both programs during the school day and to provide equitable access opportunities.

Locating the Student Support Suite close to the Nurses' station will further assist in providing students with all the wraparound services they need. These facilities should be located on the main floor for easy access by all students as well as emergency medical personnel.

As noted under desired educational adjacencies, interdisciplinary and project learning opportunities can be greatly enhanced through site adjacencies of academic and CTE programs that support STEM or STEAM programming, or potential Humanities programming.

Additional desired site adjacencies include locating physical education and health classrooms adjacent to the multi-functional health lab, which will promote and facilitate increased use of all physical education/health spaces. In addition, having classrooms adjacent to the fitness room and gym will allow staff to provide hands on practical instruction. The design would also need to allow for the ability to section off the fitness room and gymnasium for weekend use during after-school hours and weekend hours.

TECHNICAL ← **CONNECTED INTERDISCIPLINARY** → **COLLEGE TRACK CURRICULUM**



2.18 Security And Visual Access Requirements

A. Describe the local process for the collaboration, coordination, and review required to update emergency response plans for the proposed school and to establish physical and operational requirements regarding security and access for the proposed project

The process for coordinating, reviewing and updating SHS emergency response plans and to establish physical and operational requirements regarding security and access involves working collaboratively throughout the year with the following City and community partner agencies:

- Somerville Police Department (SPD): Superior Officers, Emergency Preparedness Consultant & Cyber Forensics
- Somerville Fire Department (SFD)
- Be Safe Consultants
- Somerville Health & Human Services
- Riverside Health
- Cambridge Health Alliance

Our District Emergency Response Plan (Manual) is reviewed annually by SPD and SFD assigned Superior Officers. The process also includes multiple district reviews by SPD, SFD, and Somerville Public Schools (SPS), coordinated by the district's Student Services Department.

SPS will work with the building project Safety Consultant throughout the project, and will consult with both SPD and SFD via a security analysis in regards to camera surveillance, and security entrances and exits to establish physical and operational requirements for the proposed project. SPD, SFD and the City's Department of Public Works responsible for building maintenance meet as needed to assess building safety concerns.

B. Indicate the date of the most recent medical emergency response plan that was submitted to these

The Somerville High School Medical Emergency Response Plan was submitted 1/2016.

C. Describe the physical and operational requirements

(e.g. main entrance design and how it is to function/be managed, classroom and hardware features, visibility, alternative entries, surveillance and lines of sight etc.)

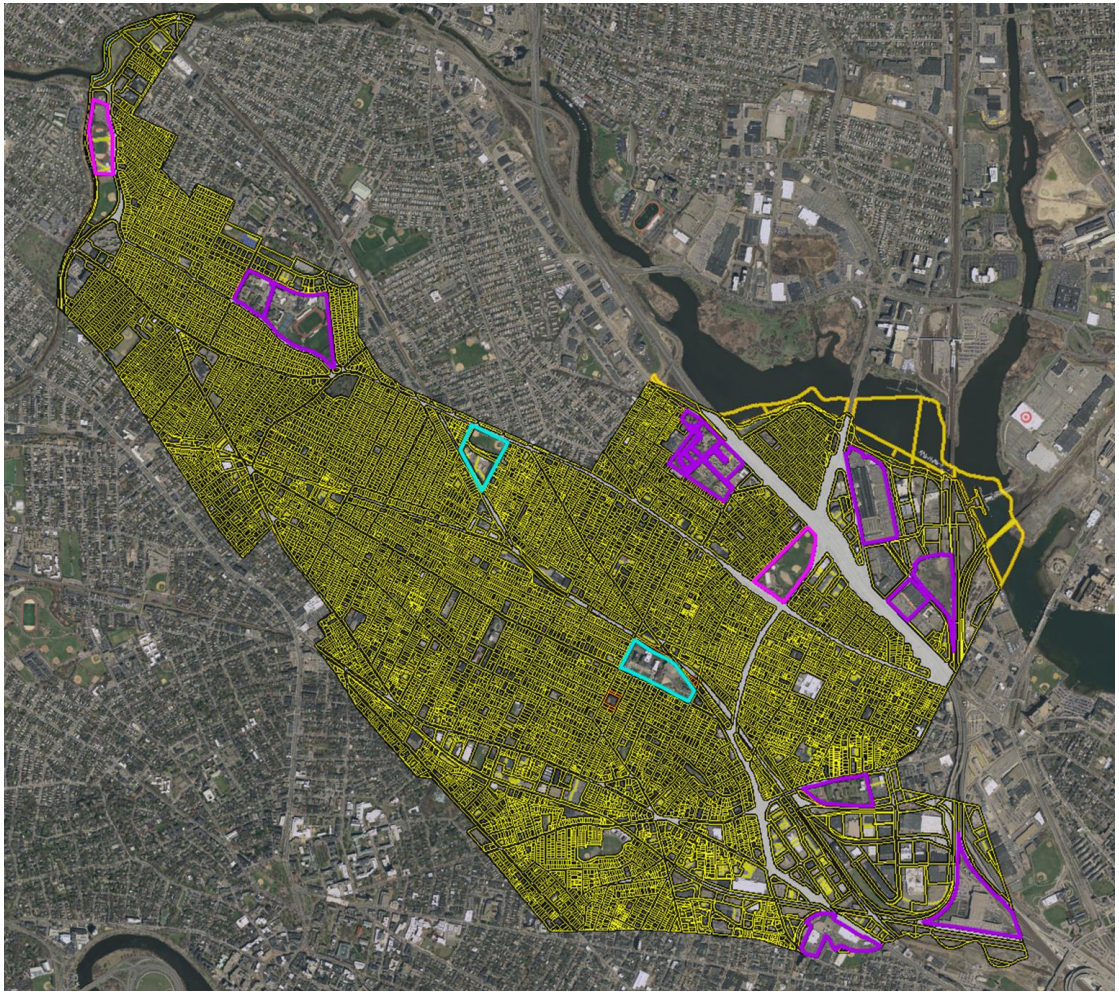
With respect to physical and operational requirements, the new Somerville High School design must address both the educational mission of the school as well as the safety and security needs for an intensively –used, public building situated in a very dense urban environment.

Regarding interior security, best practice in design to make visible and easily monitored spaces, including the strategic use of glass walls, is desired. Student meeting spaces, sited adjacent to staffed office space, is one example of this approach.

Exterior considerations and the perimeter of the building must consider the urban environment of Somerville. Entry doorways should be kept to a minimum. The main entry space should allow for good sight lines and supervision from the Main Office or some similar space that is staffed throughout the day. Video monitoring is also needed, to be accessed by appropriate staff inside. Physical obstructions should be avoided in areas adjacent to the school perimeter in order to provide best monitoring.

Additional physical and operation requirements include:

- Bus and car drop-off areas with safe pedestrian walkways and minimal crossings on-site. Emergency vehicle access must be considered. Consideration should be given to access to public transportation access (bus and/or light rail).
- State of the art access control utilizing a security access fob device by authorized staff.
- Safe pathways for pedestrians and bicyclists coming from multiple directions. Bicycle parking adjacent to school's main entrance.
- Safe staff and visitor parking (visible, lighted and monitored)
- 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 to adjacent buildings and other public spaces near the High School.
- Separate external building entrance for Next Wave/Full Circle that contains the same security/ access features as the school's primary main entrance.
- Separate external building entrance proposed for therapeutic classroom



City of Somerville:
Parcels Greater than 10 Acres

- Commonwealth Owned
- Privately Owned
- City Owned

Appendix

Chapter 74 Programming
Educational Visioning Workshop
Space Summaries

Chapter 74 Programming

Chapter 74 Programming

Local Authorizations

A. Provide a certified copy of the school committee meeting minutes, which includes the specific language of the vote and the number of votes in favor, opposed and abstained regarding continuation of the existing Chapter 74 programming and proposed Chapter 74 adjustments (additions, expansions, contractions and discontinuations). If multiple meetings are conducted provide certified copies of all applicable meeting and votes.

The Educational Programs School Sub-Committee will be meeting on March 9th, 2016 to review these topics, and the full School Committee will meet and vote on the topic on March 21st, 2016. Minutes for both meetings will be forwarded to the MSBA for reference following the full Committee meeting.

B. Provide a description of the status of communications with the DESE regarding Chapter 74 Programming, including relevant information that informs the District's intentions and potentially the proposed Somerville High School school project.

Somerville High School CTE staff have been in direct and recent contact with DESE regarding this project, and its intentions to both maintain the existing Chapter 74 programs and add four new programs as detailed below. Communication regarding the project has occurred with DESE as recently as February 12th, 2016. In support of the proposed additional programs, attached please find a letter issued by the Metro North Regional Employment Board [REB] on January 9th, 2016, confirming the industry benefits of the new programs.

Educational Vision For Chapter 74 Programming

C. Provide a description of the District's vision for its education delivery methodology for Chapter 74 Programming.

Refer to the Educational Program narratives located in Section 2 for a description of the education delivery methodology for Chapter 74 Programming.

Programs To Continue Unchanged

Program	Current Enrollment	Approved Capacity
Automotive Technology	56	50
Architectural Design/Drafting	24	30
Carpentry	48	50
Cosmetology	52	50
Culinary Arts	45	50
Dental	28	30
Early Education and Care	32	30
Electrical	49	50
Graphic Communications	38	40
Health Careers	48	40
ISSN – Information Support Services and Networking	37	30
Machine Technology	25	30
Metal Fabrication and Welding	39	30
Total	521*	510*

* *Enrollments noted above are inclusive of exploratory program participants*

D. Confirm the following for all of the unchanged programs listed in the table above:

- A Program Advisory Committee is in place
- The decision to continue with these programs was planned in consultation with its advisory committee based on adequate and timely information regarding student, workforce, and job development demands or job market trends
- A planned budget for the existing programs are in place

All of the above are confirmed for the unchanged programs listed in the table above.

E. Description of deficiencies in the existing programs:

All Existing Programs: The remote geographic location of the existing Chapter 74 programs within the school precludes opportunities for ready collaboration with the academic disciplines, missing out on an intrinsic potential of a comprehensive high school. From a logistical standpoint, the existing Chapter 74 programs all lack sufficient access to student toilet facilities, a reality that compromises instruction time.

Automotive Technology: Vehicular access to the existing shop is compromised due to the existing access ramp and the tight turning radius that vehicles are required to make in order to gain entry into the shop. This compromised vehicular path also precludes certain sizes of vehicles from being worked on in the shop, limiting educational opportunities. The shop lacks proper changing facilities for students, including a lack of dedicated boys & girls changing areas that would promote greater inclusion in the program. This program has no publicly-accessible "retail" front that would allow for business curriculum to be more closely integrated. Shop windows are in poor condition, are thermally inefficient and do not lock. The HVAC system is in poor operating condition and lighting is dim within the shop.

Architectural Design/Drafting: Overall shop space is below what is required by current DESE space requirements. The HVAC system in the shop is in poor operating condition.

Carpentry: HVAC and dust collection systems are in need of constant repair and operate at varying degrees of efficiency. The dust collector hopper located within the access tunnel leading up to the shop make access and service challenging. The shop lacks proper changing facilities for students, including a lack of dedicated boys & girls changing areas that would promote greater inclusion in the program.

Cosmetology: This program has no publicly-accessible "retail" front that would allow for business curriculum to be more closely integrated. The shop's current location on the second floor creates security concerns for members of the public who choose to visit the shop for services.

Culinary Arts: The program lacks a dedicated classroom environment for instructional purposes beyond either the kitchen or restaurant environments. The restaurant, while located in proximity to one of the building's main entrances, does not provide a dedicated secure access point for the public, creating a security concern. Furthermore, dedicated toilet facilities for public use are not in place near the restaurant, creating further security concerns for public use of the restaurant. The kitchen lacks sufficiently sized changing and personal items storage facilities for the students.

Dental: Enrollment in the program is currently constrained by an under-sized shop space as compared to current DESE requirements. While all equipment located within the shop is new, the existing space that is occupied by the shop has compromised finishes that are not ideal for replicating a hygienic dental environment. The shop lacks proper changing facilities for students, including a lack of dedicated boys & girls changing areas that would promote greater inclusion in the program.

Early Education and Care: Shop space lacks critical functionality for curriculum, including a sink with water service.

Electrical: Enrollment in the program is currently constrained by an under-sized shop space as compared to ideal DESE requirements. Access to this shop for heavy materials such as long conduit runs is compromised due to its position on the second floor. The shop lacks proper changing facilities for students, including a lack of dedicated boys & girls changing areas that would promote greater inclusion in the program.

Graphic Communications: This program has no publicly-accessible "retail" front that would allow for business curriculum to be more closely integrated. The shop's current location on the second floor creates security concerns for members of the public who choose to visit the shop for services. The HVAC systems for the shop are insufficient to accommodate the increased heating load associated with the reproduction equipment.

Health Careers: The shop lacks proper changing facilities for students, including a lack of dedicated boys & girls changing areas that would promote greater inclusion in the program.

ISSN – Information Support Services and Networking: No major deficiencies with the infrastructure of the existing program are noted.

Machine Technology: The dedicated classroom for this program lacks proper ventilation. Deliveries of large metal stock pieces are compromised due to the lack of a true loading dock and the absence of an over-sized door into the shop itself. The overall size of the shop is compromised due to the size and quantity of equipment and its proximity to the Metal Fabrication Shop. There is no physical partition separating the Machine Technology shop from the Metal Fabrication shop, resulting in both acoustic and operational challenges when students and instructors are occupying both spaces. The shop lacks proper changing facilities for students, including a lack of dedicated boys & girls changing areas that would promote greater inclusion in the program.

Metal Fabrication: The dedicated classroom is undersized, operating out of what was originally designed to be a tool storage room. Storage for gases is presently located within the shop due to a lack of a secure adjacent location on the exterior of the building. Deliveries of large metal stock pieces are compromised due to the lack of a true loading dock and the absence of an over-sized door into the shop itself. The overall size of the shop is compromised due to the size and quantity of equipment and its proximity to the Machine Technology shop. There is no physical partition separating the Machine Technology shop from the Metal Fabrication Shop, resulting in both acoustic and operational challenges when students and instructors are occupying both spaces. The shop lacks proper changing facilities for students, including a lack of dedicated boys & girls changing areas that would promote greater inclusion in the program.

F. Description of how deficiencies will be addressed:

The method of addressing the deficiencies noted above will be identified as part of the Preferred Schematic Report [PSR] submission.

Programs To Be Added, Expanded, Contracted Or Discontinued

Program	Current Enrollment	Approved Capacity	Proposed Capacity
Barbering	NA	TBD	30
Medical Occupations	NA	TBD	40
HVAC	NA	TBD	30
Plumbing	NA	TBD	30
Total			130*

** Enrollments noted above are inclusive of exploratory program participants*

Note: Barbering, Medical Occupations, HVAC and Plumbing have been blanketed under the General Advisory Committee discussion. Meetings with minutes and data are attached to validate the need for these expanded career areas in the new building. This includes support from the Metro North Regional Employment Board.

G. Confirm that the District understands that this submittal documents the District's desire to investigate potential changes to existing Chapter 74 programming as part of its Feasibility Study only, does not commit the District or the MSBA to any particular Chapter 74 Program offerings at the Somerville High School school project, all local decisions and approvals regarding Chapter 74 programming offerings are to be finalized prior to the District submitting its Preferred Schematic Report to the MSBA, and that DESE review and acknowledgement of the District's proposed additions, expansions, contractions, and/or discontinuations to its current Chapter 74 program offerings must be provided with the District Preferred Schematic Report.

The District confirms this understanding.

H. Confirm that the District further understands that, among other things, program area associated with Chapter 74 programming and total square footage of the Somerville High School school project shall be subject to the approval of the MSBA's Board and that the final approval of a Proposed Project at the Somerville High School school project shall be within the sole discretion of the MSBA's Board.

The District confirms this understanding.

Educational Visioning Workshop

Workshop Overview and Notes

In October and November of 2015, the Somerville High School Educational Working Group (EWG) – a group of approximately 30 Somerville Public School teachers, parents, district administrators, community partners and higher education partners – assembled for the purpose of educational visioning for the new Somerville High School. New Vista Design and Symmes Maini & McKee Associates (SMMA) facilitated two workshops, each a collaborative session designed to inform the Somerville High School design process. Participants were led through a step-by-step visioning process aimed at capturing their best thinking about Somerville High School's current and future educational goals and priorities, and connecting them to best practices and possibilities in innovative school facility design.

On October 20, 2015, the Somerville High School EWG participated in the first Educational Visioning Workshop. The workshop was four-hours long and explored the following topics:

- **Priority Goals** for the renovated/new facility
- **21st Century Teaching and Learning Practices** that are being influenced by digital technology and our changing economy
- **Strengths, Challenges, Opportunities, and Goals (SCOG Analysis)** associated with Somerville High School's current academic program as well as the vision for its new facility
- **21st Century Learning Goals** that distill the group's best thinking with regard to Somerville High School's current and future educational programming and priorities

On November 9, 2015, the Somerville High School EWG participated in the second Educational Visioning Workshop. The workshop was seven-hours long and explored the following topics:

- **21st Century Design Patterns** that innovative schools throughout the country have put into practice in order to make their forward-thinking learning goals come alive on the level of facility design
- **DRAFT Guiding Principles 1.0** for design of the renovated/new facility
- **Blue Sky Ideas** for the renovated/new facility
- **Key Spaces and Adjacencies** for the renovated/new facility
- **Bubble Diagramming** for the renovated/new facility

The following pages offer a consolidation of notes based on participant's feedback and ideas.

