



LESTER J GATES MIDDLE S

2018 A4LE James D. MacConnell Award

Lester J. Gates Middle School

Scituate Public Schools | Scituate, Massachusetts



Executive Summary  
Goals & Objectives

A New Vision

When Scituate Public Schools embarked on their journey to repair or replace their aging intermediate school, there was uncertainty about where that journey would take them. Ultimately, they developed both a new educational vision and a future-ready facility to support it.

*Transition to a project-based learning approach where teachers and students are highly engaged in interdisciplinary, real-world experiences that promote collaboration, communication, higher-order thinking, and creative problem solving.*



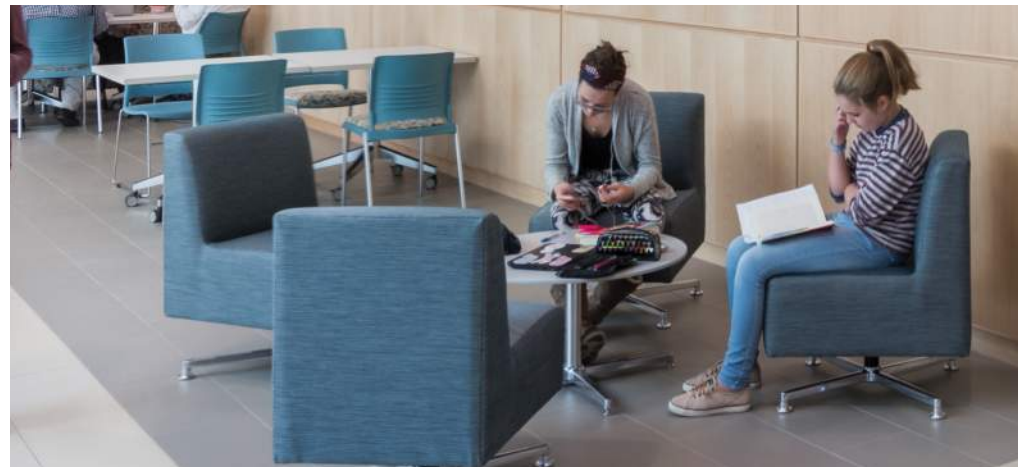
**GOAL**  
Support and Enable  
Project-based Learning





## Students First

While projects of this size tend to have hundreds of competing interests, the school district made it clear from the beginning that the decision-making process would put student needs first. As evidence of that, this project acknowledges and supports students' individual learning preferences. Rather than prioritizing control and teacher ownership, where the learning experience is the same for every student, learning studios and breakout spaces are designed to offer students the opportunity to choose a or customize an environment to meet their individual needs. Similarly, rather than a single type of furniture in every learning space, which is easier to maintain and often less expensive to purchase, students have a wide range of choices.







## Executive Summary Goals & Objectives

### Flexibility

This project exhibits flexibility at every scale. Furniture was chosen to be light, mobile, and height-adjustable to create minute-to-minute flexibility. Openings between spaces and a wide variety of space types allow for flexibility in group sizes, from the individual learner in a cave space to small and classroom-sized groups,

multi-class groupings, and entire grade level groupings. Even the moment frame structural system was selected to create the greatest flexibility possible to reshape the interior over the long-term life-expectancy of the building.



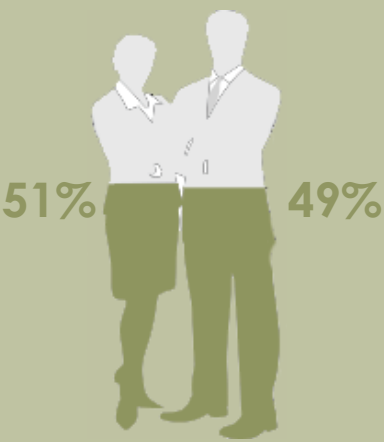


# School & Community Engagement

## Community Profile

Scituate, Massachusetts is a seacoast community approximately thirty miles southeast of downtown Boston with a total population of approximately 18,600. Scituate Public Schools serve approximately 3,000 children in grades Pre-K through 12th grade in four elementary schools, one middle school, and one high school.

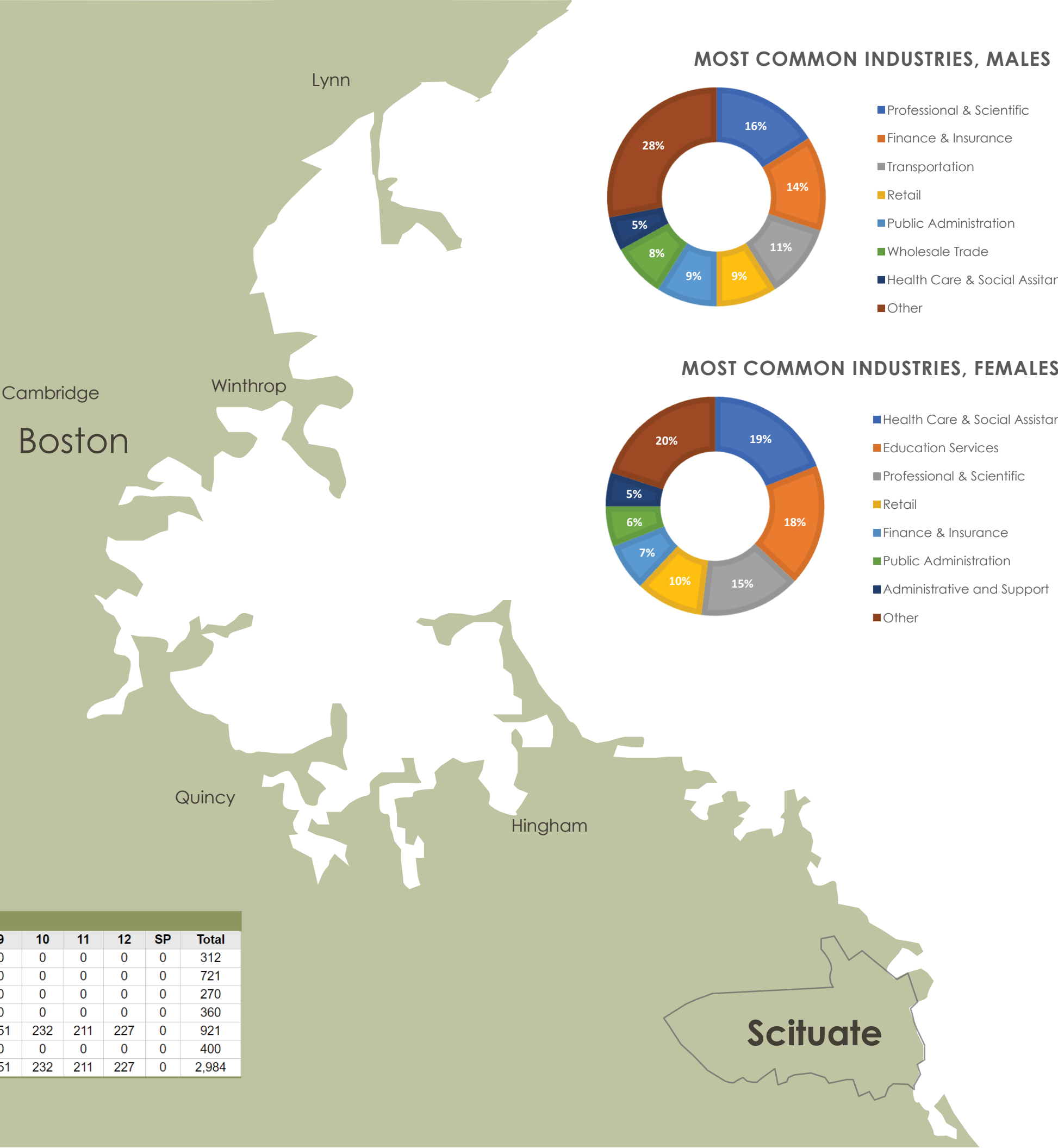
Scituate could be described as a typical seacoast town with median household incomes and home values above the state average. The most common occupations among men living in Scituate include sales, management, and financial operations. Women who live in Scituate serve in those same occupations, but also serve in health care and educational sectors.