Educational Visioning Workshop One Notes

October 20, 2015

Priority Goals

The following list of priority goals for the design of the new and/or renovated Somerville High School was recorded during the participant introduction section of Workshop One, with each participant offering one or more priority goal.

The Somerville High School program and/or new facility:

- Is a truly engaging educational environment
- Promotes real-world experience
- Prepares student well for college in terms of critical thinking and writing
- Prepares its teachers with internships
- Is a multi-purpose and highly interactive facility
- Is fully accessible with no barriers: physical or emotional
- Will be created in such a way that it holds up over time
- Maintains its beautiful and old library and creates a satellite campus with wrap around services
- Is "IFFY"… interdisciplinary, integrated, innovative, flexible, futuristic and fun!
- Is an engaging, warm, welcoming space that meets ALL students needs, including safe and quiet "time out" spaces
- Is part of the larger community and still maintains its identity
- Supports teacher collaboration
- Supports adaptive and responsive teaching and learning: adapts and evolves to the changing needs of students and adults
- Is flexible and adaptable, allowing students to create and explore

- A space where kids want to be: access to projects and the ability to "make it their own"
- Maximizes opportunities for interactive learning and collaboration
- Facilitates and inspires creative expression and focused practice
- Has flexible and adaptable spaces in which a wide range of visual arts can be offered
- Has functional and integrated lab and workshop spaces, including outdoor classrooms, and weather stations, that support real science, STEM and STEAM
- Promotes and strengthens the school's partnership with TUFTS
- Puts vocational work on display
- Maintains safety and mimics present day work environments
- Facilitates the creation of community and the practice of inquiry-based and personalized learning
- Respects the historic building
- Is safe and secure, while also promoting community use
- Has more developmentally appropriate athletic and unified sports facilities
- Encourages students to own their educational experience and processes, and to develop as learners
- Promotes authentic and real-world application of learning
- Facilitates emergency response: preparedness, response and mitigation

The Following Priorities Were Added On November 9, 2015 During Workshop Two

- Robust technology
- Agile classrooms
- Performance Space
- Green Building
- Being at the "center of the community"
  - A touchstone place to go

- Support services and space for health organizations (some require more privacy)
- Spaces for teacher professional development
- Space for adult learners (staff, community, parents)
- Cafeteria that is nourishing and age appropriate education around food
- Promotion of health and wellness as a community resources
- Sustainability

Educational Visioning Workshop One Notes

October 20, 2015

Somerville Public Schools SCOG Analysis

Two groups, one comprised of SPS leadership and community partners within the Educational Working Group (EWG), and the other comprised of Somerville High school teachers and administrators and community partners each conducted a "SCOG Analysis" of what they see as the current strengths, challenges, opportunities and goals with regard to the Somerville Public School's academic programs and facilities. The following is a compilation of participants' combined responses and ideas, with the SHS group's highlighted in blue.

STRENGTHS

- Strong mindset for student and staff growth and academic achievement
- Community partners (colleges and universities, science and tech)
- Social and mental health support
- CVTE – Comprehensive school
- Diversity
- Proactive central office that is involved with the community
- Strong mayoral and city support
- Close knit and collaborative culture
- Resources for families and youth
- Equitable opportunities: specialists and access to programs
- Solid technology infrastructure
- Staff quality, dedication and commitment
- Variety of Visual Arts electives
- Small class sizes (good)
- High quality and talented teachers
- ELL Welcome Center
- CVTE – ongoing development
- Vibrant arts community
- Community partnerships
- Extra-SHS opportunities (internships, co-curricular, etc.)
- Pride in community
- Support from city government agencies
- House system
- Developing system of intervention

CHALLENGES

- Multiple data systems
- Facilities are in various states of decay district-wide
- K-8 (generalists vs. specialists)
  - Transition to high school model
  - Transition to first grade
- Poverty and mobility in an urban environment
- Dually identified students (complexity of needs)
- Diverse family and socio-economic families
- Diversity of educational backgrounds (some unknown)
- Cultural diversity
- Staff diversity relative to student body (cultural competency responsiveness)
- CVTE: costly and difficult to stay competitive and effective
- Technology is not ubiquitous yet
- Current space configurations
- Security
- Existing sports facilities are restrictive
- Limitations of current schedule
- Better use of technology (1:1, 3:1, assessments)
- Need more flexible learning environments
- Limited informal student/teacher spaces
- Over-programming of student schedules
- Standardized testing (celebration of scores)
- State level curriculum requirements

OPPORTUNITIES

- Leveraging diversity and cultural backgrounds
- Leveraging resources: geography; business; culture and parents
- Use data
- New facility
- Improved athletic facilities
- Improved indoor/outdoor connections
- Create small community fee
- Career Technical and Vocational Education
- Strengthen specialized environments
- Integration of school within a school
- More flexible integration options
- Add more sports options
- Increase extra-curricular participation
- Increase student schedule flexibility
- Celebrate student accomplishments
- Increase CVTE exposure
- Increase staff collaboration
- Outside enrichment opportunities
- Increase coding (computer science) instruction
- More CVTE programs: plumbing and HVAC

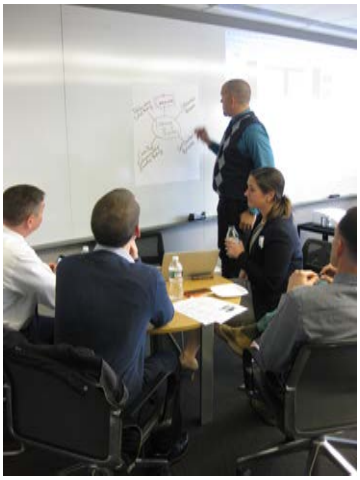
GOALS

- Cultural proficiency
- Parental involvement
- Inclusion (differentiation of needs)
- Commitment to reduce "barriers"/problems
- Use data meaningfully
- Student wellness/whole child
- Partner with our "neighbors" (colleges and universities +)
- Cohesive technology plan – teaching and learning applied
- No "wasted space" – ubiquitous learning throughout
- Preparing students with 21st century skills (whatever the next step: college and careers)
- Equitable facilities within the whole system
- Equitable facilities support ALL students through their educational experience
- Access to, and appreciation for the arts
- Widespread support for socio-emotional
- Create multi-purpose and flexible spaces, including performance venues and opportunities
- Increase support options for students
- Full utilization of resources
- Increase student privileges (flexible lunch options)
- Schedule improvements
  - Structural
  - Flexibility
  - Opportunities for increased/frequent class times
- Physical infrastructure that works
  - Efficient and safe use of space
  - Productive collaborative workspace
  - Maker spaces
  - Fine/performing arts wing
  - Outdoor learning environments (fields)

Educational Visioning Workshop One Notes

October 20, 2015

21st Century Learning Goals 1.0



The following set of priority "21st Century Learning Goals" for Somerville High School students were developed by the Educational Working Group (EWG). Five teams of 5-6 participants each worked to create their own set of Learning Goals, after which each team presented to the larger group. Each list was then displayed in a gallery format and participants were given the opportunity to vote for their top six priority Learning Goals.

New Vista Design then combined learning goals and "indicators" and listed them below in order of the number of priority votes they received, with each learning goal receiving 5 votes for appearing on a small group list, and one point for each subsequent priority vote received from an individual participant. This resulting list of "21st Century Learning Goals 1.0" will be revised by the Educational Working Group.

1. Learning to Be 61 votes

- Sense of self
- Growth Mindset
- Self-direction and reflection
- Curiosity and initiative
- Creativity and risk-taking
- Passion for learning
- Joy

2. Authentic Learning 52 votes

- Learning to do
- Project-based and service learning
- Career prep and entrepreneurship
- Practical skills sets
- Effective use of real world tools
- Inventive thinking
- Relevant applications and outcomes
- Ability to produce high quality products

3. Critical Thinking 45 votes

- Problem solving and reasoning
- Risk taking
- Assessing and analyzing information
- Adaptability

4. Communication and Collaboration 45 votes

- Oral and written
- Interpersonal skills
- Teamwork

5. Social and Civic Responsibility 40 votes

- Local and global
- Cultural awareness and expression
- Ethics and responsibility
- Diversity and inclusion
- Social justice and responsibility

6. Mastery of Core Academic Content 18 votes

- Including STEAM and digital literacy
- Effective use of real world tools

The following observations were made about Learning Goals 1.0 during Workshop Two on November 9, 2015

- Mastery of Core Content is integral and should be moved to the top. Is Mastery of Learning something that we assume at this point, or is that shifting?
- Mastery has a lot to do with educational delivery models – what do we want ALL student to know and how do we measure? Authentic Learning might be missing this…
- Authentic Learning is pedagogy that is connected to content creation
- It all seems connected to globalization and the rapidly changing nature of careers – which means we all have to be more flexible and proactive learners
- People were surprised to see Learning to Be at the top, but think it is because students are coming from so many different places and backgrounds that creating a place where student want to be, and where they feel safe is essential to the overall culture of the school
- Learning can only happen when students physical needs are met
- Keeping families engaged should be added under Communication and Collaboration

Educational Visioning Workshop Two Notes

November 9, 2015

21st Century Design Patterns 1.0

The following set of priority "21st Century Design Patterns" for the design of the new and/or renovated Somerville High School was brainstormed by the Educational Working Group (EWG). Seven groups of approximately 5 people worked together to create a set of priority Design Patterns, after which each group presented to the larger group. With all seven lists placed in a gallery format, participants then each had the opportunity to vote for their top six design patterns. These are listed below in order of the number of priority votes they received, with each Design Pattern given five points for appearing on the original team list and one additional point for every priority vote that it received.

- **Greeting and Gatekeeping** (49 votes)
  - Safe Entry
  - Wayfinding
  - Welcome Centers
  - Clear and welcoming entrance
  - Community Access
  - All kids, staff, visitors come through here
- **Community Access** (34 votes)
  - Functional Access
  - To Gym and Cafeteria
- **Flexible Classrooms** (32 votes)
  - Flexible Furniture
  - Adaptive Classrooms
- **Clusters of Learning** (28 votes)
  - Classroom Neighborhoods
  - Would Allow for Collaboration and Communication
- **Collaborative Spaces for Learning** (26 votes)
  - Students and Staff
  - Presentation Spaces
- **Varied and Flexible Spaces** (21 votes)
  - Multi-Purpose Spaces

- **Sustainability** (19 votes)
  - Tied to Curriculum
  - Durability
  - Building as Teacher
- **Athletic Facilities** (17 votes)
  - Classroom Neighborhoods
- **Outdoor Spaces** (16 votes)
  - Outdoor Learning
  - Less restrictive and more engaging
- **Seamless Technology** (14 votes)
  - Ubiquitous Technology
  - Teaching Digital Citizenship
  - Charging Stations
- **Effective Classrooms** (13 votes)
  - Consideration for Acoustics
  - Visibility (but minimize distractions)
  - Break Out Spaces
- **Campus Feel** (13 votes)
- **Display and Exhibition** (9 votes)
  - Flexible Storage
- **Nooks and Crannies** (9 votes)
  - Between Spaces
- **Visible Learning & Transparency** (8 votes)
- **Teacher Teaming** (8 votes)
  - Counselor Teaming
  - Collaborative Spaces
- **Cyber Dining** (8 votes)
- **Small Group Spaces** (8 votes)
- **Professional Work Areas** (6 votes)
- **High Performance Learning Spaces** (5 votes)
  - Visibility and Safety
- **Informal and Varied Spaces** (5 votes)
  - Gathering and Commons Areas
  - Non-Classroom Spaces

Educational Visioning Workshop Two Notes

November 9, 2015

21st Century Design Patterns 1.0 - Consolidated

The following set of consolidated priority "21st Century Design Patterns" for the design of the new and/or renovated Somerville High School was created by combining like Design Patterns to create a more streamlined list, which can be reviewed by the EWG for further development.

- **Varied and Flexible Spaces** (79 votes)
  - Flexible and Adaptive Classrooms
  - Flexible Furniture
  - Multi-Purpose Spaces
  - Gathering and Commons Areas
  - Non-Classroom Spaces
  - Small Group Spaces
  - Nooks and Crannies
  - Between Spaces
- **Greeting and Gatekeeping** (49 votes)
  - Safe Entry
  - Wayfinding
  - Welcome Centers
  - Clear and welcoming entrance
  - Community Access
  - All kids, staff, visitors come through here
- **Clusters of Learning** (36 votes)
  - Classroom Neighborhoods
  - Would Allow for Collaboration and Communication
  - Teacher Teaming
  - Counselor Teaming
- **Community Access** (34 votes)
  - Functional Access
  - To Gym and Cafeteria
- **Collaborative Spaces for Learning** (33 votes)
  - Students and Staff
  - Presentation Spaces
  - Professional Work Areas
- **Seamless Technology** (22 votes)
  - Ubiquitous Technology
  - Cyber Dining
  - Teaching Digital Citizenship
  - Charging Stations
- **Visible Learning & Transparency** (21 votes)
  - Display and Exhibition
  - High Performance Work Spaces
  - Visibility and Safety
  - Flexible Storage
- **Athletic Facilities** (17 votes)
  - Classroom Neighborhoods
- **Outdoor Spaces** (16 votes)
  - Outdoor Learning
  - Less restrictive and more engaging
- **Sustainability** (19 votes)
  - Tied to Curriculum
  - Durability
  - Building as Teacher
- **Effective Classrooms** (13 votes)
  - Consideration for Acoustics
  - Visibility (but minimize distractions)
  - Break Out Spaces
- **Campus Feel** (13 votes)

Educational Visioning Workshop Two Notes

November 9, 2015

Guiding Principles 1.0

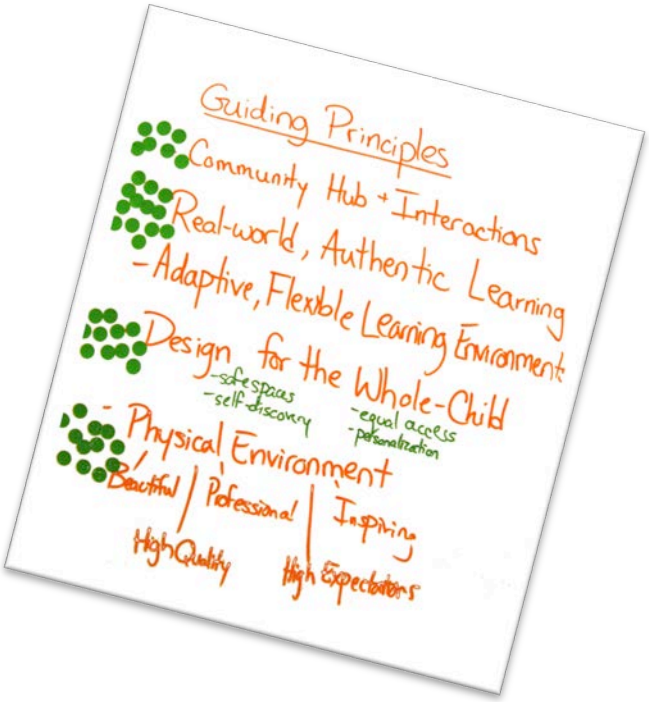
Guiding Principles 1.0 offer a framework of educational and facility related design priorities that prove invaluable in helping stakeholders and design team members to set design goals and focus their work. The following set of Guiding Principles for design of the new and/or renovated Somerville High School was developed by the Educational Working Group (EWG). Seven groups of approximately 5 people worked together to create a set of priority Guiding Principles, after which each group presented to the larger group. With all seven lists placed in a gallery format, participants then each had the opportunity to vote for their top six Guiding Principles. These are listed below in order of the number of priority votes they received, with each Guiding Principle given five points for appearing on the original team list and one additional point for every priority vote that it received.

- Personalization, Connections and Building Relationships (49 Votes)
  - Collaborative, Not Competitive
  - Connections
  - Building Relationships
  - Personalized Learning
  - Learning to Be

- Design for the Whole Child (37 Votes)
  - Safe Spaces
  - Self-Discovery
  - Equal Access
  - Personalization
  - Inclusivity

- Innovative, Creative and Interdisciplinary (32 Votes)
  - Curiosity and Creativity
  - Joy

- Authentic Learning (31 Votes)
  - Real World Connections
  - 21st Century Skills
  - Opportunity for Exposure



Guiding Principles 1.0 (Continued)

- A Place You Want to Be (30 Votes)
  - Welcoming and Inclusive
  - Professional
- High Expectations for All (21 Votes)
  - Accountability
  - Staff and Students
- Multiple Pathways (19 Votes)
- Physical Environment (17 Votes)
  - Beautiful
  - Professional
  - Inspiring
  - High Quality
  - High Expectations
- Community Hub and Interactions (12 Votes)
- Learning By Thinking and Doing (11 Votes)
- Flexibility to Meet Huge Range of Needs (10 Votes)
- Critical Thinking and Creative Problem Solving (9 Votes)
- Diversity as Strength (8 Votes)
- School As Community Resource (7 Votes)
  - Community as School Resource
- Adaptive, Flexible Learning Environments (5 Votes)
- Sense of Community Pride (9 Votes)
- Authentic Arts Integration (8 Votes)

Educational Visioning Workshop Two Notes

November 9, 2015

Guiding Principles 1.0 - Consolidated

The following set of consolidated priority "Guiding Principles" for the design of the new and/or renovated Somerville High School was created by combining like Guiding Principles to create a more streamlined list, which can be reviewed by the EWG for further development.