Gender



Home Value



Enrollment by Grade (2017-18)																
	PK	K	1	2	3	4	5	6	7	8	9	10	11	12	SP	Total
Cushing Elementary	0	52	56	53	48	50	53	0	0	0	0	0	0	0	0	312
Gates Middle School	0	0	0	0	0	0	0	234	217	270	0	0	0	0	0	721
Hatherly Elementary	0	38	35	48	49	51	49	0	0	0	0	0	0	0	0	270
Jenkins Elementary School	0	65	47	53	57	60	78	0	0	0	0	0	0	0	0	360
Scituate High School	0	0	0	0	0	0	0	0	0	0	251	232	211	227	0	921
Wampatuck Elementary	76	56	55	57	63	44	49	0	0	0	0	0	0	0	0	400
District	76	211	193	211	217	205	229	234	217	270	251	232	211	227	0	2,984



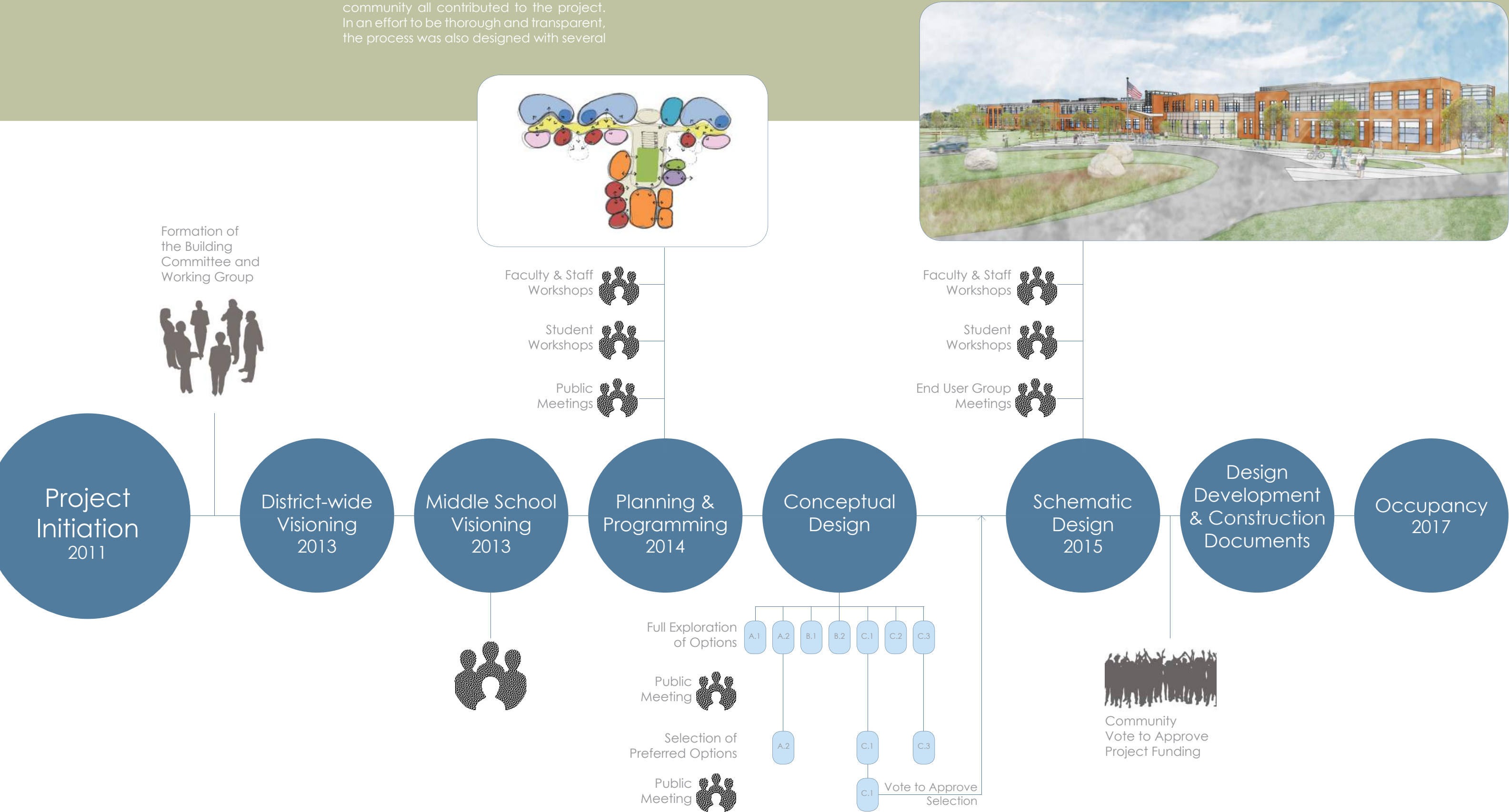
# School & Community Engagement

## Overall Process

The overall process was developed to engage the widest range of participants possible. While the process was directed by a School Building Committee and a Working Group created by the School Committee - students, parents, faculty and staff, administrators, local boards and commissions, and members of the local community all contributed to the project. In an effort to be thorough and transparent, the process was also designed with several

moments where it engaged the broader local community to weigh in on issues prior to formal decisions being made.

As a result of the process, a community who had not engaged in a building project of this size since the 1970s, successfully voted to fund the project in January of 2015.







## School & Community Engagement

### Visioning

A first set of district-wide workshops invited parents, students, teachers, administrators, and business leaders to help define the future of school in Scituate.

A second set of more grade-level-specific visioning workshops invited local stakeholders to explore issues that would ultimately inform the project.