1. Design for the Whole Child (64 Votes)
   - Multiple Pathways
   - Safe Spaces
   - Diversity as Strength
   - Self-Discovery
   - Equal Access
   - Personalization
   - Inclusivity

2. Personalization, Connections and Building Relationships (59 Votes)
   - Collaborative, Not Competitive
   - Connections
   - Building Relationships
   - Personalized Learning
   - Flexibility to Meet Huge Range of Needs
   - Learning to Be

3. Authentic Learning (51 Votes)
   - Learning By Thinking and Doing
   - Real World Connections
   - 21st Century Skills
   - Critical Thinking and Problem Solving
   - Opportunity for Exposure

4. A Place You Want to Be (47 Votes)
   - Welcoming and Inclusive
   - Professional
   - Beautiful
   - Inspiring
   - High Quality
   - High Expectations

5. Innovative, Creative and Interdisciplinary (45 Votes)
   - Curiosity and Creativity
   - Authentic Arts Integration
   - Adaptive, Flexible Learning Environments
   - Joy

6. School As Community Resource (28 Votes)
   - Community as School Resource
   - Community Hub and Interactions
   - Sense of Community Pride

7. High Expectations for All (21 Votes)
   - Accountability
   - Staff and Students

Educational Visioning Workshop Two Notes

November 9, 2015

Blue Sky Ideas

The Somerville High School Educational Working Group brainstormed "Blue Sky Ideas" for the new facility. Blue Sky Ideas serve the purpose of eliciting creative and unconstrained thinking about what is desirable for the new school facility and, although not necessarily achievable, often contain the seeds of ideas can be modified to fit the budgetary and programmatic constraints of the architectural program. Additional Blue Sky Ideas and diagrams appear as scanned pages at the end of this document.

- **Business Incubator**
  - Changes each year
  - Store front
  - Adult world connections
  - Like Greentown Labs
  - Space for start-ups
  - Kids get experience of being part of it
- **Teen Center/Internet Cafe**
  - Open into evening
  - Top of the hub meeting room
  - Glass walls/meeting space
  - Like WPI – kids walk out to practice
- **Athletic Parking Structure**
  - 2 athletic fields on second floor
  - Parking no longer a problem
  - Bridge over railroad tracks
- **Functional Rooftop Learning Spaces**
  - Weather station
  - Green space
  - Urban farming
  - Astronomy
  - Outdoor café
  - Rooftop sports field
- **2D and 3D Galleries**
  - Guest artists
  - Local colleges
  - Center for 3D art and wall space for 2D
  - 2 wings
- **Flexible Spaces**
  - Small lecture hall for 200-250
  - Multi-Purpose room
- **Technology Connected Community**
  - Continuous learning
  - Anytime, anywhere learning
- **Multiple Engineering Workshops**
  - Tools and table space
  - Storage is key – lots of stuff
  - Greater access to machines/shops
- **Exterior Message Boards**
  - Let community know about all the great stuff going on at the school
- **Central Hub**
  - Meeting space
  - Highly flexible cafeteria
- **Commons/Café**
  - Informal Meeting
  - Views to the city
  - Performance venue
  - Visible educational mission
  - Small business/store
  - Comfortable, appropriate eating space the can be used for other functions

- **Dance Studio**
  - Yoga too
  - Hardwood floors
- **Blackbox Theater**
- **Maker Space(s)**
  - Maker Campus
  - Beyond just Engineering Lab
- **Classroom Neighborhoods**
  - Flexible classrooms
  - Teacher learning
  - Commons areas
- **House Suites**
  - With student services, admin and conference rooms
- **Sports Complex/Community Center**
  - Accessible, large, varied, health and wellness
- **Collaborative Learning Spaces**
  - Used by classes during the school day
  - Student and club use after school
- **Professional Space for Teachers**
  - Educationally current
  - Collaboration spaces for teachers
- **Comprehensive Athletic Facility**
  - Fields adjacent to campus
  - Larger field house
  - More space for indoor sports and activities
- **Interdisciplinary Neighborhoods**
  - Authentic learning with hands on applications
  - Connections to CTE
  - Integrated STEAM
- **Retail Spaces for CTE**
  - Culinary, Cosmetology, Graphics, Dental, etc.
  - Asset for community
- **Public Access Auditorium**
- **Green, Green and Greener**
  - Greenhouse
  - Recycling
  - Urban Farming
- **Blue Sky Diner**
  - Cafeteria, café, workspace
  - Bright with big windows and views
  - Open to garden that students harvest
  - Accommodate a variety of after-hours meetings
  - High top tables, bar counter for breakfast
  - High end kitchen
- **Upper Story Function Room**
  - Massive glass walls
  - Greenhouse feel
  - Informal student space
  - Flagship meeting room
  - Top of the Hub
- **Café/Meeting Space**
  - Feeling of immediate welcome
  - Central location
  - Connected to other spaces
- **If Next Wave and Full Circle**
- **Green, Green and Greener**
  - Greenhouse
  - Recycling
  - Urban Farming
- **Blue Sky Diner**
  - Cafeteria, café, workspace
  - Bright with big windows and views
  - Open to garden that students harvest
  - Accommodate a variety of after-hours meetings
  - High top tables, bar counter for breakfast
  - High end kitchen
- **Upper Story Function Room**
  - Massive glass walls
  - Greenhouse feel
  - Informal student space
  - Flagship meeting room
  - Top of the Hub
- **Next Wave/Full Circle**
  - Part of new building
  - Warm and welcoming space
  - Classrooms with nooks
  - Sensory room
  - Technology supports varied learning needs
  - Recording studio
  - Student ownership/art
  - Flexible furniture

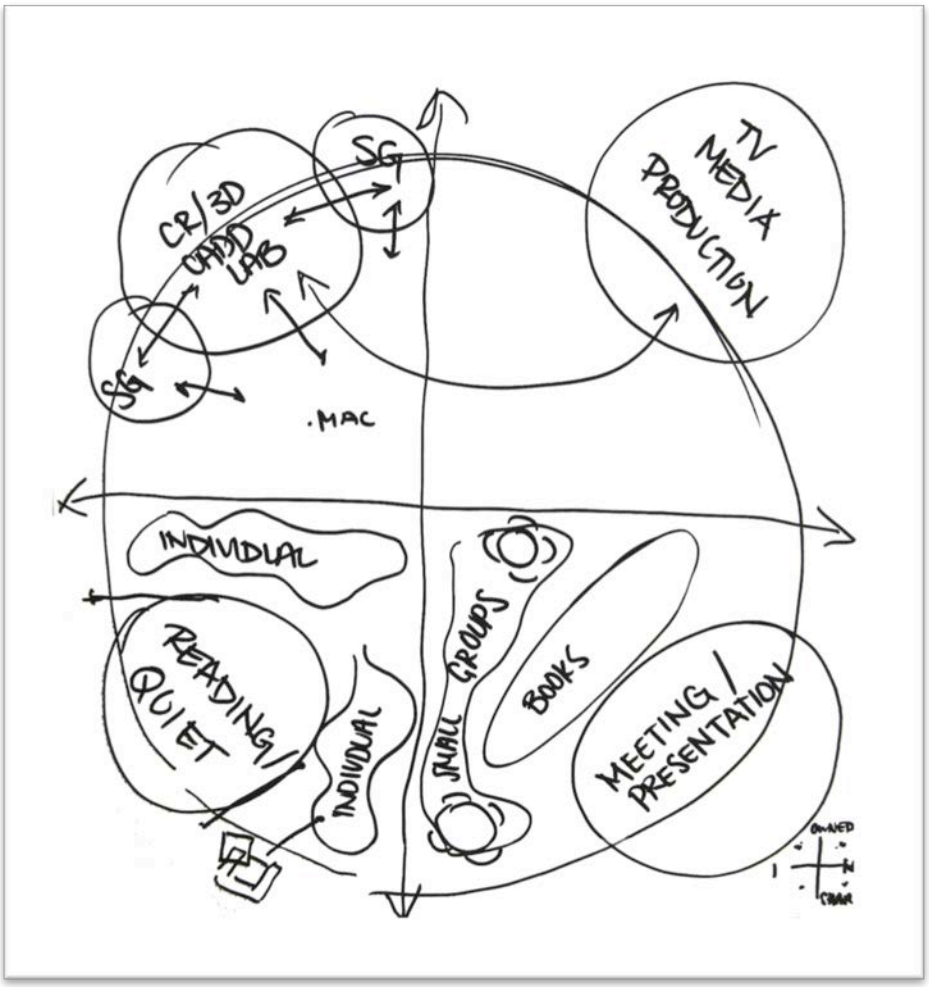
Educational Visioning Workshop Two Notes

November 9, 2015

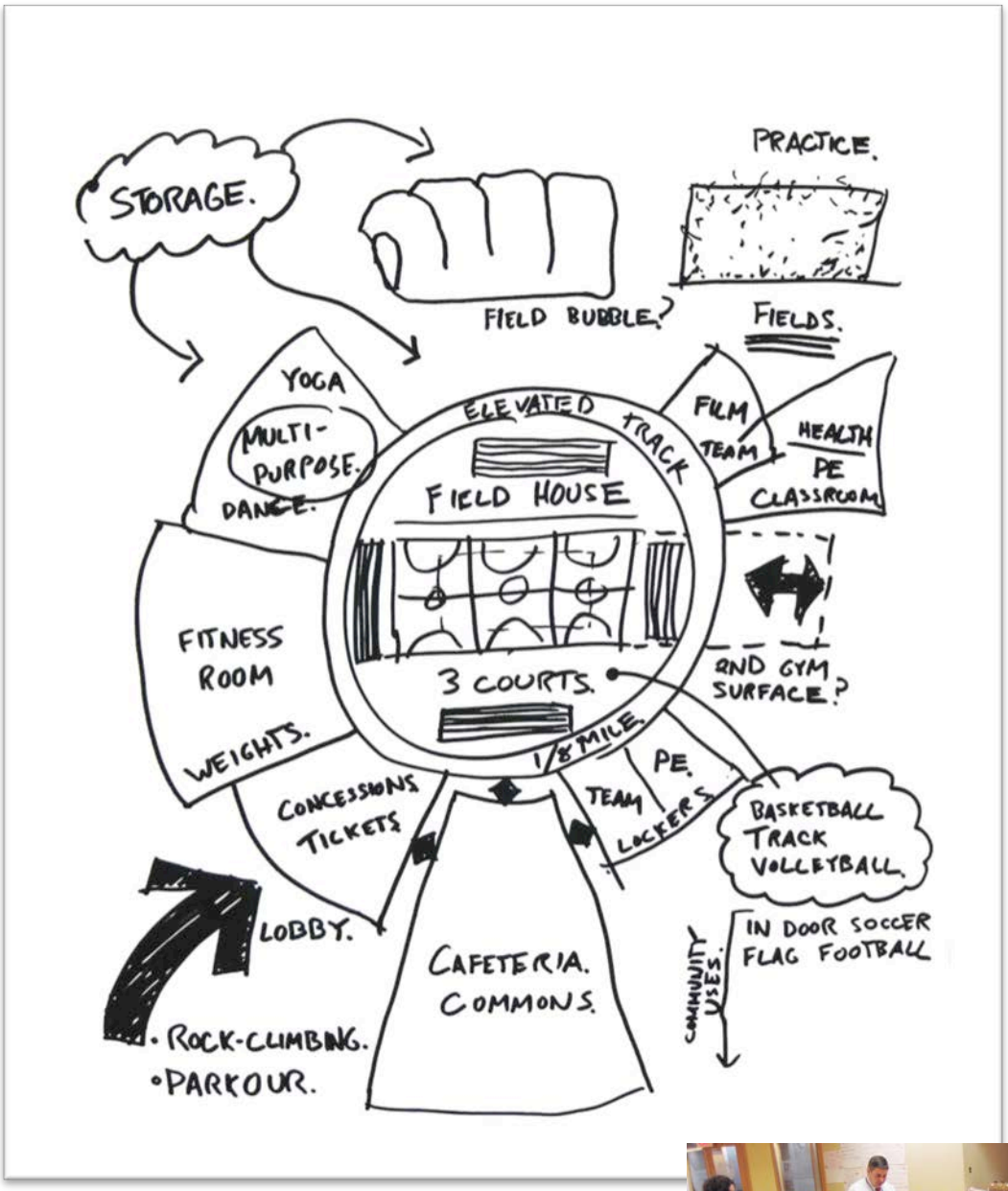
Diagrams

The Somerville High School Educational Working Group worked in small teams to develop ideas and diagrams that describe the kinds of spaces and adjacencies they envision for the new Somerville High School facility. They then presented their ideas to each other for feedback and further discussion. The following images represent the work of each group.

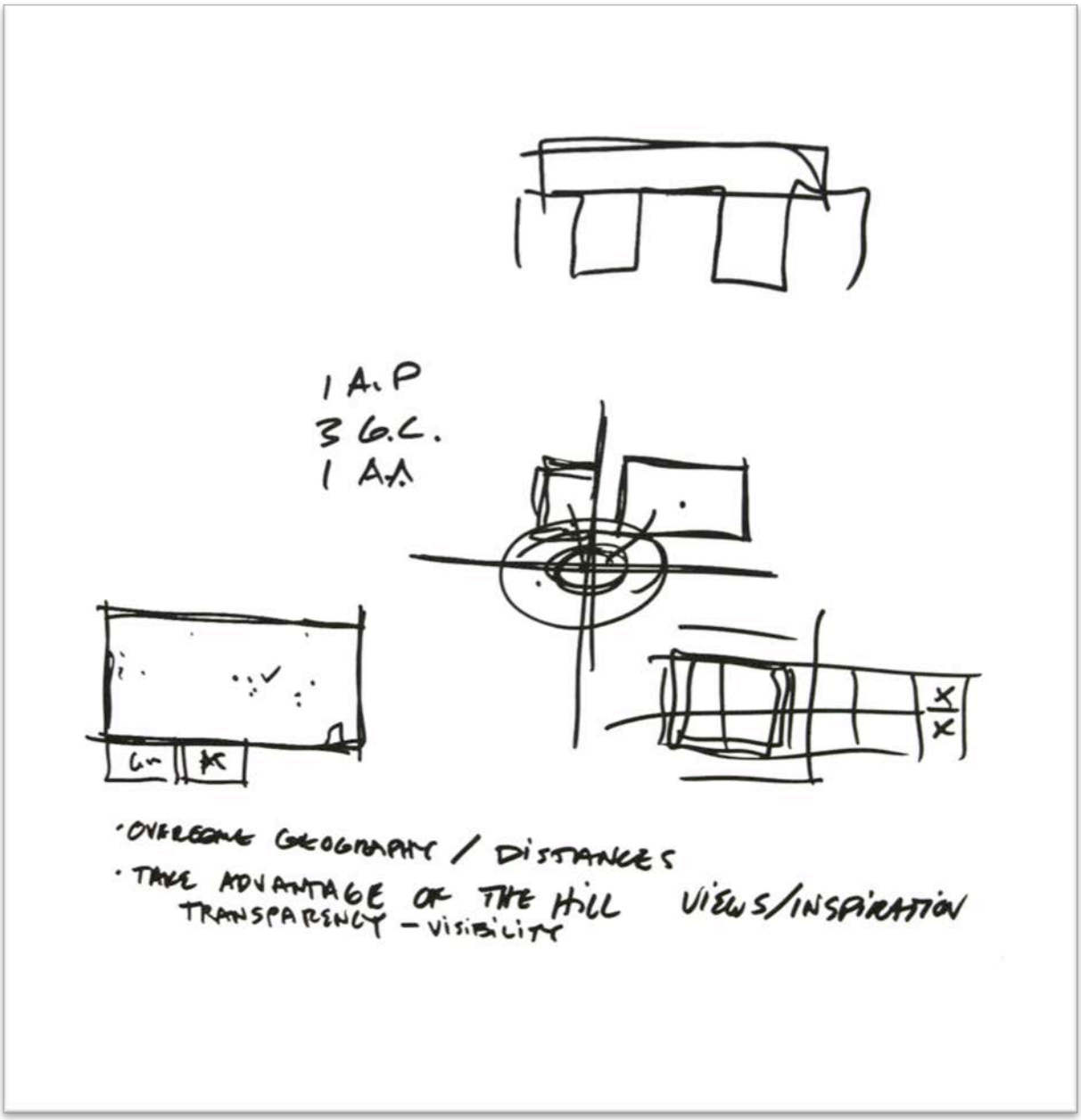
Media Lab Diagram



Field House Diagram



Hillside Sectional Diagram



Educational Working Group

Educational Visioning
Workshop One Agenda – October 20, 2015

Agenda

EXPECTED OUTCOMES: By the end of the session we will have begun to…

- Share **Priority Goals** for the design of Somerville High School's new facility
- Discuss 21st century teaching and learning and identify **21st Century Learning Goals** and initiatives for Somerville High School
- Assess Somerville High School's **Strengths, Challenges, Opportunities, and Goals** with regard to the development of its academic programs and the design of a new facility
- View a range of **Design Patterns** that support 21st century teaching and learning
- Generate **Blue Sky Ideas** for the new facility

Time	Activity	Purpose
1:00 – 1:45	***Workshop Goals and Introductions*** • Workshop overview • The Design Process • Creating a Design Guide • Introductions ○ Priority Goals for the new facility	Introduce participants, and clarify agenda and desired outcomes for this workshop and subsequent workshops. Share some of our Priority Goals for the new facility.
1:45– 2:30	***21st Century Schools*** • Changing Paradigms Video • Presentation: 21st Century Teaching and Learning	Identify and discuss changing paradigms in education, and essential elements of 21st century teaching and learning.
2:30– 2:45	**BREAK**	
2:45– 3:30	***21st Century Learning Goals*** • Small group review of assorted 21st century learning goals and outcomes and creation of priority listings • Large group prioritization • Media Saves the Beach Video	Ground our thinking about design guidelines and desired building features in a discussion and exploration of priority Learning Goals for the District.