#### Summer 2013 District-wide Visioning

- Educational Delivery Strategies
- Grade Configurations
- School Size
- School Count

#### Fall 2013 MS Visioning

- Project-Based Learning
- School Organization
- Grade Reconfiguration
- Facilities Impact





## School & Community Engagement

### Visioning

Student participation was the real strength of the visioning process. Their desire for change and excitement for authentic, real-world learning experiences were instrumental in shaping the educational direction.

These early visioning workshops resulted in several overarching guiding principles that informed the project from inception to occupancy:

### Outcomes



Project-based Learning as Primary Educational Delivery Strategy

Student-centric Decision-making Process

Highly Flexible Design

Interdisciplinary Grade Level Teams

Ubiquitous Access to Technology for both Faculty and Students

Exhibition of Student Work

School-within-school Concept: Middle School Attached to the Existing High School



## School & Community Engagement

### Planning & Programming

End user workshops helped the design team translate the educational objectives into actionable planning principles.

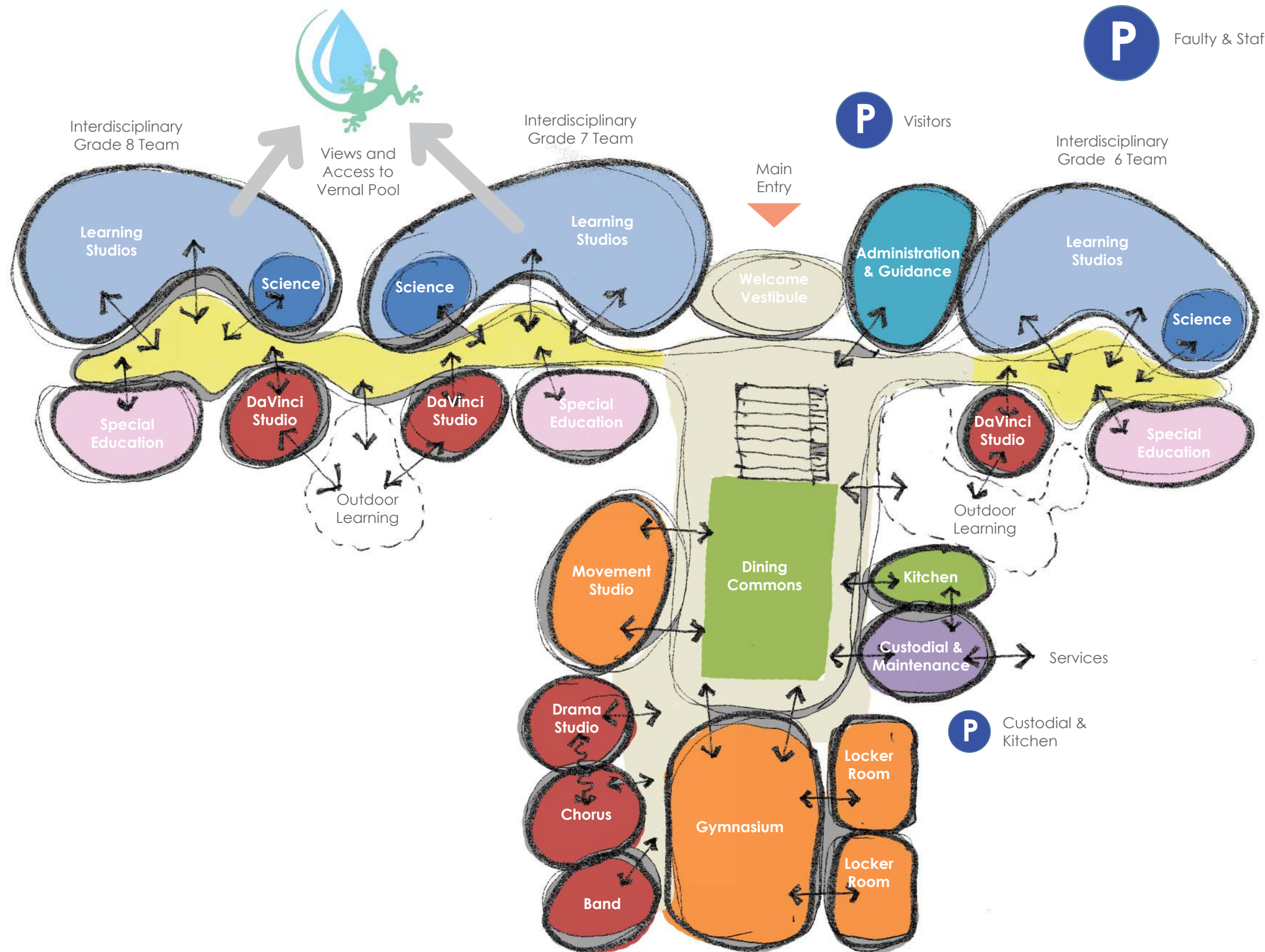
Organize the building into six, interdisciplinary grade level teams.

Position grade six to both feel like part of the whole AND to have enough separation to be experienced as a transitional year from elementary school.