3:30– 3:40	**BREAK**	
3:40– 4:30	***Somerville High School SCOG Analysis*** • Brainstorm of Somerville High School's Strengths, Challenges, Opportunities, and Goals	Identify what is presently working well within Somerville High School, what is challenging, and what opportunities exist with regard to the further development of programs and facilities.
4:30– 4:50	***21st Century School Facility Design Patterns*** • Presentation and overview	Begin our conversation about design guidelines and desired building features in a discussion Design Patterns and possibilities for Somerville High School.
4:50 –5:00	***Closing and Next Steps*** • Review of next steps moving forward • Exit Tickets: Blue Sky Ideas	Hear from participants about their questions and thoughts and think about Blue Sky (no-holds-barred) Ideas for the new facility.

SOMERVILLE HIGH SCHOOL

Educational Working Group

Educational Visioning
Workshop Two Draft Agenda – November 9, 2015

Agenda

EXPECTED OUTCOMES: By the end of the session we will have begun to…

- Review **Priority Goals**, **SCOG Analyses** and **Learning Goals** for the design of Somerville High School's new facility
- Explore and prioritize a range of architectural **Design Patterns** that support 21st century teaching and learning
- Understand the role that **Guiding Principles** play in setting facility design priorities and intent
- Create a set of **Guiding Principles and priorities for design** of Somerville High School's renovated and/or new school
- Generate a listing of **Key Spaces and Blue Sky Ideas** for the new facility
- Engage in a **Bubble Diagramming Activity** to identify important spaces and adjacencies within the new school

Time	Activity	Purpose

10:00 – 10:45	***Workshop Goals and WS One Debrief***
	• Introduction of new members
	• Review of:
	  ○ Design Priorities
	  ○ SCOG Analysis
	  ○ Learning Goals
	
	What strikes us? What's missing?
		Review today's agenda and debrief the October 20th workshop activities and discuss key themes and takeaways.

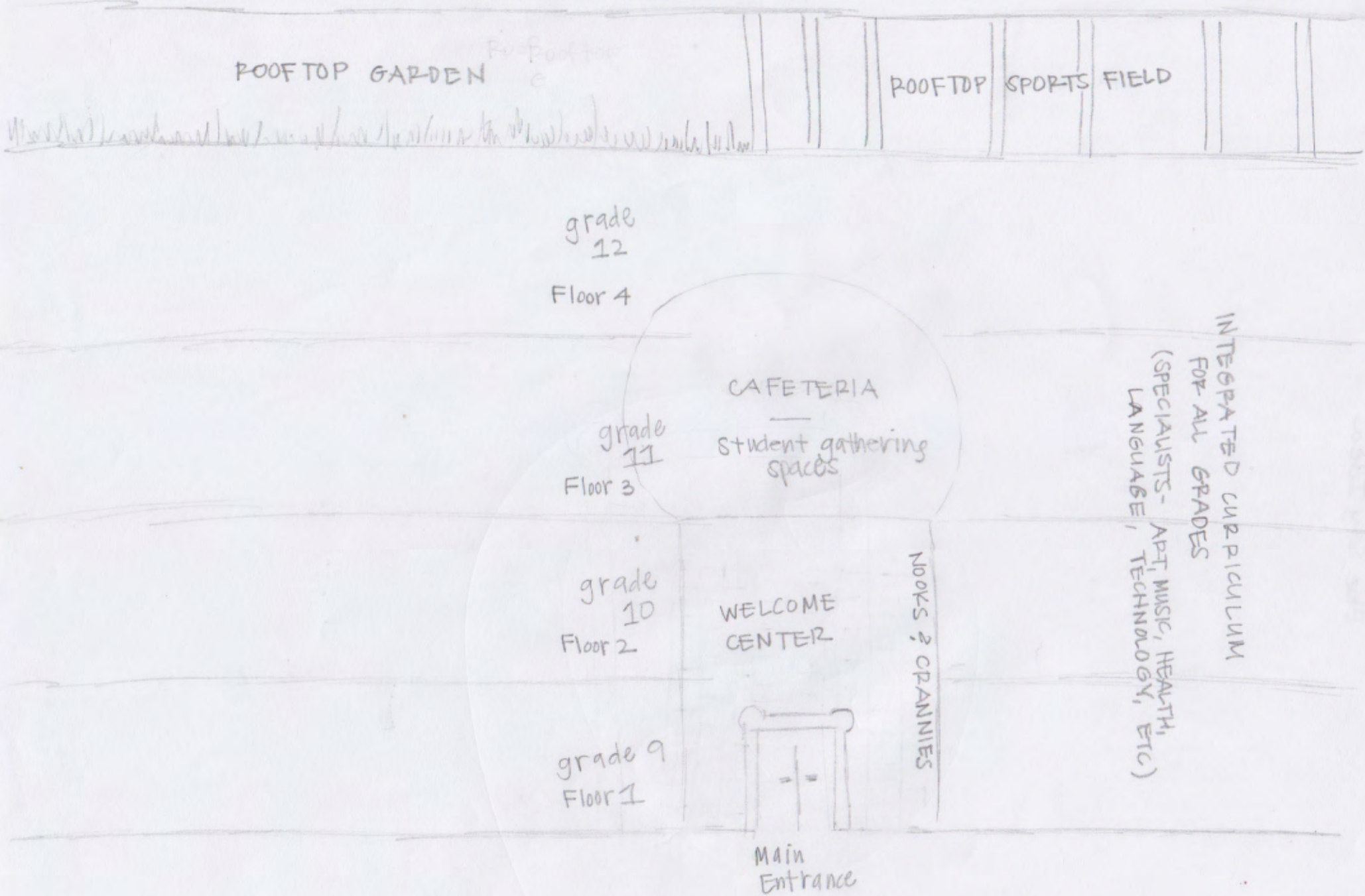
10:45– 12:00	***21st Century School Facility Design Patterns*** • Presentation and Q&A ***Design Patterns for Somerville High School*** • Small group review of assorted facility Design Patterns • Creation of priority listings • Large group prioritization	Ground our thinking about design guidelines and desired building features in a discussion and exploration of new school Design Patterns. Identify priority Design Patterns for Somerville High School.
12:00– 12:30	**LUNCH**	

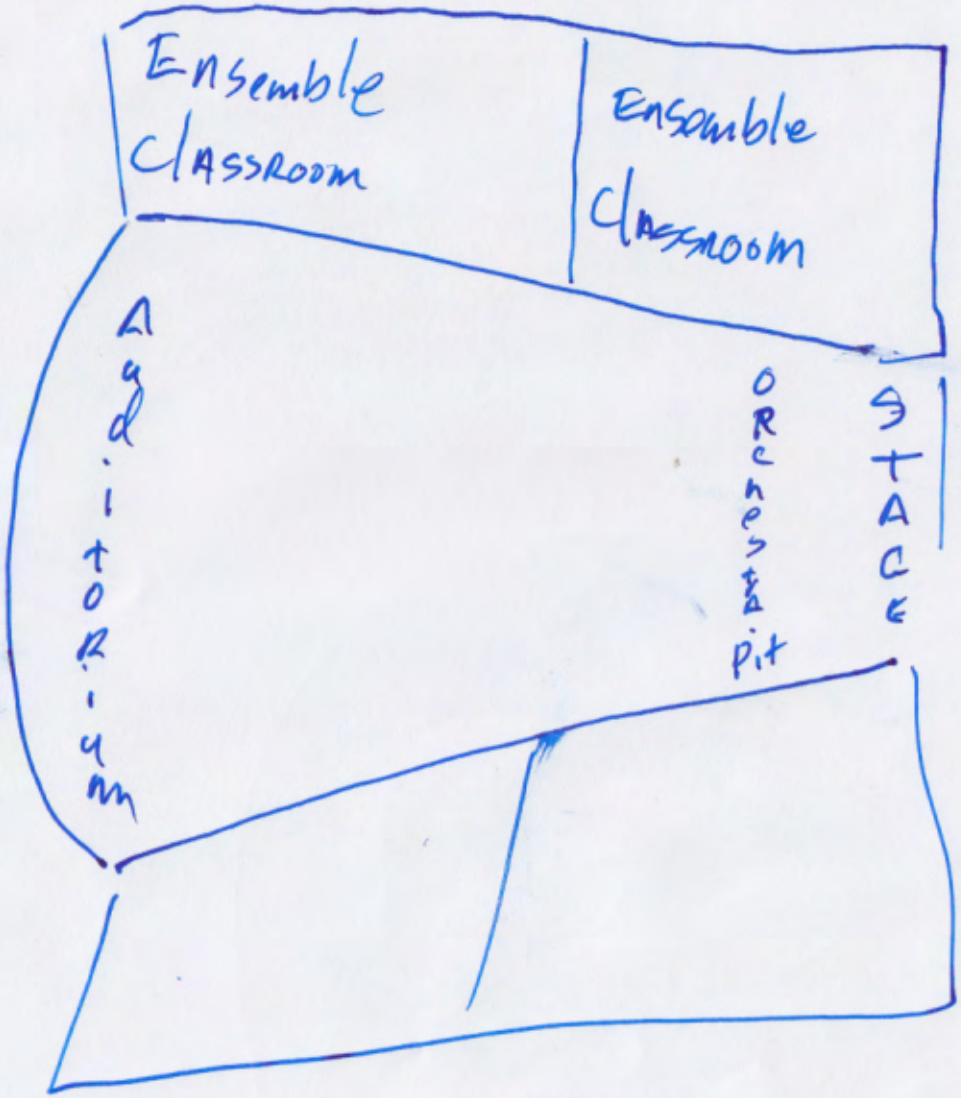
12:30– 1:45	***Guiding Principles for Design*** • Presentation and Q&A • Small group review of assorted Guiding Principles and creation of priority listings • Large group sharing and prioritization	Explore the connections between Guiding Principles and school design solutions. Translate our Somerville High School Design Patterns into a listing of priority Guiding Principles for design of the new and/or renovated building.
1:45– 2:00	**BREAK**	
2:00– 3:15	***Key Spaces and Adjacencies*** • Individual reflection • Small group discussion Large group discussion of key spaces and desired adjacencies	Share practical and creative design ideas that will help us reach our learning goals, implement desired Design Patterns, and put our newly brainstormed Guiding Principles into practice.
3:15– 3:30	**BREAK**	
3:30 – 4:45	***Bubble Diagramming*** • Individual and small group diagramming of key spaces and/or desired adjacencies within the new school • Large group sharing	Identify important adjacencies and design ideas that can be explored further in the conceptual design process.
4:45–5:00	***Closing and Next Steps*** • Next Steps review and Q&A	Hear from participants about their questions and thoughts. Review next steps for development of our process working together.

Blue Sky Ideas

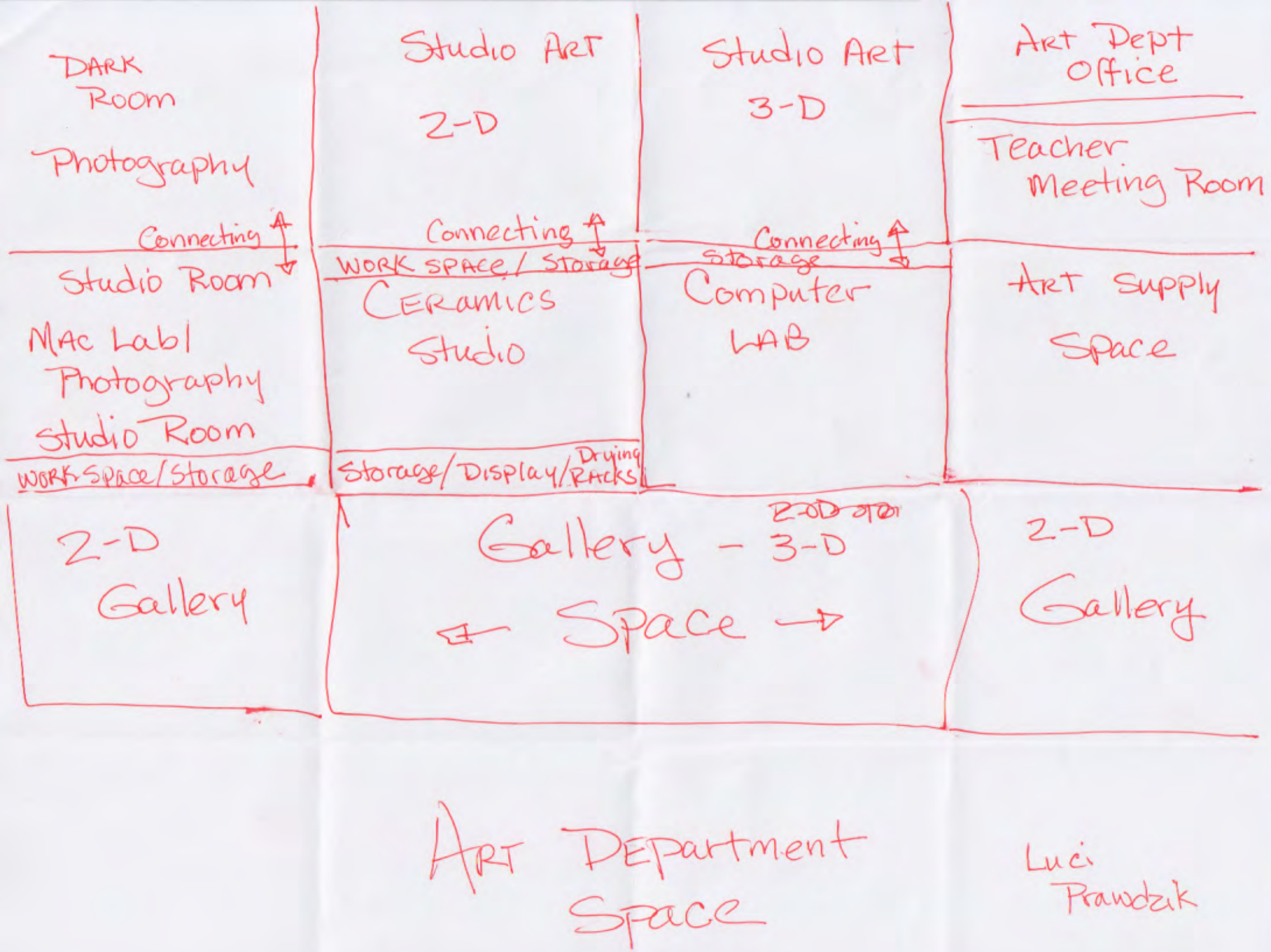
Scans of Blue Sky Ideas that were either solely diagrammatic, or contained a diagram.

Somerville High School





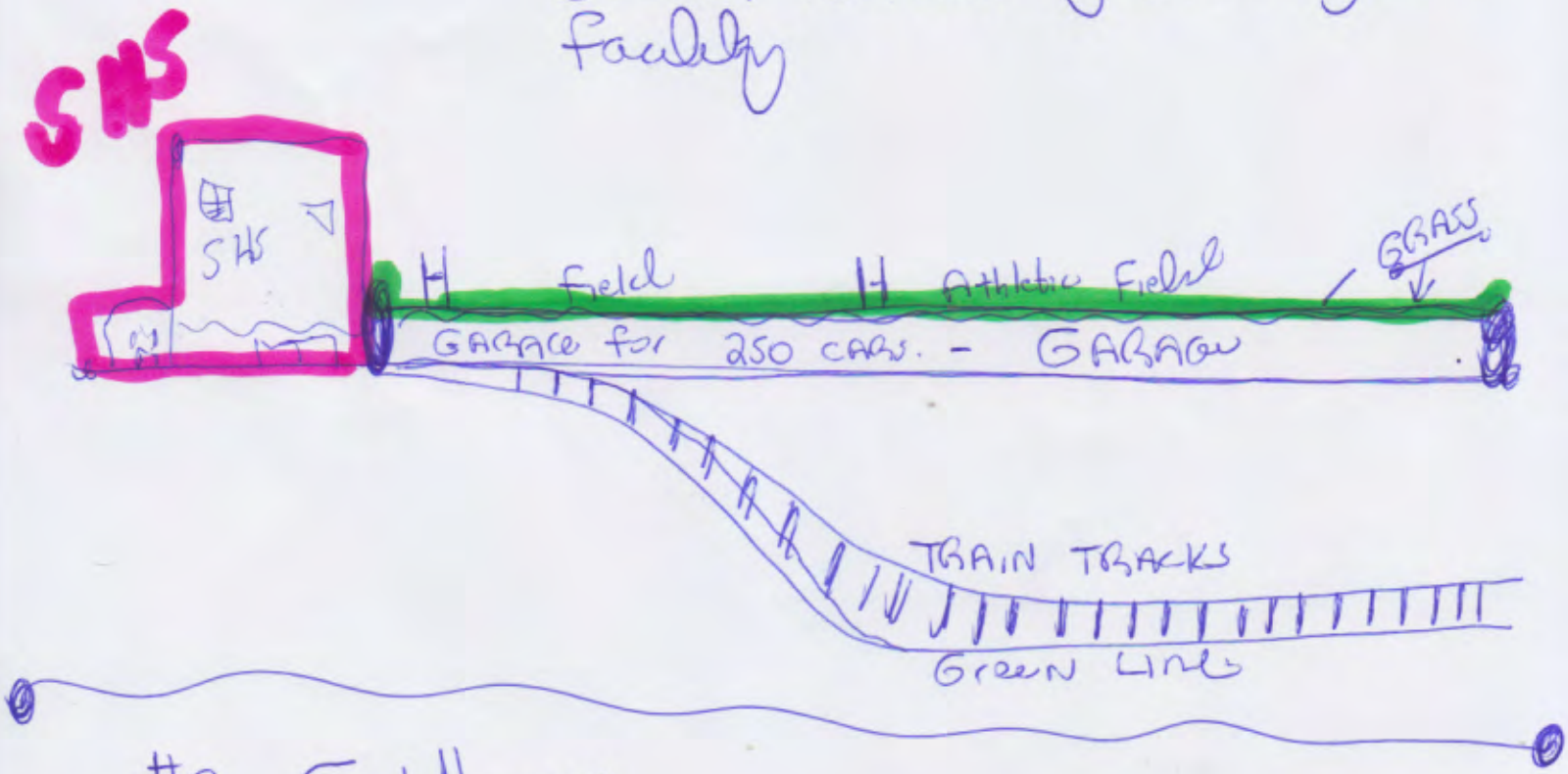
Music Department -
Rick Saunders


DARK Room
Photography
Connecting
Studio Room
MAC Lab/ Photography Studio Room
WORK SPACE/Storage
Studio ART 2-D
Connecting
WORK SPACE/ Storage
CERAMICS Studio
Storage/ Display/ Drying RACKS
Studio ART 3-D
Connecting
Storage
Computer LAB
ART Dept Office
Teacher Meeting Room
ART Supply Space
2-D Gallery
Gallery - 3-D
Space
2-D Gallery
ART DEPARTMENT Space
Luci Prawdzik

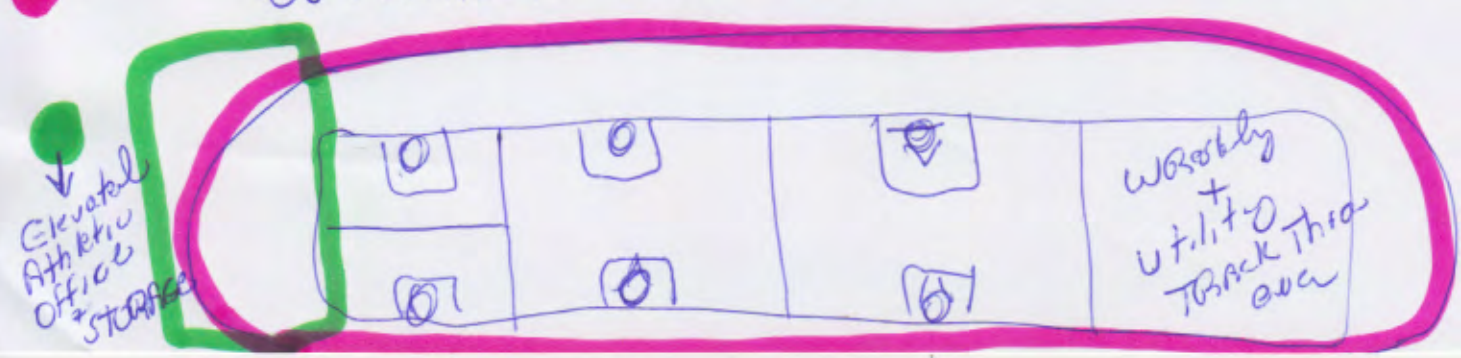
Chuck Melillo
Director of Student Services

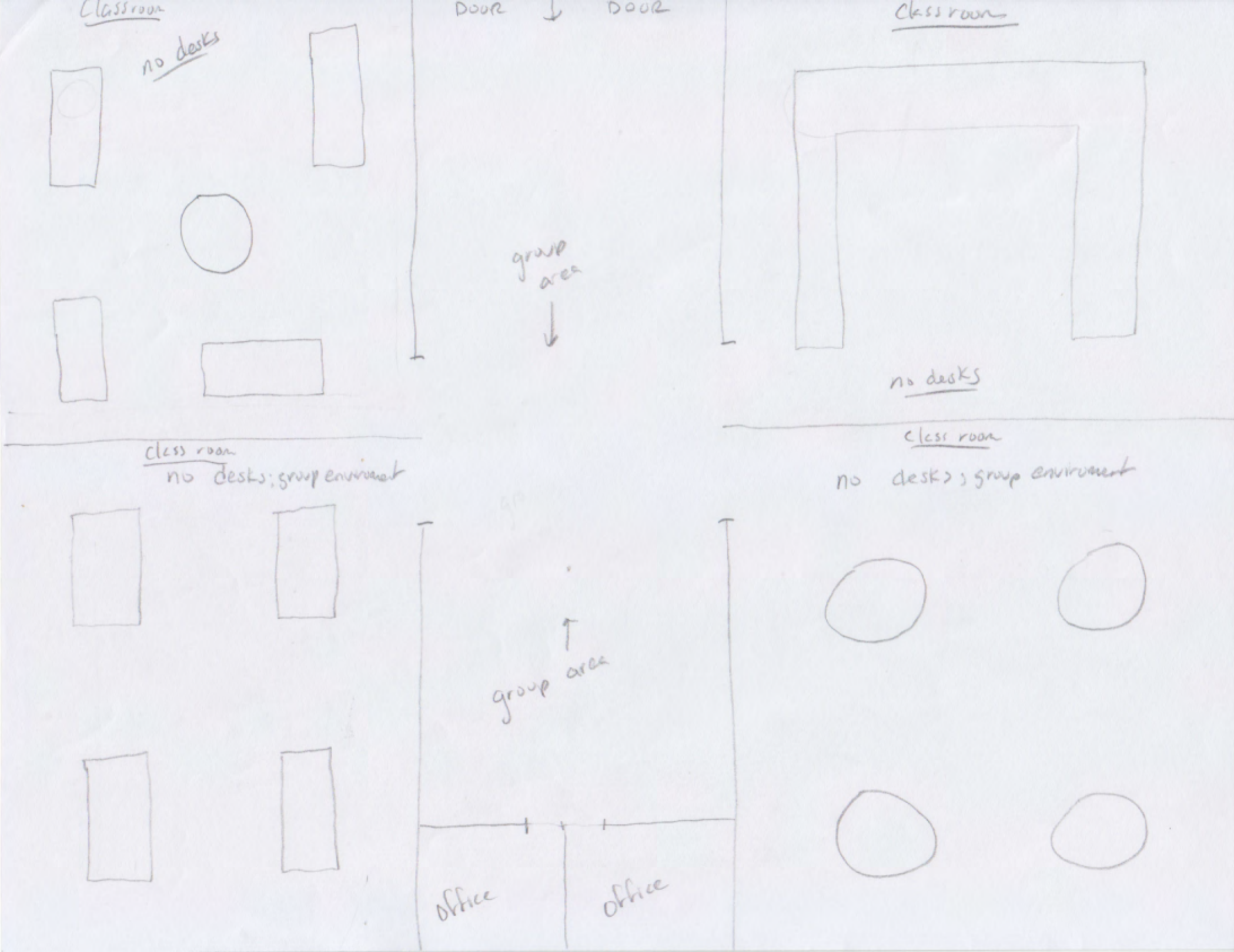
Problem > Fields + Athletic Venues are issue

#1. Build behind SHS > build a garage over the tracks (CREATE A # 150-200 yard tunnel) > Build 1 Level parking garage with > 2 Fields on top
soccer/football > practice + game facility



#2 Fieldhouse
A. Build/Erect an elevated track
B. Athletic Officer in Fieldhouse > Elevated



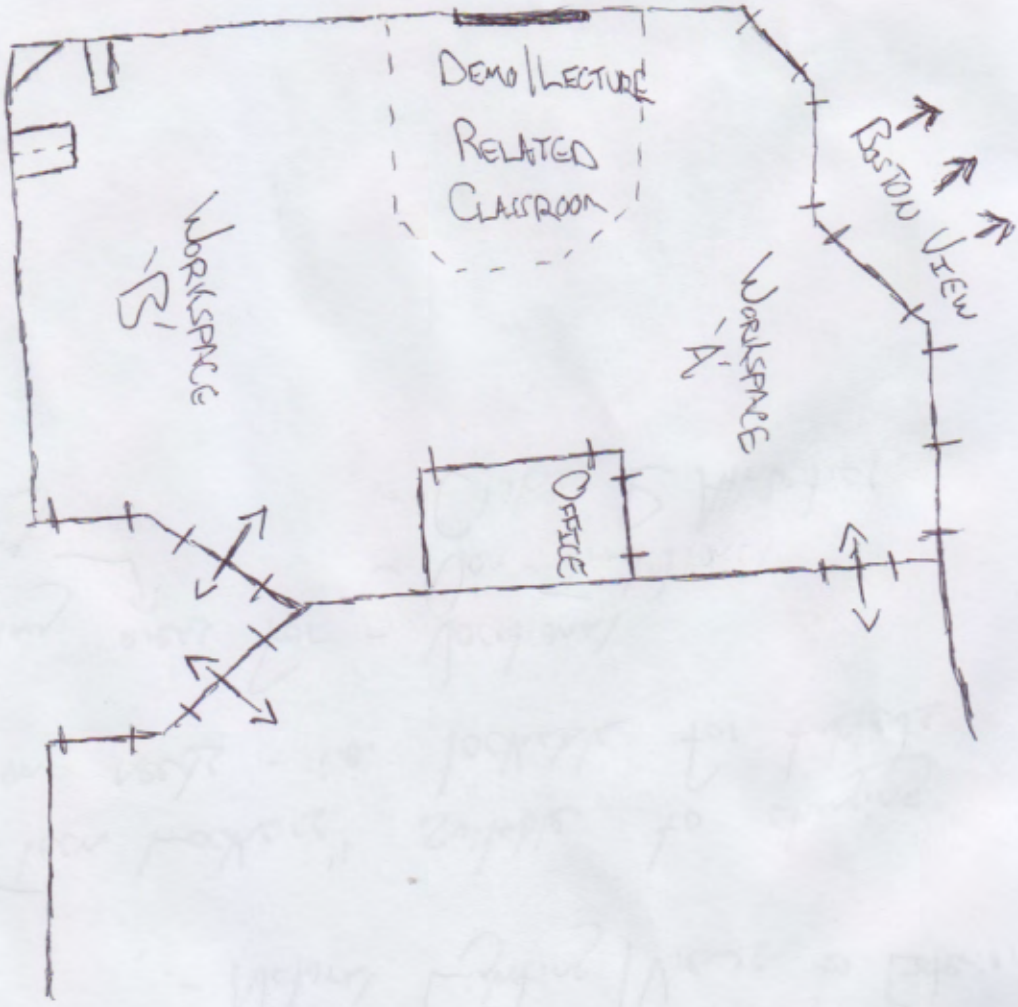

Classroom
no desks
DOOR
DOOR
group area
Classroom
no desks
class room
no desks; group environment
group area
office
office
class room
no desks; group environment

"Blue Sky Ideas"

- Vocational Work Stations
  - i.e. ① Engineering space for Computer Work, Design/Sketching Model building per student
    ② Auto. each student personal tool & work Carp. space seperated from common areas
- ——→ Related classrooms for all Voc trades

- No "Boxy" rooms - be inspiring
  - Natural Lighting/Views to Exterior
- Personalized "Tech Lockers" suitable to changing eduction needs - i.e. lockable for tablets
- Promanent display areas for - Vocational
  - Non-Traditional
  - Clubs & Athletics

New entryway →

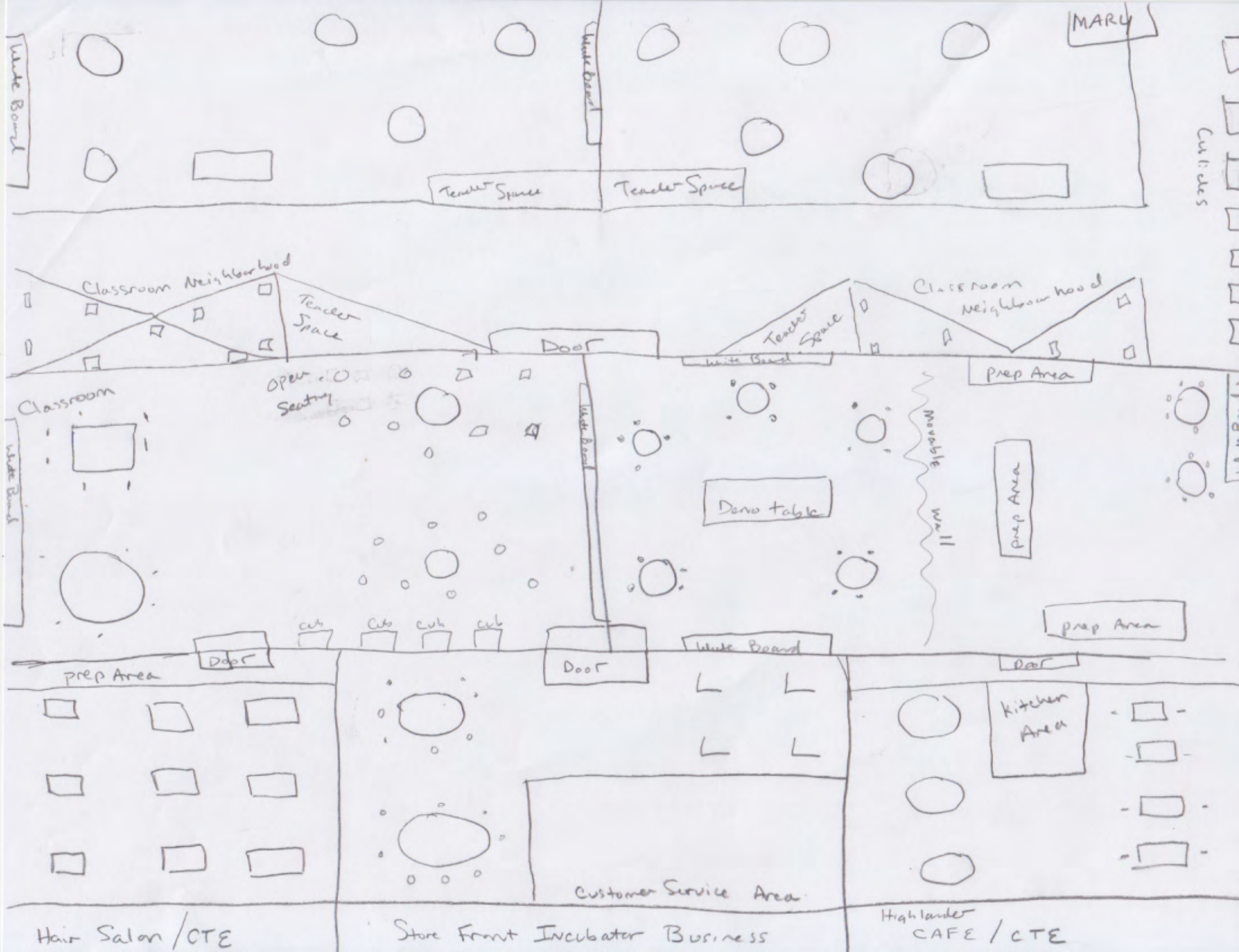


ENGINEERING / DRAFTING
LMS CTE

Key areas

If Next/Wave/Full Circle are part of the new building

- a common space that fits each whole school ie. NW all at once, FC all at once, possibly both together
- a main entry way of its own that is welcoming and safe
- Classroom spaces that can interact with each other and be closed off with space for students to work independently
  - nooks that are visible
- space that is welcoming for counseling sessions
- space for students who are in crisis out of class/ a time out space that has space for movement as well as quiet work
- meeting spaces for teachers, team mtgs, etc.
- lab space
- kitchen space for cooking


MARY
White Board
Teacher Space
Teacher Space
Cubicles
Classroom Neighborhood
Teacher Space
Door
Open Seating
Classroom
White Board
Teacher Space
Classroom Neighborhood
White Board
Prep Area
Movable wall
Demo table
Prep Area
Cub
Cub
Cub
Cub
Door
Door
White Board
prep Area
Door
prep Area
Kitchen Area
Customer Service Area
Hair Salon / CTE
Store Front Incubator Business
Highlander CAFE / CTE

Blue Sky Ideas

(1) SHS would greatly benefit from additional and necessary athletic space. We need fields adjacent to the campus. This would increase safety and, would likely increase participation. also increase space within the facility fieldhouse for indoor sports and activities
- ROOFS, UNDERGROUND, Wherever !!
- Over the Library for studio space?