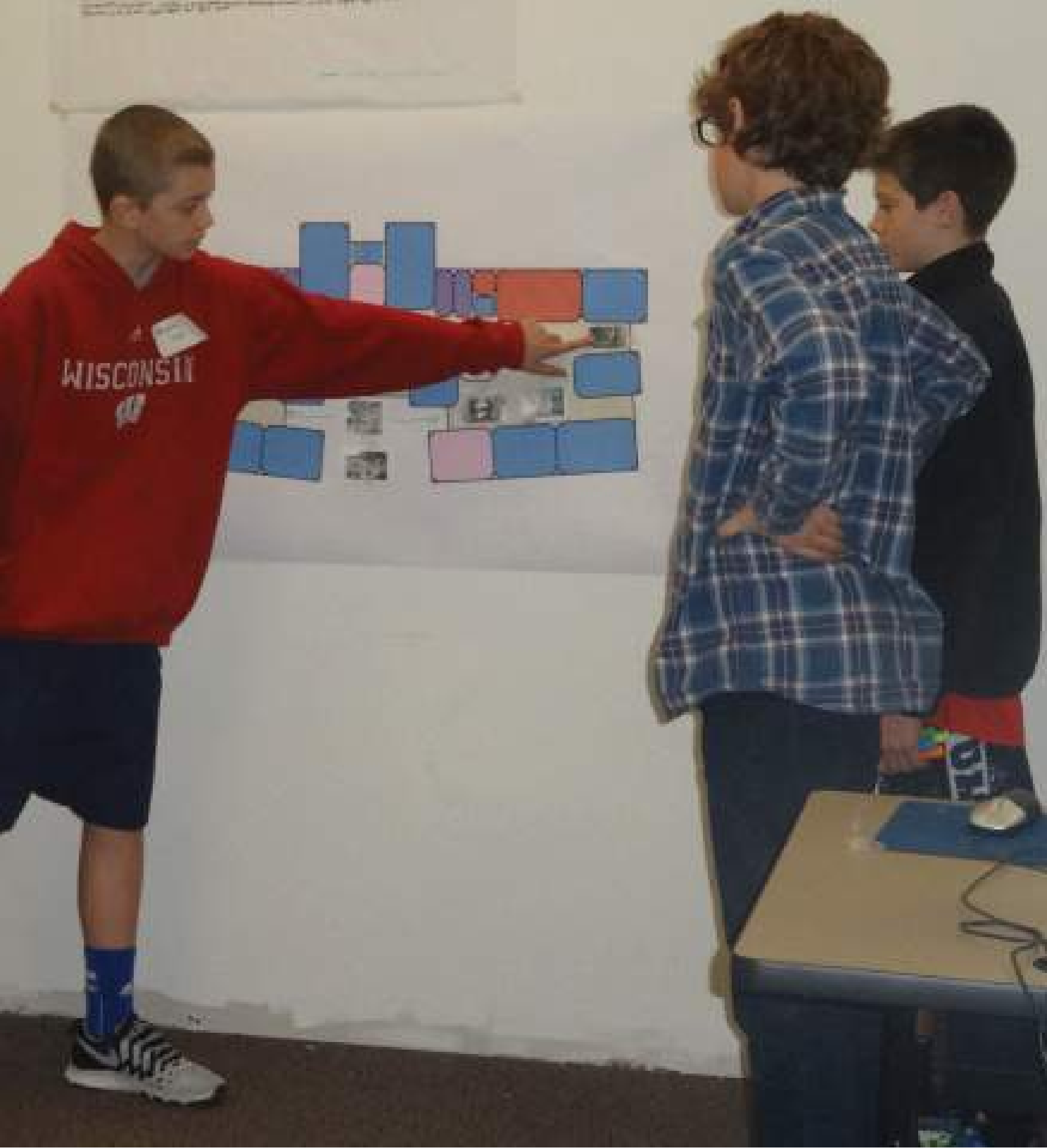
Distribute both the Library/Media Center square footage and print collection among the grade level teams to provide access to tools and resources at arms reach rather than as a destination.

Re-imagine the student dining experience to be multi-faceted and at the heart of the school.

Create new outdoor learning areas and provide access to the existing vernal pool as extensions of the learning environment.







## School & Community Engagement

### Planning & Programming

The design team continually leaned on students to develop student-centric design concepts. In the workshop depicted in this image, a group of 7th graders present their preferences for internal spatial relationships, locations for interior glazing and doors, and their vision for a series of cave spaces where an individual student or pair of students could retreat to read silently, work alone on a laptop, or otherwise have heads down time away from larger groupings.

They accomplished this work by leveraging several tools provided by the design team, including:

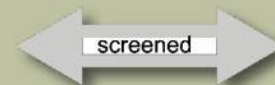
- Scaled bubble diagrams of a grade level team
- Symbols depicting door connections, interior view connections, and scaled furnishings
- A stack of inspirational imagery to help them explain their vision.

In addition to the concept of the cave space, these students' contributions informed the final design in two other key ways:

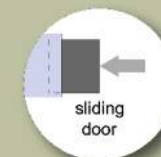
**Sliding pocket doors to both control the size of the opening and maximize usable vertical surfaces.**

**Learning Studios with different personalities (not every learning studio should be the same). Each should have different tools and resources. Each should have different levels of view to the Media Commons.**

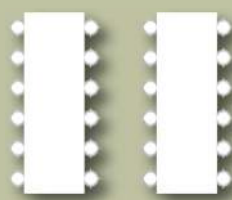
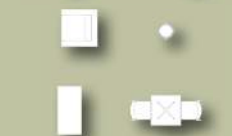
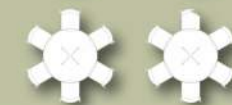
#### Connections



#### Openings



#### Furnishings





Educational  
Environment

Vision & Goals

The educational environment for Gates Middle School was created to be a departure from the traditional. The images on this page depict several supplemental learning areas that exist as part of each grade level team.

1 Media Commons

This project has no conventional centralized media center. Instead, the media center's square footage is distributed among the grade level teams to position its tools and resources at arms reach from students and teachers rather than as a destination. Within each of these media commons, students can work at tables and chairs, on low soft finishings, in what student's call the fish bowls (small group rooms with conference tables and interactive digital display technology), or carve out a quiet spot in a cave space overlooking the Arts plaza.

2 Drop-In Presentation

Public speaking is an important part of the district's curriculum across all disciplines. A zone of each media commons has a drop-in pin-up area where students can practice their public speaking skills with a small group of their peers.

3 Exhibition Space

In addition to the media commons, the educational environment celebrates student work in two key ways. First, the building itself acts as a gallery of curated student work. Two and three dimensional projects are proudly hung throughout. Second, the building has been designed with an exhibition space intended to provide a place for students to orally and visually present their work to a group of about thirty outside experts, their parents, or their peers. This space is outfitted with interactive flat panel displays, dry erase surface, and pin-up surface. Having such presentation space honors student work in a way that pinning it up or presenting it in a general classroom just never can.



Strategic interior glazing allows for the passive supervision of supplemental learning spaces. From any of the learning studios, a teacher has views into all supplemental spaces.





## Educational Environment

# Supporting the Curriculum

Scituate's new vision for educational delivery focuses on teachers working together to create authentic, project-based, and interdisciplinary lessons. Math teachers and science teachers collaborate on lessons that combine scientific observation and data gathering with graphing of data and searching for trends. English teachers and art teachers collaborate to illustrate children's books. As a result, the composition of grade level teams and the individual features of the learning studios became critical.

### Learning Studio, Type 1

- Moderately extroverted - medium interior transparency w/ views of media commons, small group room, drop-in presentation area, and window seat
- Connected internally to Type 2 with folding acoustical partition

### Learning Studio, Type 2

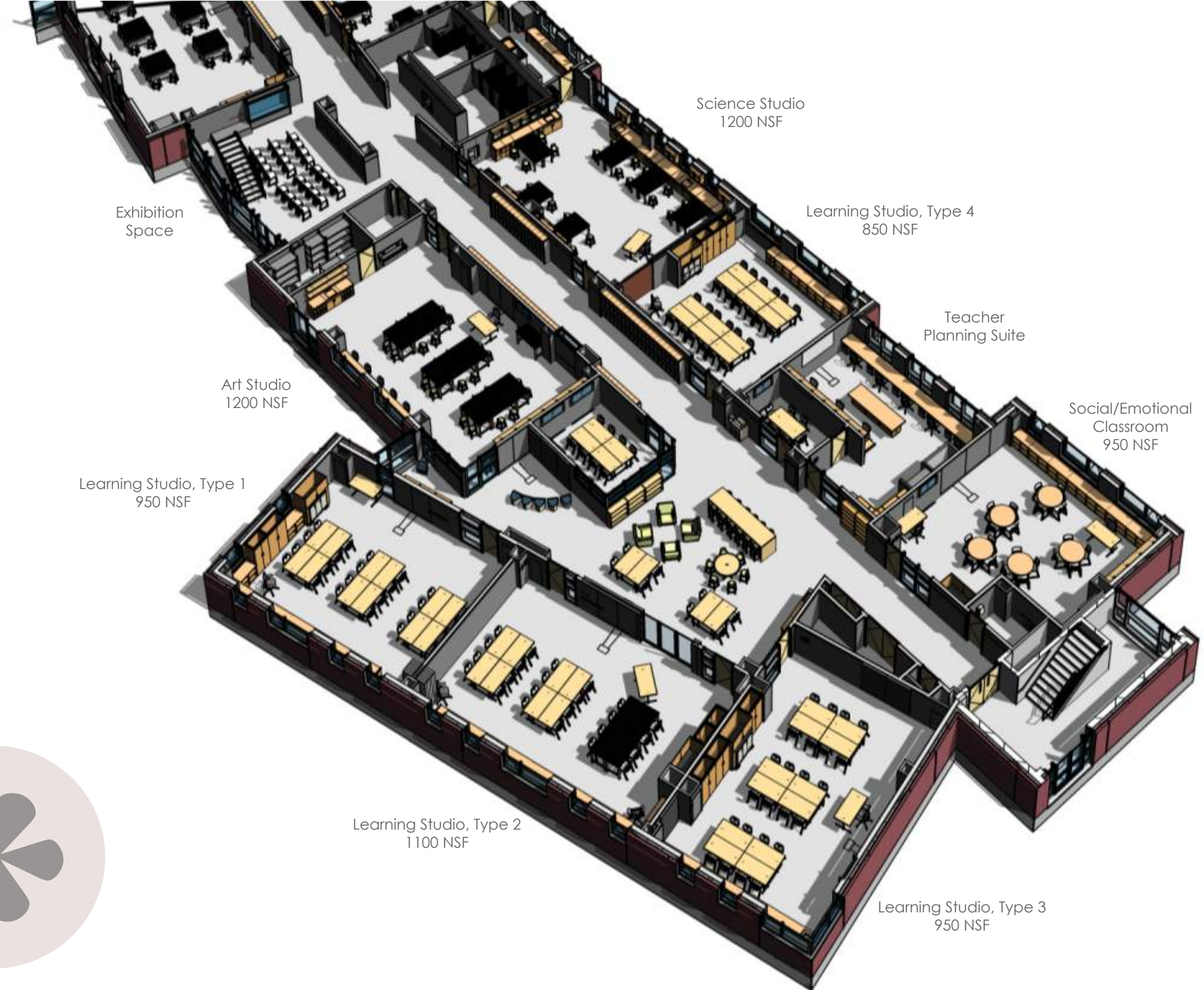
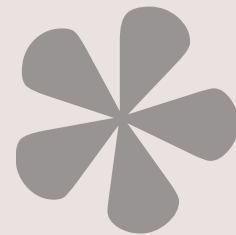
- Extroverted - maximum interior transparency w/ views of media commons, small group room, drop-in presentation area
- Connected internally to Type 1 with folding acoustical partition and to media commons with 10'-wide sliding glazed pocket door

### Learning Studio, Type 3

- Introverted - minimum interior transparency w/ views of media commons, small group room, drop-in presentation area, and window seat

### Learning Studio, Type 4

- Moderately introverted - minimum interior transparency w/ views of media commons and small group room
- Connected internally to science with 8'-wide sliding opaque pocket door



Typical Interdisciplinary Team



Educational Environment

Supporting Learning Styles

Like most projects, traditional passive learning modes are supported because each learning studio supports lecture and direct instruction with vertical writing surface, digital display technology, and voice amplification technology. But, the real success of this project is that core academic spaces are capable of supporting far more learning modalities than traditional school facilities.

1 Kinesthetic Modalities

Several spaces are capable of supporting open floor area for movement activities including the creation digital films.

2 Tactile Modalities

All learning studios are designed to support the making of things. Some studios provide students with access to tools and equipment in a maker environment. Other studios provide students with access to cloth and other low tech materials to make costumes and puppets. Three of the learning studios even have kitchen equipment to support the making of food in Core Academic projects.

3 Technology Modalities

Blended and flipped classrooms, technology modalities, in general, are supported not only by ubiquitous access to WiFi, but also by the network capacity to support multiple hand-held devices per child and rooms where students can retreat to work on portable technology away from the learning studio.

4 Visual Modalities

As a building designed around project-based learning and the display of student work, all instructional spaces support visual learning modalities by providing access to vertical dry erase surface, interactive touch-screen monitors, and vertical pin-up surface for those who prefer to see information in a visual format.





## Educational Environment

# Supporting Learning Styles

1

### Kinesthetic Modalities

Several spaces are capable of supporting open floor area for movement activities including the creation digital films.

2

### Tactile Modalities

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Drama Studio



Drop-in Presentation Area



Exhibition Area



# Adaptability & Flexibility

Administrators for the district knew that transitioning to their new educational vision would be difficult for faculty and staff. While some teachers immediately embraced the change, the majority of the staff needed more time and training to embrace the new concept.

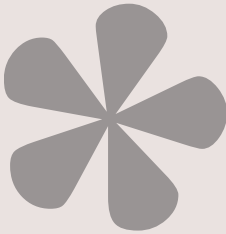
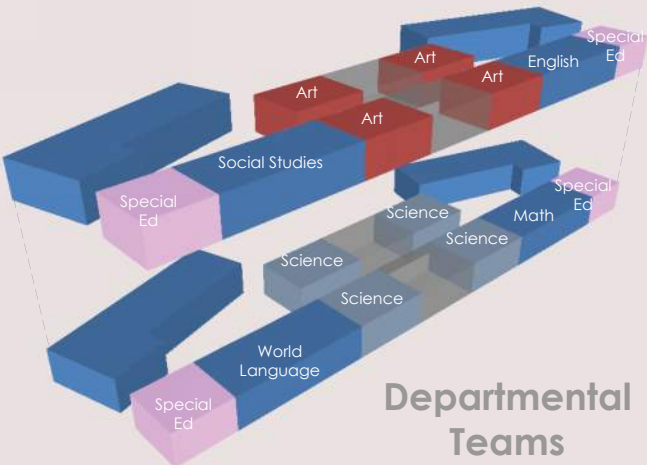
In order to position the project for success, the district made a commitment to three years of project-based learning professional development while the project was still in the design and construction phases. They also directed the design team to incorporate enough adaptability and flexibility into the design so that the building could operate as a traditional middle school on opening day and as a much more progressive facility

as the staff became more comfortable with the new project-based learning strategies.