The second Blue Sky idea is an integrated interdisciplinary layout. This would (2) capitalize on the CTE program and provide authentic learning with hands on applications. Integrating STEAM, STREAM or whatever will be a great benefit

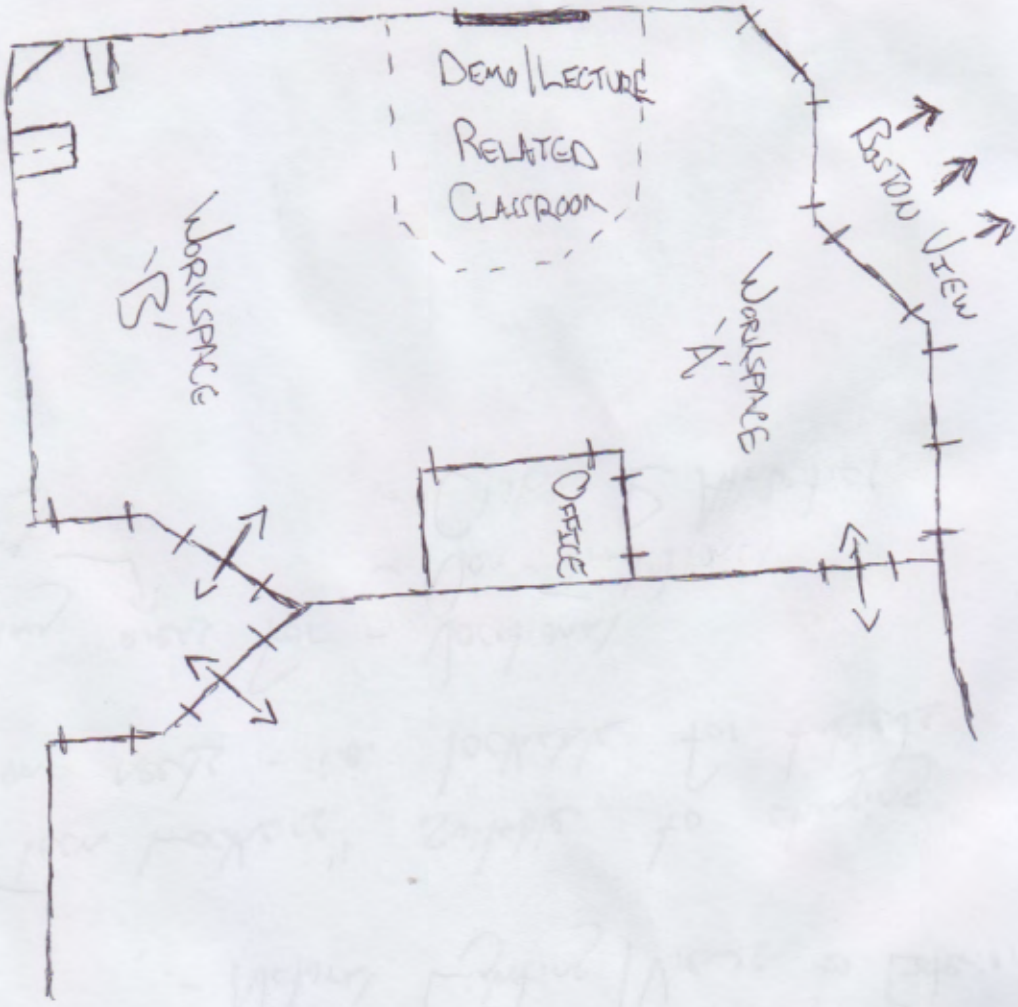
(3) Create retail space for the CTE programs open to the public: Culinary, Cosmetology, Graphics, possible banking, dental, etc. would be a tremendous asset for the community
also - public access for auditorium, Field House and retail space would be helpful.

(4) GREEN, GREEN and GREENER
→ Greenhouses, recycling, urban farming.

Key areas

If Next/Wave/Full Circle are part of the new building

- a common space that fits each whole school ie. NW all at once, FC all at once, possibly both together
- a main entry way of its own that is welcoming and safe
- Classroom spaces that can interact with each other and be closed off with space for students to work independently
  - nooks that are visible
- space that is welcoming for counseling sessions
- space for students who are in crisis out of class/ a time out space that has space for movement as well as quiet work
- meeting spaces for teachers, team mtgs, etc.
- lab space
- kitchen space for cooking



ENGINEERING / DRAFTING
LMS CTE

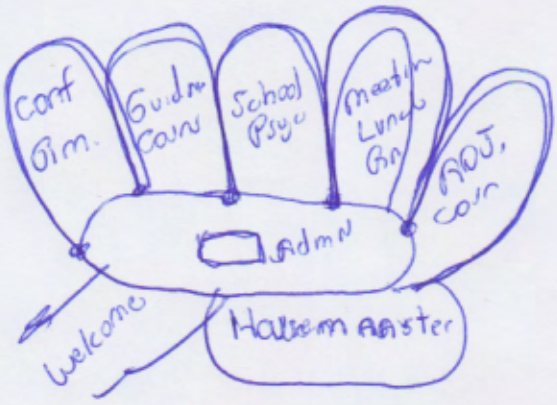
Blue Sky Ideas

If Next Wave/Full Circle is part of the new building I would love to have

- warm, welcoming space that feels homey
- soft seating
- classrooms with nooks outside/inside to accommodate students who need different space to work
- sensory room for kids who need movement and other sensory experiences
- technology to support special learning needs in a way that doesn't make someone stand out
  - so lots of different technology for all to use
- nooks and crannies for kids to use as a quiet space or a place to talk with a counselor
- space to show membership → we have a tree printed on the wall right now where every student puts a handprint with their name. It creates a great sense of belonging to a larger community of students who come back and visit often
- a recording studio will be cool - we have tons of kids who live for music and are constantly creating beats and rhythms in the classroom.
- Outdoor space that could be used for therapeutic ways
- moveable furniture in classrooms - both to reconfigure seating/use but also desks/chairs that go up and down to accommodate student size and need for movement

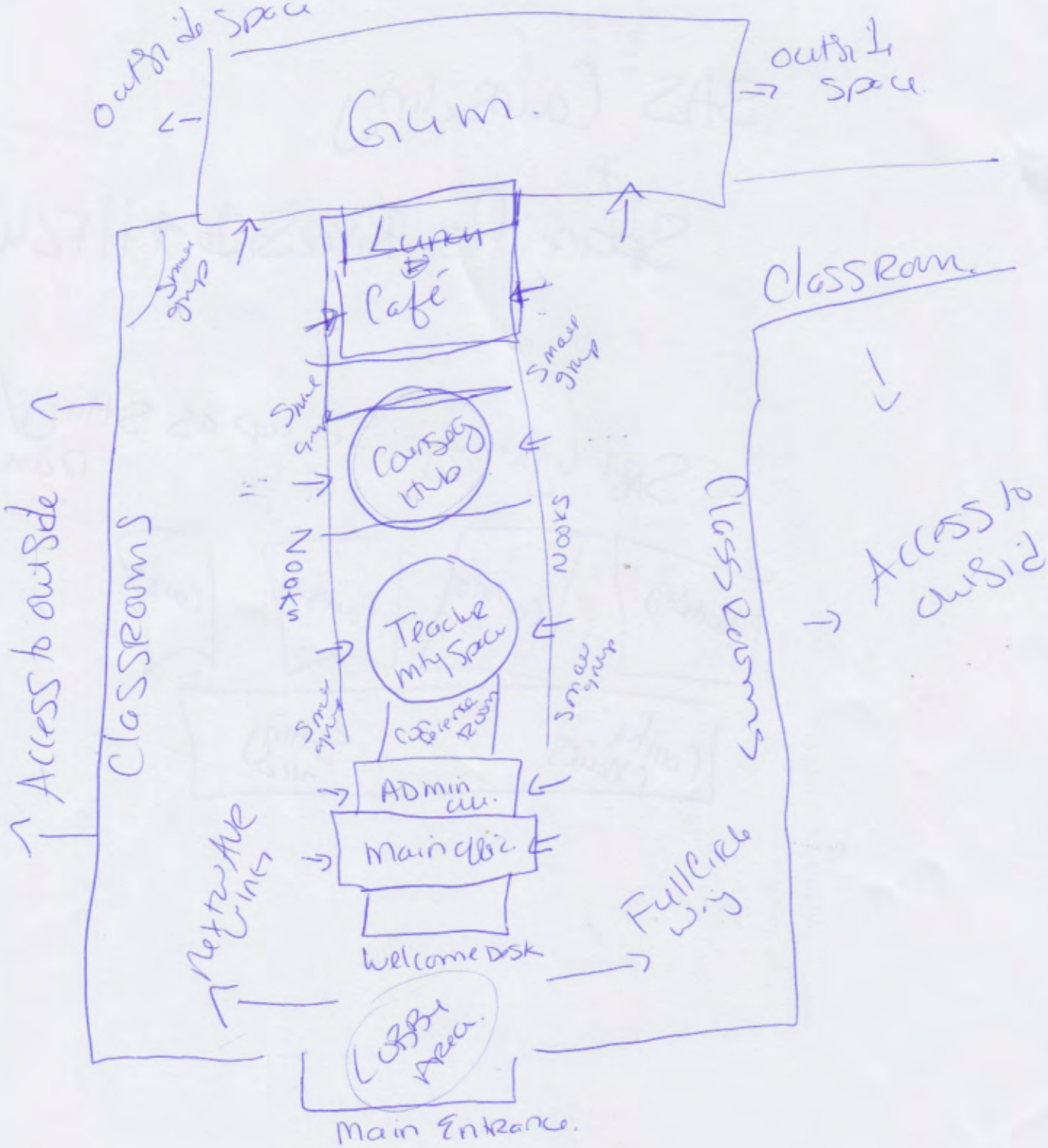
- soft lighting
- kitchen
- science labs

House Suites



Margaret DePasquale

NW FC SPAC



Key Spaces for SHS

- places for quiet, introverted, private people to focus
- a beautiful physical recreation area for Students, Staff, community to play, exercise ...
- Spaces that can be kept clean + accessible

Blue Sky Ideas

SHS would greatly benefit from additional and necessary athletic space. We need fields adjacent to the campus. This would increase safety and, would likely increase participation. also increase space within the facility fieldhouse for indoor sports and activities

(1) - ROOFS, UNDERGROUND, Wherever !!
- Over the Library for studio space?

The second Blue Sky idea is an integrated interdisciplinary layout. This would

(2) capitalize on the CTE program and provide authentic learning with hands on applications. Integrating STEAM, STREAM or whatever will be a great benefit

(3) Create retail space for the CTE programs open to the public: Culinary, Cosmetology, Graphics, possible banking, dental, etc. would be a tremendous asset for the community

also - public access for auditorium, Field House and retail space would be helpful.

(4) GREEN, GREEN and GREENER
→ Greenhouses, recycling, urban farming.

Blue Sky Ideas for SHS

Be opportunistic about Union Sq. development, multiple old city/school buildings in meeting all educ. needs

I like the idea of having this process/project expand the concept of having the city be the campus with SHS as the hub. Not everything has to be in one building.

- light blue ceilings in classrooms/inside spaces → message = sky's the limit
- lots of natural light with blinds/options to add privacy + darker areas
- pool + gym that community can also use
- Combine SHS project w/ public library space next door + Cummings school 2 blocks away. City Hall? Green line stop?
- Space for New Wave/Full Circle? Admin. staff? SCALE adult ed.?
- like the example of a vertical STEM/STEAM dept.
- outdoor space ~ for learning, moving
- dental clinic
- Showcase CTE for public - easy access to shops - automotive, cafe, salon...
- like the examples of some furniture w/ wheels locked storage
- bike racks
- I second a greenhouse
- make good use of roof

Margaret DePasquale.

Blue Sky Idea

Next Wave Jr. high + Full Circle High School

- Welcoming entrance - main office Right when you enter the building
- large classrooms that allow for group work, individual stations + opportunities to move
- Cafe Styled lunchroom - ~~w/ good~~ w/ soft lighting + quiet spaces
- Counseling offices + time out space close by each other. - soft lighting
- lots of natural light in all classrooms + offices
- [redacted]
- easy to move furniture.
- wireless - One to one student devices (chromebooks ipad, laptops)
- gym that can host basketball games for Alt. School bball league
- Outdoor Spaces - each classroom opens to an outdoor space
- ~~Computer~~ Science Lab for middle School
  Science Lab for High School.
- Breakout spaces outside Class Rooms - with Sightlines
- Common area for middle school students
- ~~Com~~ Separate Common area for H.S. Students.

Blue Sky Idea

* Support Services wing/center that includes all school counselor offices, spaces for meetings, spaces for groups (counseling groups), spaces for mental health or college/career partnerships, College/career center w/ computers + technology, nurses?, tutoring, etc. A place where support services staff can collaborate. A place where students can go for support/help.

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* Space for.
* Collaboration btwn CTE + the community.

Providing space + equipment to companies to train their employees, providing post grad learning through CTE + in return companies provide internships

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* ~~*~~

most of the
A way to have students on computers at the same time. More technology in more spaces!

Space Summaries

Proposed Space Summary - Somerville High School - Addition / Renovation

2/22/2016: PDP

Somerville High School	Existing Conditions			PROPOSED									Ch. 74 Requirements	MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)			
				Existing to Remain/Renovated			New			Total							
ROOM TYPE	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals		ROOM NFA[1]	# OF RMS	area totals	Comments
CORE ACADEMIC SPACES			**59,494**			**28,900**			**40,680**			**69,580**				**68,170**	# of RMS based on FTE Students w/o NWFC
Classroom - General	varies	54	34,794	850	24	20,400	850	18	15,300	850	42	35,700		850	47	39,950	825 SF min - 950 SF max
Classroom - ESL	varies	5	4,286	850	3	2,550	0	0	-	850	3	2,550					
Teacher Planning	varies	12	3,389	850	5	4,250	0	0	-	850	5	4,250		100	47	4,700	
Small Group Seminar (20-30 seats)				425	4	1,700	0	0	-	425	4	1,700		500	4	2,000	
Large Group Instruction (80-100 seats)							1,800	1	1,800	1,800	1	1,800					
Lecture Hall/Mini-Theater (200 seats)							2,600	1	2,600	2,600	1	2,600					
Science Classroom / Lab	varies	13	12,339	1,440	0	-	1,440	12	17,280	2,880	12	17,280		1,440	13	18,720	3 x85% ut=20 Seats-1 per /day/student
Prep Room	varies	8	1,633	200	0	-	200	12	2,400	400	6	2,400		200	13	2,600	
Central Chemical Storage Rm	105	1	105				200	1	200	200	1	200		200	1	200	
Computer Labs	varies	3	1,998														
Language Lab	950	1	950				1,100	1	1,100	1,100	1	1,100					
SPECIAL EDUCATION			**5,282**			**3,409**			**16,550**			**19,959**				**16,110**	# of RMS based on Total Student Population w/ NWFC
Self-Contained SPED	*see below*													950	11	10,450	assumed 8% of pop. in self-contained SPED
Self-Contained SPED Toilet							60	2	120	60	2	120		60	11	660	
Life Skills Classroom	981	1	981				1,500	1	1,500	1,500	1	1,500					
Shared Kitchenette							200	1	200	200	1	200					
"SHIP" Medically Fragile Student Classroom	1,175	1	1,175				1,500	1	1,500	1,500	1	1,500					
ASD Classroom w/ Breakout - Severe							850	1	850	850	1	850					
Quiet Room							150	1	150	150	1	150					
ASD Classroom w/ Breakout - Moderate							850	1	850	850	1	850					
Study Skills Classroom							425	1	425	425	1	425					
Therapeutic Classroom							425	1	425	425	1	425					
PT/OT/Speech Sensory Room							425	1	425	425	1	425					
Transition Skills Classroom *(for 18-22 year old students)*	297	1	297				425	1	425	425	1	425					
Resource Room	varies	3	1,835				425	4	1,700	425	4	1,700		500	5	2,500	1/2 size Genl. Clrm.
Small Group Room	150	1	150				425	4	1,700	425	4	1,700		500	5	2,500	1/2 size Genl. Clrm.
SPED Office - Adj Counselor	varies	3	358				200	3	600	200	3	600					
SPED Office - Department Head							150	1	150	150	1	150					
SPED Office - Workroom	486	1	486				425	1	425	425	1	425					
Next Wave/Full Circle Program																	
FC Classrooms				425	4	1,700	425	4	1,700	425	8	3,400					
NW Classrooms							425	4	1,700	425	4	1,700					
NWFC Reception				400	1	400				400	1	400					
NWFC Clinical Counselor Office				120	2	240	0	0	-	120	2	240					
NWFC Director Office				150	1	150	0	0	-	150	1	150					
NWFC Aide Workstation				54	1	54	0	0	-	54	1	54					
NWFC Crisis Counselor Office				120	2	240	0	0	-	120	2	240					
NWFC Nurse Station				200	1	200				200	1	200					
NWFC Conference Room (20 seats)				425	1	425				425	1	425					
NWFC Student Shop							600	1	600	600	1	600					
NWFC Kitchenette				0	0	-	200	1	200	200	1	200					
NWFC Commons				0	0	-	425	1	425	425	1	425					
Self-Contained SPED Toilet							60	8	480	60	8	480		60	0	-	
											NWFC Subtotal:	8,034					