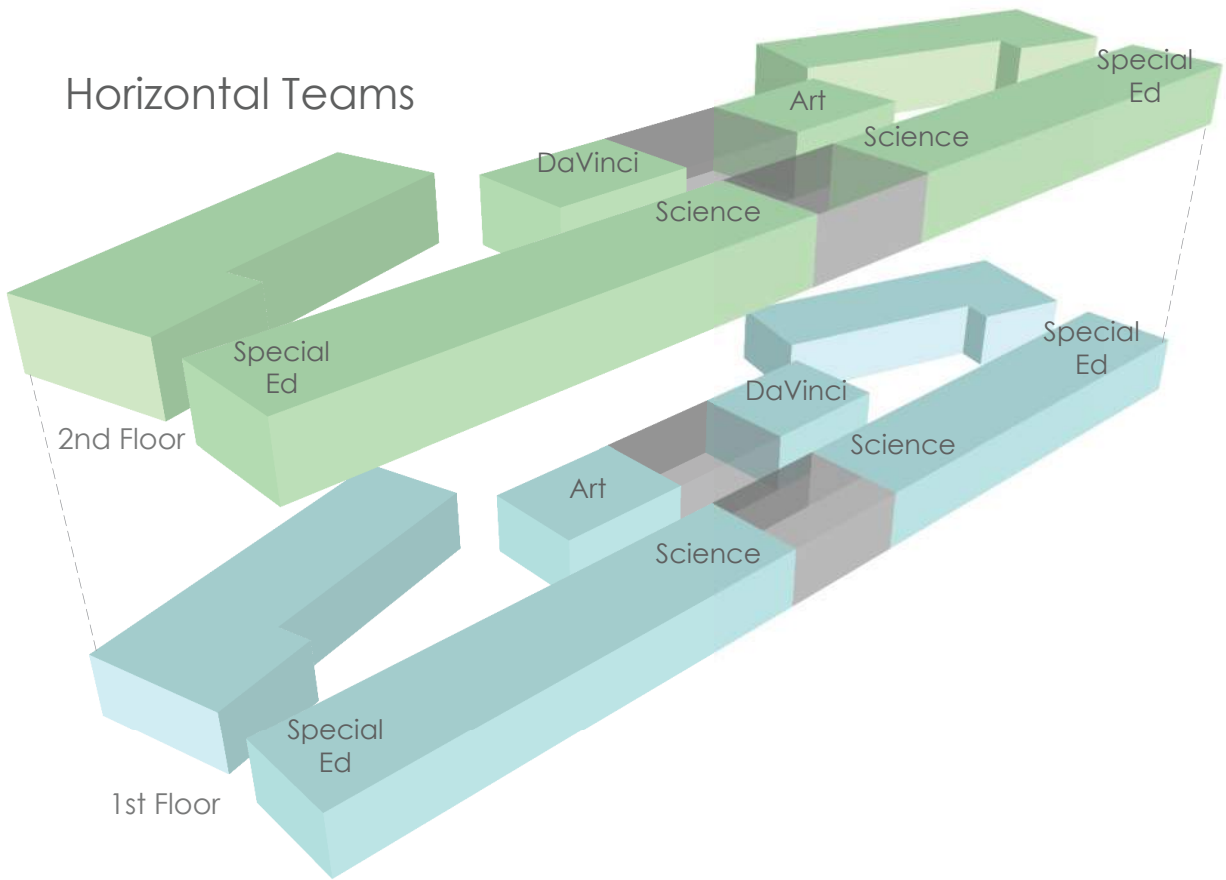
As a result, learning studios are designed as fully enclosed spaces that can be opened to adjacent spaces when desired. Some learning studios are more transparent and extroverted than others to give teachers choice. Those who are more comfortable teaching alone in a more traditional environment can do so. Others who are more comfortable with the concept of project-based learning and “spillability” - a term coined by the superintendent to represent the ability for a teacher and his or her class to occupy more than one space at a time - can use the strategic connections between spaces to do so.

In addition to allowing staff members and the educational vision to evolve over time, the district requested that the design be capable of allowing more than one organizational model. This was accomplished by positioning art, sciences, and engineering spaces (DaVinci Studios) in strategic locations so that regardless of the organizational model, each team could possess two sciences, one art, and one DaVinci Studio.

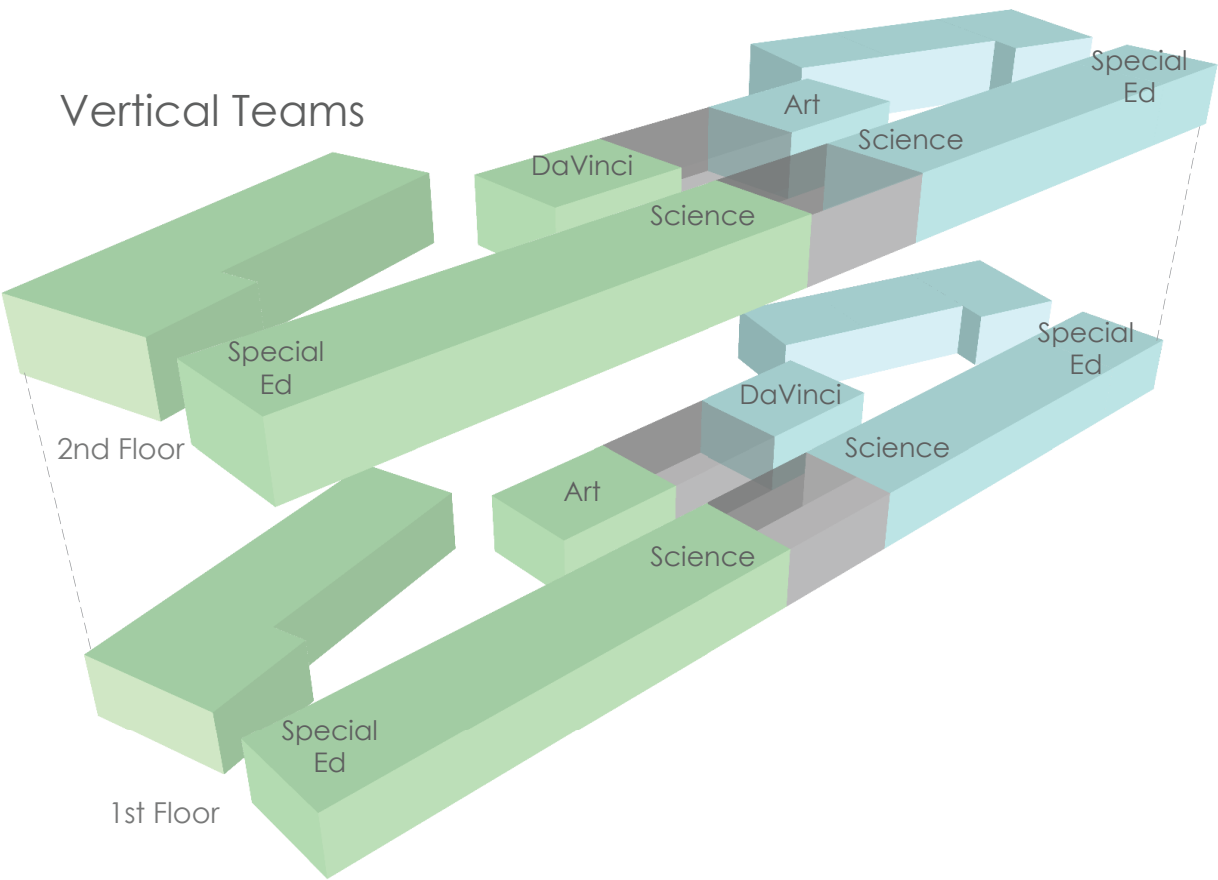
Art, DaVinci, and Science spaces all share similar infrastructures: access to multiple sinks, access to additional power, and direct access to the exterior. As such, each is flexible enough to function as the other with little expense setting up the opportunity to revert to a strictly departmental model if desired.



## Interdisciplinary Grade Level Teams



- 7<sup>th</sup> Grade
- 8<sup>th</sup> Grade





## Physical Attributes

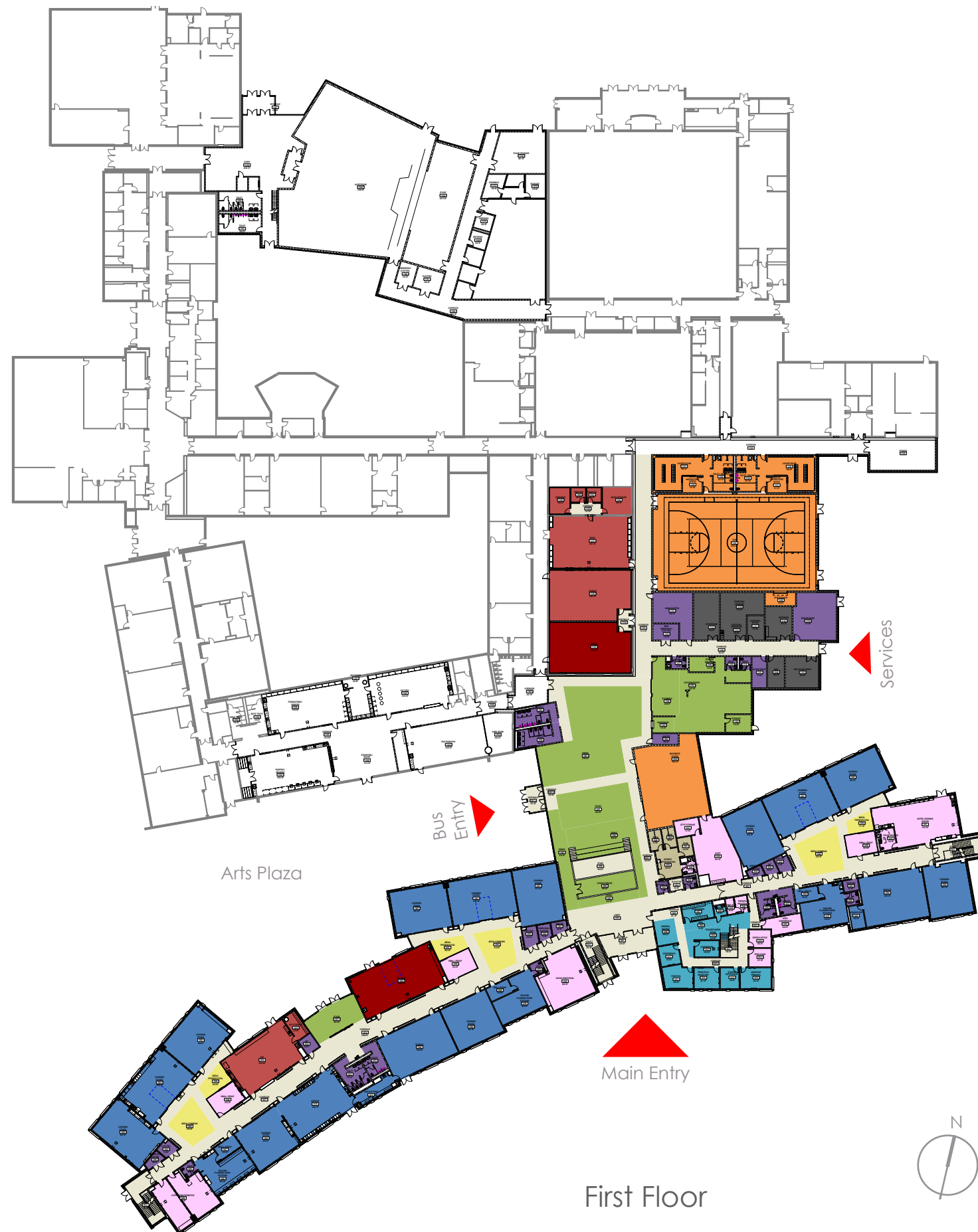
Gates Middle School was constructed as an addition to the existing Scituate High School but operates as an independent entity under the same roof. It has its own parking lot, entry, school administration, instructional space, cafeteria, kitchen, and gymnasium.

In this arrangement, middle school students have an appropriate developmental separation from high school students, but the opportunity to cross over for advanced academic achievement when appropriate. Middle school students also have access to some instructional spaces (like a professional quality performing arts center) that they would not have had otherwise.

Sixth grade teams are positioned to the east with a slight separation from the seventh and eighth grade teams as a transitional year. Administration and guidance are positioned at the main entry with clear site lines to both the parking lot and approach to the building.

The Library/Media Center square footages have been decentralized to position tools, printed resources, and activity areas at arms reach from students and teachers rather than have them as a consolidated destination. Gates Middle School does, however, have a full time media/technology specialist and a circulation desk at the heart of the school.

Finally, the student dining commons is at the heart of the school and has been designed to be both multi-purpose and multi-faceted in an effort to de-institutionalize the student dining experience.





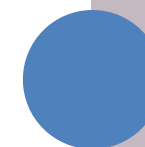
# Physical Environment

## Physical Attributes

The second floor is largely a repeat of the first floor with a few notable exceptions. Guidance is located on the second floor adjacent to the Hellerup stair leading down into the dining commons. It is a high traffic area making it convenient for students to access while successfully eliminating much of the stigma associated with going to guidance because of its own entry and vertical separation from the main office.

The second floor also presents students with exciting interior and exterior vistas. Each of the grade level teams have a large roof monitor that allows natural daylight to penetrate into the center of the team all the way to the first floor, which creates an interior vista where one can observe two teams from a single vantage point. Similarly, there is a terrific interior to exterior vista from the student balcony dining area. From here, one can see through the entire student dining commons below and out to the arts plaza though a large curtain wall.