Somerville High School	Existing Conditions			PROPOSED											MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)				
				Existing to Remain/Renovated			New			Total			Ch. 74 Requirements						
ROOM TYPE	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	No. Students	Ch.74 sf /Student	ROOM NFA[1]	# OF RMS	area totals	Comments
ART & MUSIC			**9,335**			**0**			**11,120**			**11,120**					**8,275**	# of RMS based on FTE Students w/o NWFC
Art Classroom - 25 seats	varies	3	2,769				1,440	2	2,880	1,440	2	2,880			1,200	3	3,600	Assumed use - 25% Population - 5 times/week
Art Workroom w/ Storage & kiln	varies	2	345				100	2	200	100	2	200			150	3	450	
Art Computer Lab	varies	2	1,712				1,440	1	1,440	1,440	1	1,440						
Photography / Dark Room	491	1	491				1,000	1	1,000	1,000	1	1,000						
Band - 50 - 100 seats	1,163	1	1,163				1,500	1	1,500	1,500	1	1,500			1,500	1	1,500	Assumed use - 25% Population - 5 times/week
Orchestra - 75 seats	883	1	883				2,250	1	2,250	2,250	1	2,250						
Chorus - 50 - 100 seats	918	1	918				1,350	1	1,350	1,350	1	1,350			1,500	1	1,500	
Ensemble							200	1	200	200	1	200			200	1	200	
Music Practice	varies	2	150				75	4	300	75	4	300			75	7	525	
Music Storage	varies	9	904				425	0	-	425	0	-			500	1	500	
VOCATIONS & TECHNOLOGY			**51,100**			**39,075**			**23,265**			**63,190**					**70,600**	# of non-Ch.74 RMS based on FTE Students w/o NWFC
Chapter 74 Vocational Spaces																		
Automotive Technology	6,398	1	6,398	0	0	-	5,000	1	5,000	5,000	1	5,000	50	275	6,875	1	6,875	4,125 DESE Shop Min. Area
Barbering				1,875	1	1,875	0	0	-	1,875	1	1,875	30	150	1,875	1	1,875	1,875 DESE Shop Min. Area
Carpentry	4,765	1	4,765	5,000	1	5,000	0	0	-	5,000	1	5,000	50	225	5,625	1	5,625	3,375 DESE Shop Min. Area
Cosmetology	2,346	1	2,346	2,500	1	2,500	0	0	-	2,500	1	2,500	50	150	3,750	1	3,750	1,875 DESE Shop Min. Area
Culinary Arts (new restaurant space)	6,076	1	6,076	4,785	1	4,785	1,465	1	1,465	6,250	2	6,250	50	125	3,125	1	3,125	1,875 DESE Shop Min. Area
Dental Assisting	1,671	1	1,671	1,875	1	1,875	0	0	-	1,875	1	1,875	30	125	1,875	1	1,875	1,875 DESE Shop Min. Area
Drafting	724	1	724				2,000	1	2,000	2,000	1	2,000	30	110	2,200	1	2,200	2,200 DESE Shop Min. Area
Early Education and Care	832	1	832	1,500	1	1,500	0	0	-	1,500	1	1,500	30	75	1,500	1	1,500	1,500 DESE Shop Min. Area
Electricity	2,412	1	2,412	4,540	1	4,540	0	0	-	4,540	1	4,540	50	225	5,625	1	5,625	3,375 DESE Shop Min. Area
Graphic Communications	4,849	1	4,849	0	0	-	3,000	1	3,000	3,000	1	3,000	40	150	3,000	1	3,000	2,250 DESE Shop Min. Area
Health Assisting	2,364	1	2,364	0	0	-	2,400	1	2,400	2,400	1	2,400	40	125	2,500	1	2,500	1,875 DESE Shop Min. Area
HVAC				4,500	1	4,500				4,500	1	4,500	30	200	4,000	1	4,000	4,000 DESE Shop Min. Area
Information Support Services & Networking	2,189	1	2,189	2,200	1	2,200	0	0	-	2,200	1	2,200	30	110	2,200	1	2,200	2,200 DESE Shop Min. Area
Machine Tool Technology	3,398	1	3,398	3,400	1	3,400				3,400	1	3,400	30	200	3,000	1	3,000	3,000 DESE Shop Min. Area
Medical Laboratory Technology				0	0	-	2,400	1	2,400	2,400	1	2,400	40	110	2,200	1	2,200	2,200 DESE Shop Min. Area
Metal Fabrication & Joining Technologies	4,027	1	4,027	4,000	1	4,000				4,000	1	4,000	30	200	3,000	1	3,000	3,000 DESE Shop Min. Area
Plumbing				2,500	1	2,500				2,500	1	2,500	30	150	2,250	1	2,250	2,250 DESE Shop Min. Area
Auto Body *(non-active program)*	1,517	1	1,517															
Vocational Classrooms (incl above)																		
Vocational Offices (incl above)																		
Vocational Storage (incl above)																		
												54,940	**640**				**54,600**	Chapter 74 sub-totals
Academic Technology Spaces																		
Tech Clrm. - (E.G. Drafting, Business)															1,200	5	6,000	Assumed use - 50% Population - 5 times/week
Tech Shop - (E.G. Consumer, Wood)															2,000	5	10,000	Assumed use - 50% Population - 5 times/week
TV/Media Computer Lab	957	1	957				1,200	1	1,200	1,200	1	1,200						
Business Computer Lab	903	1	903				1,000	1	1,000	1,000	1	1,000						
Broadcast Room	354	1	354				1,200	1	1,200	1,200	1	1,200						
TV Studio Control Booth							200	1	200	200	1	200						
Family & Consumer Science Lab	884	1	884				1,600	1	1,600	1,600	1	1,600						
Fabrication Lab/Engineering & STEAM/Robotics Lab	3,659	1	3,659				1,800	1	1,800	1,800	1	1,800						
Technical Career Resource Center	775	1	775				850	1	850	850	1	850						
Storage				400	1	400	0	0	-	400	1	400						
			7,532									**8,250**					**16,000**	non-Chapter 74 sub-totals

Version 11.24.2010

Somerville High School	Existing Conditions			PROPOSED: Existing to Remain/Renovated			PROPOSED: New			PROPOSED: Total			Ch. 74 Requirements	MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)			
ROOM TYPE	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals		ROOM NFA[1]	# OF RMS	area totals	Comments
HEALTH & PHYSICAL EDUCATION			**37,772**			**37,479**			**2,500**			**39,979**				**24,684**	Locker Rooms based on Total Student Population w/o NWFC
Gymnasium	25,779	1	25,779	25,779	1	25,779				25,779	1	25,779		12,000	1	12,000	
Elevated Walking Track																	
PE Alternatives	varies	2	2,439	2,500	1	2,500	2,500	1	2,500	varies	2	5,000		3,000	1	3,000	
Fitness Room																	
Multi-Purpose Studio (dance, wrestling, aerobics, etc)																	
Gym Storeroom	varies	6	1,698	varies	1	800				varies	1	800		300	1	300	
Locker Rooms - Boys / Girls w/ Toilets	varies	3	4,199	3,000	2	6,000	0	0	-	varies	2	6,000		8,484	1	8,484	5.6 sf/student total
Phys. Ed. Storage	varies	4	1,676	varies	1	500				varies	1	500		500	1	500	
Athletic Director's Office	300	1	300	300	1	300				300	1	300		150	1	150	
Athletic Storage	899	1	899	800	1	800				800	1	800					
Health Instructor's Office w/ Shower & Toilet	varies	4	472	250	2	500				varies	2	500		250	1	250	
Trainer's Office	310	1	310	300	1	300				300	1	300					
MEDIA CENTER			**9,792**			**0**			**7,500**			**7,500**				**8,714**	Media Center size based on FTE Students w/o NWFC
Media Center / Reading Room	varies	8	8,865				7,500	1	7,500	7,500	1	7,500		8,714	1	8,714	
Computer Lab	927	1	927														
AUDITORIUM / DRAMA			**13,805**			**10,800**			**-**			**10,800**				**10,400**	Auditorium size based on Total Student Population w/o NWFC
Auditorium	11,304	1	11,304	7,500	1	7,500				7,500	1	7,500		7,500	1	7,500	2/3 Enrollment @ 10 SF/Seat - 750 seats MAX
Stage	984	1	984	2,000	1	2,000	0	0	-	2,000	1	2,000		1,600	1	1,600	
Auditorium Storage	1,046	1	1,046	500	1	500				500	1	500		500	1	500	
Make-up / Dressing Rooms	369	1	369	300	2	600				300	2	600		300	2	600	
Controls / Lighting / Projection	102	1	102	200	1	200				200	1	200		200	1	200	
Mini Theater(seats 200)							2,400	0	-	2,400	0	-					
Black Box Theater (seats 200)							2,400	0	-	2,400	0	-					
DINING & FOOD SERVICE			**12,821**			**4,638**			**7,500**			**12,138**				**12,148**	Cafeteria/Kitchen size based on Total Student Pop. w/o NWFC
Cafeteria / Student Lounge / Break-out	8,491	1	8,491				7,500	1	7,500	7,500	1	7,500		7,575	1	7,575	3 seatings - 15SF per seat
Chair / Table Storage				500	1	500	0	0	-	500	1	500		529	1	529	
Scramble Serving Area				600	1	600	0	0	-	600	1	600		600	1	600	
Kitchen	3,639	1	3,639	2,890	1	2,890	0	0	-	2,890	1	2,890		2,815	1	2,815	1600 SF for first 300 + 1 SF/student Add'l
Staff Lunch Room	691	1	691	648	1	648	0	0	-	648	1	648		629	1	629	20 SF/Occupant
MEDICAL			**597**			**1,310**			**-**			**1,310**				**1,310**	Sizes based on Total Student Population w/o NWFC
Medical Suite Toilet	46	1	46	60	1	60	0	0	-	60	1	60		60	1	60	
Nurses' Office / Waiting Room	427	1	427	350	1	350	0	0	-	350	1	350		250	1	250	
Interview Room	39	1	39	150	2	300	0	0	-	150	2	300		100	3	300	
Examination Room / Resting	43	2	85	100	6	600	0	0	-	100	6	600		100	7	700	

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ADMINISTRATION & GUIDANCE			**12,253**			**7,720**			**3,200**			**11,720**				**5,678**	Sizes based on Total Student Population w/o NWFC
General Office / Waiting Room / Toilet	varies	3	1,351	varies	3	1,000				varies	3	1,000		758	1	758	
Teachers' Mail and Time Room				100	1	100	0	0	-	100	1	100		100	1	100	
Duplicating Room				200	1	200	0	0	-	200	1	200		200	1	200	
Records Room	168	1	168	168	1	168				168	1	168		200	1	200	
Principal's Office w/ Conference Area	262	1	262	262	1	262				262	1	262		375	1	375	
Principal's Secretary / Waiting				125	1	125				125	1	125		125	1	125	
House Master's Suite - HM1 (Beacon House)	221	4	883		0	-	varies	5	800	varies	5	800		150	1	150	
House Master's Suite - HM2 (Elm House)	209	3	628		0	-	varies	5	800	varies	5	800		150	2	300	
House Master's Suite - HM3 (Highland House)	191	3	574		0	-	varies	5	800	varies	5	800					
House Master's Suite - HM4 (Broadway House)	204	3	612		0	-	varies	5	800	varies	5	800					
Supervisory / Spare Office	varies	10	1,373	varies	10	1,300				varies	10	1,300		120	1	120	
CTE Director Office Suite	varies	5	1,309							varies	5	800					
Conference Room	varies	2	650	450	1	450				450	1	450		450	1	450	
Guidance Office In HM Suite - (TBD)	varies	2	463							varies	0	-		150	8	1,200	
Guidance Waiting Room	527	1	527	527	1	527				527	1	527		100	1	100	
Guidance Storeroom	35	1	35	35	1	35				35	1	35		100	1	100	
Career Center	775	1	775	550	1	550				550	1	550		529	1	529	
Records Room				225	1	225				225	1	225		214	1	214	
Teachers' Work Room	715	1	715	850	1	850				850	1	850		758	1	758	
Mediation Waiting Room	180	1	180	180	1	180				180	1	180					
Mediation Room	380	1	380	380	1	380				380	1	380					
Mediation Office	222	1	222	222	1	222				222	1	222					
Welcome Center (ELL)	varies	4	1,146	varies	4	1,146				varies	4	1,146					
CUSTODIAL & MAINTENANCE			**13,338**			**2,561**			**500**			**3,061**				**2,818**	Sizes based on Total Student Population w/ NWFC
Custodian's Office	49	1	49	150	1	150	0	0	-	150	1	150		150	1	150	
Custodian's Workshop				250	1	250	0	0	-	250	1	250		250	1	250	
Custodian's Storage	2,466	1	2,466	375	1	375	0	0	-	375	1	375		375	1	375	
Recycling Room / Trash				400	1	400	0	0	-	400	1	400		400	1	400	
Receiving and General Supply	421	1	421	529	1	529	0	0	-	529	1	529		548	1	548	
Storeroom	varies	45	8,771	858	1	858	0	0	-	858	1	858		895	1	895	
Network / Telecom Room	varies	3	1,631				500	1	500	varies	1	500		200	1	200	
OTHER			**872**			**500**			**-**			**500**				**-**	
School Store	varies	2	706	400	1	400				400	1	400					
PTO Storage	166	1	166	100	1	100				100	1	100					
Sub-Total School Use Net Floor Area (NFA)			**226,461**			**136,392**			**112,815**			**250,857**				**228,906**	

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ROOM TYPE	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals		ROOM NFA[1]	# OF RMS	area totals	Comments
DPW Office & Storage			**3,993**						-			-					
Office Suite	1,783	1	1,783														
General Storage	2,210	1	2,210														
Somerville Child Care Center			**805**						-			-					
Classroom	640	1	640														
Education Lab																	
Office																	
Toilet Rooms	varies	2	165														
Somerville City Cable			**2,565**						-			-					
TV Studio	1,475	1	1,475														
Control Room	470	1	470														
Editing Room	210	1	210														
Repair Workroom	210	1	210														
Storage	100	2	200														
Cambridge Health Alliance (Teen Health Center)			**1,056**						-			-					
Waiting																	
Reception																	
Exam Room	120	2	240														
Office	85	6	510														
Break Room	90	1	90														
Storage	varies	3	216														
Sub-Total On-Site Auxiliary Net Floor Area (NFA)			**8,419**				**No New Net Floor Area for Existing On-Site Auxiliary is Included**										
Total Building Net Floor Area (NFA)			**234,880**			**136,392**			**112,815**			**250,857**				**228,906**	
Proposed Student Capacity / Enrollment			**1,237**									**1,515**			Total:	**1,515**	226
Academic Students			*893*									*1,096*			FTE:	**1,410**	FTE = Academic + Adjusted CTE/Academic
CTE Students (not including exploratory)			*344*									*419*					
CTE Students (including exploratory)			*521*									*640*			w/ NWFC Total:	**1,590**	Includes 75 NWFC Students
Exploratory Students			*177*									*221*					
Adjusted CTE Students w/ Academic Space Usage			*258*									*314*					
Total Building Gross Floor Area (GFA)[2]			**360,150**									**376,285**				**342,390**	
Grossing factor (GFA/NFA)			**1.53**									**1.50**				**1.50**	

[1] **Individual Room Net Floor Area (NFA)** Includes the net square footage measured from the inside face of the perimeter walls and includes all specific spaces assigned to a particular program area including such spaces as non-communal toilets and storage rooms.

[2] **Total Building Gross Floor Area (GFA)** Includes the entire building gross square footage measured from the outside face of exterior walls

Architect Certification

I hereby certify that all of the information provided in this "Proposed Space Summary" is true, complete and accurate and, except as agreed to in writing by the Massachusetts School Building Authority, in accordance with the guidelines, rules, regulations and policies of the Massachusetts School Building Authority to the best of my knowledge and belief. A true statement, made under the penalties of perjury.

Name of Architect Firm: Symmes, Maini & McKee Associates (SMMA)

Name of Principal Architect: Alex Pitkin, AIA

Signature of Principal Architect: _____

Date: _____

Version 11.24.2010

Proposed Space Summary - Somerville High School - All New Construction

2/25/2016: PDP

Somerville High School	Existing Conditions			PROPOSED									Ch. 74 Requirements	MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)			
				Existing to Remain/Renovated			New			Total							
ROOM TYPE	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals		ROOM NFA[1]	# OF RMS	area totals	Comments
CORE ACADEMIC SPACES			**59,494**			**0**			**69,580**			**69,580**				**68,170**	# of RMS based on FTE Students w/o NWFC
Classroom - General	varies	54	34,794				850	42	35,700	850	42	35,700		850	47	39,950	825 SF min - 950 SF max
Classroom - ESL	varies	5	4,286				850	3	2,550	850	3	2,550					
Teacher Planning	varies	12	3,389				850	5	4,250	850	5	4,250		100	47	4,700	
Small Group Seminar (20-30 seats)							425	4	1,700	425	4	1,700		500	4	2,000	
Large Group Instruction (80-100 seats)							1,800	1	1,800	1,800	1	1,800					
Lecture Hall/Mini-Theater (200 seats)							2,600	1	2,600	2,600	1	2,600					
Science Classroom / Lab	varies	13	12,339				1,440	12	17,280	1,440	12	17,280		1,440	13	18,720	3 x85% ut=20 Seats-1 per /day/student
Prep Room	varies	8	1,633				400	6	2,400	400	6	2,400		200	13	2,600	
Central Chemical Storage Rm	105	1	105				200	1	200	200	1	200		200	1	200	
Computer Labs	varies	3	1,998														
Language Lab	950	1	950				1,100	1	1,100	1,100	1	1,100					
SPECIAL EDUCATION			**5,282**			**0**			**19,959**			**19,959**				**16,110**	# of RMS based on Total Student Population w/ NWFC
Self-Contained SPED	*see below*													950	11	10,450	assumed 8% of pop. in self-contained SPED
Self-Contained SPED Toilet							60	2	120	60	2	120		60	11	660	
Life Skills Classroom	981	1	981				1,500	1	1,500	1,500	1	1,500					
Shared Kitchenette							200	1	200	200	1	200					
"SHIP" Medically Fragile Student Classroom	1,175	1	1,175				1,500	1	1,500	1,500	1	1,500					
ASD Classroom w/ Breakout - Moderate							850	1	850	850	1	850					
Quiet Room							150	1	150	150	1	150					
ASD Classroom w/ Breakout - Moderate							850	1	850	850	1	850					
Study Skills Classroom							425	1	425	425	1	425					
Therapeutic Classroom							425	1	425	425	1	425					
PT/OT/Speech Sensory Room							425	1	425	425	1	425					
Transition Skills Classroom *(for 18-22 year old students)*	297	1	297				425	1	425	425	1	425					
Resource Room	varies	3	1,835				425	4	1,700	425	4	1,700		500	5	2,500	1/2 size Genl. Clrm.
Small Group Room	150	1	150				425	4	1,700	425	4	1,700		500	5	2,500	1/2 size Genl. Clrm.
SPED Office - Adj Counselor	varies	3	358				200	3	600	200	3	600					
SPED Office - Department Head							150	1	150	150	1	150					
SPED Office - Workroom	486	1	486				425	1	425	425	1	425					
Next Wave/Full Circle Program																	
FC Classrooms							425	8	3,400	425	8	3,400					
NW Classrooms							425	4	1,700	425	4	1,700					
NWFC Reception							400	1	400	400	1	400					
NWFC Clinical Counselor Office							120	2	240	120	2	240					
NWFC Director Office							150	1	150	150	1	150					
NWFC Aide Workstation							54	1	54	54	1	54					
NWFC Crisis Counselor Office							120	2	240	120	2	240					
NWFC Nurse Station							200	1	200	200	1	200					
NWFC Conference Room (20 seats)							425	1	425	425	1	425					
NWFC Student Shop							600	1	600	600	1	600					
NWFC Kitchenette							200	1	200	200	1	200					
NWFC Commons							425	1	425	425	1	425					
Self-Contained SPED Toilet							60	8	480	60	8	480					
											NWFC Subtotal:	8,034					

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SHS Space Summary - All New SM

Proposed Space Summary - Somerville High School - All New Construction

2/25/2016: PDP

Somerville High School	Existing Conditions			PROPOSED											MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)				
				Existing to Remain/Renovated			New			Total									
ROOM TYPE	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	Ch. 74 Requirements		ROOM NFA[1]	# OF RMS	area totals	Comments
ART & MUSIC			**9,335**			**0**			**11,120**			**11,120**					**8,275**	# of RMS based on FTE Students w/o NWFC
Art Classroom - 25 seats	varies	3	2,769				1,440	2	2,880	1,440	2	2,880			1,200	3	3,600	Assumed use - 25% Population - 5 times/week
Art Workroom w/ Storage & kiln	varies	2	345				100	2	200	100	2	200			150	3	450	
Art Computer Lab	varies	2	1,712				1,440	1	1,440	1,440	1	1,440						
Photography / Dark Room	491	1	491				1,000	1	1,000	1,000	1	1,000						
Band - 50 - 100 seats	1,163	1	1,163				1,500	1	1,500	1,500	1	1,500			1,500	1	1,500	Assumed use - 25% Population - 5 times/week
Orchestra - 75 seats	883	1	883				2,250	1	2,250	2,250	1	2,250						
Chorus - 50 - 100 seats	918	1	918				1,350	1	1,350	1,350	1	1,350			1,500	1	1,500	
Ensemble							200	1	200	200	1	200			200	1	200	
Music Practice	varies	2	150				75	4	300	75	4	300			75	7	525	
Music Storage	varies	9	904				425	0	-	425	0	-			500	1	500	within music spaces
VOCATIONS & TECHNOLOGY			**51,100**			**0**			**63,190**			**63,190**	No. Students	Ch.74 sf /Student			**70,600**	# of non-Ch.74 RMS based on FTE Students w/o NWFC
Chapter 74 Vocational Spaces																		
Automotive Technology	6,398	1	6,398				5,000	1	5,000	5,000	1	5,000	50	275	6,875	1	6,875	4,125 DESE Shop Min. Area
Barbering							1,875	1	1,875	1,875	1	1,875	30	150	1,875	1	1,875	1,875 DESE Shop Min. Area
Carpentry	4,765	1	4,765				5,000	1	5,000	5,000	1	5,000	50	225	5,625	1	5,625	3,375 DESE Shop Min. Area
Cosmetology	2,346	1	2,346				2,500	1	2,500	2,500	1	2,500	50	150	3,750	1	3,750	1,875 DESE Shop Min. Area
Culinary Arts	6,076	1	6,076				6,250	1	6,250	6,250	1	6,250	50	125	3,125	1	3,125	1,875 DESE Shop Min. Area
Dental Assisting	1,671	1	1,671				1,875	1	1,875	1,875	1	1,875	30	125	1,875	1	1,875	1,875 DESE Shop Min. Area
Drafting	724	1	724				2,000	1	2,000	2,000	1	2,000	30	110	2,200	1	2,200	2,200 DESE Shop Min. Area
Early Education and Care	832	1	832				1,500	1	1,500	1,500	1	1,500	30	75	1,500	1	1,500	1,500 DESE Shop Min. Area
Electricity	2,412	1	2,412				4,540	1	4,540	4,540	1	4,540	50	225	5,625	1	5,625	3,375 DESE Shop Min. Area
Graphic Communications	4,849	1	4,849				3,000	1	3,000	3,000	1	3,000	40	150	3,000	1	3,000	2,250 DESE Shop Min. Area
Health Assisting	2,364	1	2,364				2,400	1	2,400	2,400	1	2,400	40	125	2,500	1	2,500	1,875 DESE Shop Min. Area
HVAC							4,500	1	4,500	4,500	1	4,500	30	200	4,000	1	4,000	4,000 DESE Shop Min. Area
Information Support Services & Networking	2,189	1	2,189				2,200	1	2,200	2,200	1	2,200	30	110	2,200	1	2,200	2,200 DESE Shop Min. Area
Machine Tool Technology	3,398	1	3,398				3,400	1	3,400	3,400	1	3,400	30	200	3,000	1	3,000	3,000 DESE Shop Min. Area
Medical Laboratory Technology							2,400	1	2,400	2,400	1	2,400	40	110	2,200	1	2,200	2,200 DESE Shop Min. Area
Metal Fabrication & Joining Technologies	4,027	1	4,027				4,000	1	4,000	4,000	1	4,000	30	200	3,000	1	3,000	3,000 DESE Shop Min. Area
Plumbing							2,500	1	2,500	2,500	1	2,500	30	150	2,250	1	2,250	2,250 DESE Shop Min. Area
Auto Body *(non-active program)*	1,517	1	1,517															
Vocational Classrooms (incl above)																		
Vocational Offices (incl above)																		
Vocational Storage (incl above)																		
												54,940	**640**				**54,600**	Chapter 74 sub-totals
Academic Technology Spaces																		
Tech Clrm. - (E.G. Drafting, Business)															1,200	5	6,000	Assumed use - 50% Population - 5 times/week
Tech Shop - (E.G. Consumer, Wood)															2,000	5	10,000	Assumed use - 50% Population - 5 times/week
TV/Media Computer Lab	957	1	957				1,200	1	1,200	1,200	1	1,200						
Business Computer Lab	903	1	903				1,000	1	1,000	1,000	1	1,000						
Broadcast Room	354	1	354				1,200	1	1,200	1,200	1	1,200						
TV Studio Control Booth							200	1	200	200	1	200						
Family & Consumer Science Lab	884	1	884				1,600	1	1,600	1,600	1	1,600						
Fabrication Lab/Engineering & STEAM/Robotics Lab	3,659	1	3,659				1,800	1	1,800	1,800	1	1,800						
Technical Career Resource Center	775	1	775				850	1	850	850	1	850						
Storage							400	1	400	400	1	400						
			7,532									**8,250**					**16,000**	non-Chapter 74 sub-totals

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SHS Space Summary - All New SM

Proposed Space Summary - Somerville High School - All New Construction

2/25/2016: PDP

Somerville High School	Existing Conditions			PROPOSED: Existing to Remain/Renovated			PROPOSED: New			PROPOSED: Total			Ch. 74 Requirements	MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)			
ROOM TYPE	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals		ROOM NFA[1]	# OF RMS	area totals	Comments
HEALTH & PHYSICAL EDUCATION			**37,772**			**0**			**32,050**			**32,050**				**24,684**	Locker Rooms based on Total Student Population w/o NWFC
Gymnasium	25,779	1	25,779				18,000	1	18,000	18,000	1	18,000		12,000	1	12,000	
Elevated Walking Track							5,000	0	-	5,000	0	-					
PE Alternatives	varies	2	2,439											3,000	1	3,000	
Fitness Room							2,500	1	2,500	2,500	1	2,500					
Multi-Purpose Studio (dance, wrestling, aerobics, etc)							2,500	1	2,500	2,500	1	2,500					
Gym Storeroom	varies	6	1,698				800	1	800	800	1	800		300	1	300	
Locker Rooms - Boys / Girls w/ Toilets	varies	3	4,199				3,000	2	6,000	3,000	2	6,000		8,484	1	8,484	5.6 sf/student total
Phys. Ed. Storage	varies	4	1,676				500	1	500	500	1	500		500	1	500	
Athletic Director's Office	300	1	300				150	1	150	150	1	150		150	1	150	
Athletic Storage	899	1	899				800	1	800	800	1	800					
Health Instructor's Office w/ Shower & Toilet	varies	4	472				250	2	500	250	2	500		250	1	250	
Trainer's Office	310	1	310				300	1	300	300	1	300					
MEDIA CENTER			**9,792**			**0**			**7,500**			**7,500**				**8,714**	Media Center size based on FTE Students w/o NWFC
Media Center / Reading Room	varies	8	8,865				7,500	1	7,500	7,500	1	7,500		8,714	1	8,714	
Computer Lab	927	1	927														
AUDITORIUM / DRAMA			**13,805**			**0**			**10,800**			**10,800**				**10,400**	Auditorium size based on Total Student Population w/o NWFC
Auditorium	11,304	1	11,304				7,500	1	7,500	7,500	1	7,500		7,500	1	7,500	2/3 Enrollment @ 10 SF/Seat - 750 seats MAX
Stage	984	1	984				2,000	1	2,000	2,000	1	2,000		1,600	1	1,600	
Auditorium Storage	1,046	1	1,046				500	1	500	500	1	500		500	1	500	
Make-up / Dressing Rooms	369	1	369				300	2	600	300	2	600		300	2	600	
Controls / Lighting / Projection	102	1	102				200	1	200	200	1	200		200	1	200	
Mini Theater (seats 200)							2,400	0	-	2,400	0	-					
Black Box Theater (seats 200)							2,400	0	-	2,400	0	-					
DINING & FOOD SERVICE			**12,821**			**0**			**12,138**			**12,138**				**12,148**	Cafeteria/Kitchen size based on Total Student Pop. w/o NWFC
Cafeteria / Student Lounge / Break-out	8,491	1	8,491				7,500	1	7,500	7,500	1	7,500		7,575	1	7,575	3 seatings - 15SF per seat
Chair / Table Storage							500	1	500	500	1	500		529	1	529	
Scramble Serving Area							600	1	600	600	1	600		600	1	600	
Kitchen	3,639	1	3,639				2,890	1	2,890	2,890	1	2,890		2,815	1	2,815	1600 SF for first 300 + 1 SF/student Add'l
Staff Lunch Room	691	1	691				648	1	648	648	1	648		629	1	629	20 SF/Occupant
MEDICAL			**597**			**0**			**1,310**			**1,310**				**1,310**	Sizes based on Total Student Population w/o NWFC
Medical Suite Toilet	46	1	46				60	1	60	60	1	60		60	1	60	
Nurses' Office / Waiting Room	427	1	427				350	1	350	350	1	350		250	1	250	
Interview Room	39	1	39				150	2	300	150	2	300		100	3	300	
Examination Room / Resting	43	2	85				100	6	600	100	6	600		100	7	700	

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SHS Space Summary - All New SM

Proposed Space Summary - Somerville High School - All New Construction

2/25/2016: PDP

Somerville High School	Existing Conditions			PROPOSED										MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)			
				Existing to Remain/Renovated			New			Total							
ROOM TYPE	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	Ch. 74 Requirements	ROOM NFA[1]	# OF RMS	area totals	Comments
ADMINISTRATION & GUIDANCE			**12,253**			**0**			**11,652**			**11,652**				**5,678**	Sizes based on Total Student Population w/o NWFC
General Office / Waiting Room / Toilet	varies	3	1,351				795	1	795	795	1	795		758	1	758	
Teachers' Mail and Time Room							100	1	100	100	1	100		100	1	100	
Duplicating Room							200	1	200	200	1	200		200	1	200	
Records Room	168	1	168				200	1	200	200	1	200		200	1	200	
Principal's Office w/ Conference Area	262	1	262				375	1	375	375	1	375		375	1	375	
Principal's Secretary / Waiting							125	1	125	125	1	125		125	1	125	
House Master's Suite - HM1 (Beacon House)	221	4	883				varies	5	800	varies	5	800		150	1	150	
House Master's Suite - HM2 (Elm House)	209	3	628				varies	5	800	varies	5	800		150	2	300	
House Master's Suite - HM3 (Highland House)	191	3	574				varies	5	800	varies	5	800					
House Master's Suite - HM4 (Broadway House)	204	3	612				varies	5	800	varies	5	800					
CTE Director Office Suite	varies	5	1,309				varies	5	800	varies	5	800					
Supervisory / Spare Office	varies	10	1,373				varies	10	1,300	varies	10	1,300		120	1	120	
Conference Room	varies	2	650				450	1	450	450	1	450		450	1	450	
Guidance Office	varies	2	463				150	2	300	150	2	300		150	8	1,200	
Guidance Waiting Room	527	1	527				100	1	100	100	1	100		100	1	100	
Guidance Storeroom	35	1	35				100	1	100	100	1	100		100	1	100	
Career Center	775	1	775				550	1	550	550	1	550		529	1	529	
Records Room							225	1	225	225	1	225		214	1	214	
Teachers' Work Room	715	1	715				850	1	850	850	1	850		758	1	758	
Mediation Waiting Room	180	1	180				180	1	180	180	1	180					
Mediation Room	380	1	380				380	1	380	380	1	380					
Mediation Office	222	1	222				222	1	222	222	1	222					
Welcome Center (ELL)	varies	4	1,146				1,200	1	1,200	1,200	1	1,200					
CUSTODIAL & MAINTENANCE			**13,338**			**0**			**3,061**			**3,061**				**2,818**	Sizes based on Total Student Population w/ NWFC
Custodian's Office	49	1	49				150	1	150	150	1	150		150	1	150	
Custodian's Workshop							250	1	250	250	1	250		250	1	250	
Custodian's Storage	2,466	1	2,466				375	1	375	375	1	375		375	1	375	
Recycling Room / Trash							400	1	400	400	1	400		400	1	400	
Receiving and General Supply	421	1	421				529	1	529	529	1	529		548	1	548	
Storeroom	varies	45	8,771				858	1	858	858	1	858		895	1	895	
Network / Telecom Room	varies	3	1,631				500	1	500	varies	1	500		200	1	200	
OTHER			**872**			**-**			**500**			**500**				**-**	
School Store	varies	2	706				400	1	400	400	1	400					
PTO Storage	166	1	166				100	1	100	100	1	100					
Sub-Total School Use Net Floor Area (NFA)			**226,461**			**0**			**242,860**			**242,860**				**228,906**	

Proposed Space Summary - Somerville High School - All New Construction

2/25/2016: PDP

Somerville High School	Existing Conditions			PROPOSED											MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)				
				Existing to Remain/Renovated			New			Total									
ROOM TYPE	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	Ch. 74 Requirements	ROOM NFA[1]	# OF RMS	area totals	Comments
DPW Office & Storage			**3,993**						-			**-**					
Office Suite	1,783	1	1,783														
General Storage	2,210	1	2,210														
Somerville Child Care Center			**805**						-			**-**					
Classroom	640	1	640														
Education Lab																	
Office																	
Toilet Rooms	varies	2	165														
Somerville City Cable			**2,565**						-			**-**					
TV Studio	1,475	1	1,475														
Control Room	470	1	470														
Editing Room	210	1	210														
Repair Workroom	210	1	210														
Storage	100	2	200														
Cambridge Health Alliance (Teen Health Center)			**1,056**						-			**-**					
Waiting																	
Reception																	
Exam Room	120	2	240														
Office	85	6	510														
Break Room	90	1	90														
Storage	varies	3	216														
Sub-Total On-Site Auxiliary Net Floor Area (NFA)			**8,419**				**No New Net Floor Area for Existing On-Site Auxiliary is Included**										
Total Building Net Floor Area (NFA)			**234,880**									**242,860**				**228,906**	
Proposed Student Capacity / Enrollment			**1,237**									**1,515**			Total:	**1,515**	226
Academic Students			*893*									*1,096*			FTE:	**1,410**	FTE = Academic + Adjusted CTE/Academic
CTE Students (not including exploratory)			*344*									*419*					
CTE Students (including exploratory)			*521*									*640*			w/ NWFC Total:	**1,590**	includes 75 NWFC Students
Exploratory Students			*177*									*221*					
Adjusted CTE Students w/ Academic Space Usage			*258*									*314*					
Total Building Gross Floor Area (GFA)[2]			**360,150**									**364,290**				**342,390**	
Grossing factor (GFA/NFA)			**1.53**									**1.50**				**1.50**	

[1] **Individual Room Net Floor Area (NFA)** Includes the net square footage measured from the inside face of the perimeter walls and includes all specific spaces assigned to a particular program area including such spaces as non-communal toilets and storage rooms.

[2] **Total Building Gross Floor Area (GFA)** Includes the entire building gross square footage measured from the outside face of exterior walls

Architect Certification

I hereby certify that all of the information provided in this "Proposed Space Summary" is true, complete and accurate and, except as agreed to in writing by the Massachusetts School Building Authority, in accordance with the guidelines, rules, regulations and policies of the Massachusetts School Building Authority to the best of my knowledge and belief. A true statement, made under the penalties of perjury.

Name of Architect Firm: Symmes, Maini & McKee Associates (SMMA)

Name of Principal Architect: Alex Pitkin, AIA

Signature of Principal Architect: _____

Date: _____

Version 11.24.2010

SHS Space Summary - All New SM

SMMA

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