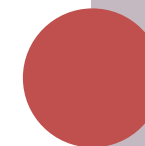
Core Academic



Special Education



Art & Music



Health & Physical Education



Media Center



Dining & Food Service



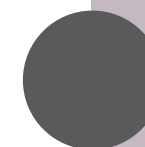
Medical



Administration & Guidance



Custodial & Maintenance



Second Floor



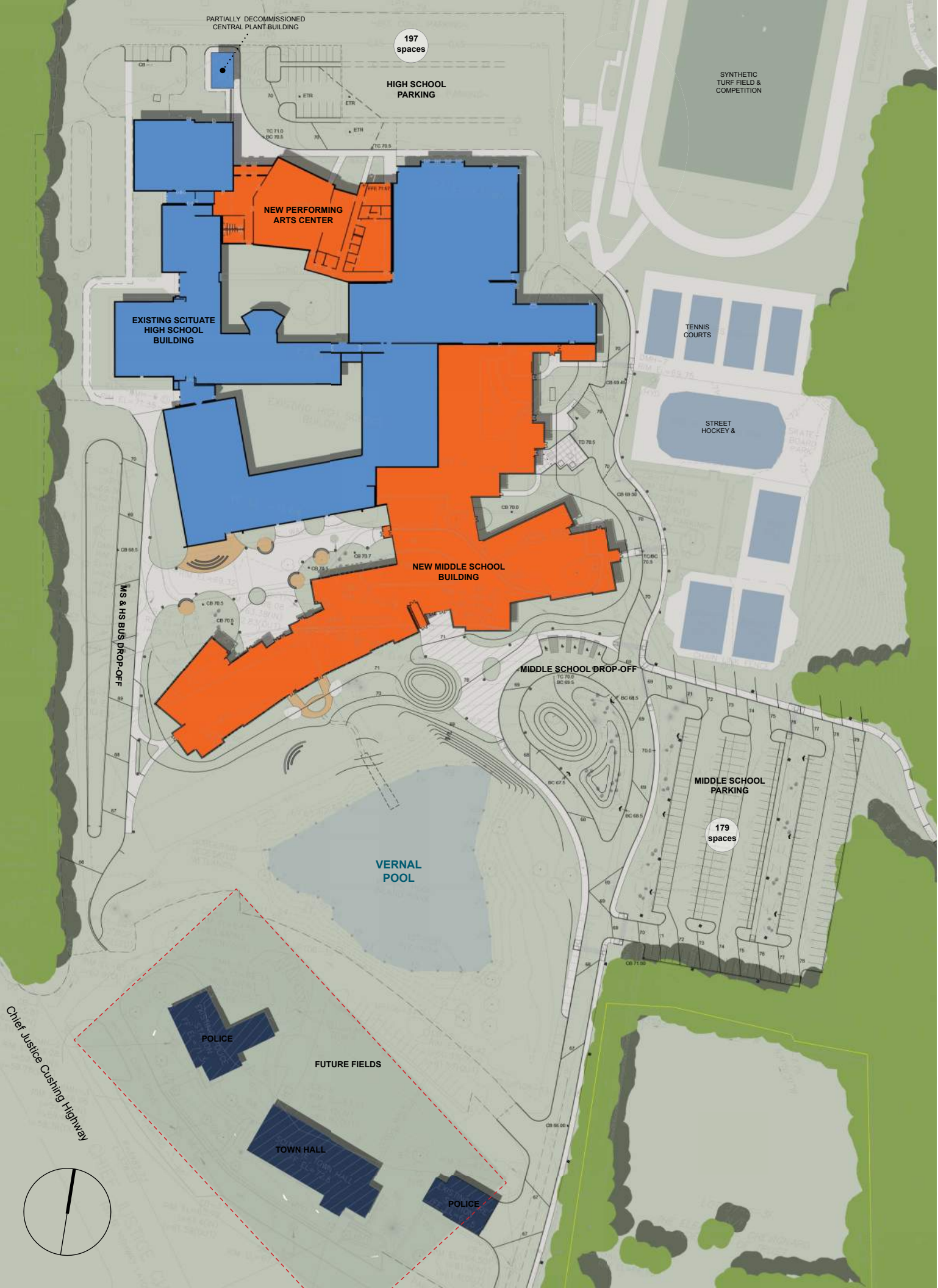
# Physical Environment



## Site Features

Gates Middle School is a major addition to the existing Scituate High School as an independent entity under the same roof. The bulk of the middle school addition was positioned southeast of the high school in an area that was parking, roadway, and a small practice field.

This positioning created a new “face” for the facility as the primary approach for vehicles is from the south along First Parish Road. This positioning also allowed the middle school to have views onto and access to an existing vernal pool as an outdoor learning resource. It also set up the opportunity to create an outdoor arts plaza between high school art spaces and the new middle school addition.

By joining the middle school to the high school, middle school students have access to high school programs and services they might not have had otherwise. Likewise, high school students benefited by having additional parking on-site and because the project included a new high school performing arts center to replace the existing auditorium, which was renovated to serve middle school drama and chorus.



-  New Construction
-  Existing High School







## Physical Environment

### Fostering Inspiration

It becomes clear to anyone who visits Gates Middle School that students are excited to be in this project-based learning environment. Rather than feeling like they have to go to school, students report that they now want to go to school. The design team is hopeful that this is, at least partially, because the spaces they've created are inspiring and aligned to the educational mission.

The student dining commons embodies this more than any other space in the project. It is a space with a full two-story volume punctuated by an articulating metal cloud ceiling. Students enjoy ample access to day light and exterior views of the arts plaza. Students have the choice to sit at conventional tables and chairs, in banquettes, booths, in cafe-style low chairs with coffee tables, and even on the Hellerup stair. Four distinct dining zones offer four different spatial and acoustical experiences.

In the year since its opening, this space has already hosted a mock constitutional convention, wrestling matches, open mic nights, and hosted the school's annual arts festival in the spring.



Scope & Budget  
Project Data

Project Name	Lester J. Gates Middle School
City	Scituate
State	Massachusetts
District Name	Scituate Public Schools
Superintendent	Ron Griffin
Occupancy Date	September 2017
Grades Housed	6,7, + 8
Capacity (Students)	735*
Site Size	40 Acres
Gross Area	130,068
Per Occupant	177
Gross/Net	1.50
Design and Build	No
If yes, Total Cost	N/A
Includes	N/A
If No	Design, Bid, Build
Site Development	\$7,550,000
Building Construction	\$54,850,000
Fixed Equipment (FFE)	\$2,900,000
Other	N/A
TOTAL	\$65,300,000

Submitting Firm	Dore & Whittier Architects
Project Role	Architect
Project Contact	Donald M. Walter, AIA
Title	Principal
Address	260 Merrimac Street, Building 7
City, State, Zip	Newburyport, MA 01950
Phone	978.499.2999

Construction Firm	Bacon Construction
Project Role	General Contractor
Project Contact	Steve Agostini
Title	Owner
Address	241 Narragansett Park Drive
City, State, Zip	East Providence, RI 02916
Phone	401.431.1200





