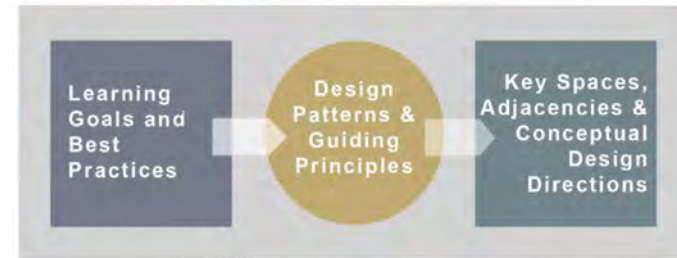


September 22, 2018

PUBLIC SCHOOLS of
BROOKLINEENVISIONING
THE RENOVATED
AND EXPANDED
DRISCOLL
SCHOOL

The Visioning Process



Connecting Design to the Brookline Ed Plan

- Learning is ubiquitous – extending beyond the classroom
- Information available through both teacher and technology access
- 4 C's of Critical Thinking, Communication, Collaboration and Creativity
- **Intelligence and talent expressed in a variety of ways:**
 - Applying knowledge
 - Creating products
 - Solving complex problems
 - Systems thinking
 - Design and testing
 - Knowing how to learn



Connecting Design to the PSB Strategic Plan

Goal 1: Every Student Achieving

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



Connecting Design to the PSB Strategic Plan

Goal 1: Every Student Achieving

Goal 2: Every Student Invested in Learning

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

Connecting Design to the PSB Strategic Plan

Goal 1: Every Student Achieving

Goal 2: Every Student Invested in Learning

Goal 3: Every student prepared for Change and Challenge

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

Connecting Design to the PSB Strategic Plan

Goal 1: Every Student Achieving

Goal 2: Every Student Invested in Learning

Goal 3: Every student prepared for Change and Challenge

Goal 4: Every Educator Growing Professionally

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

Focus on "Future Ready Skills"



Social Emotional Learning

Social & Emotional Learning Core Competencies



- Character education
- Growth Mindset
- Mental health
- Mindfulness
- Resilience and Grit
- Classroom management



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Student-Centered Learning

- Agency
- Higher Order Thinking
- Proactive Learning
- Problem Solving
- Organizational Skills
- Communication
- Confidence



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Student Engagement

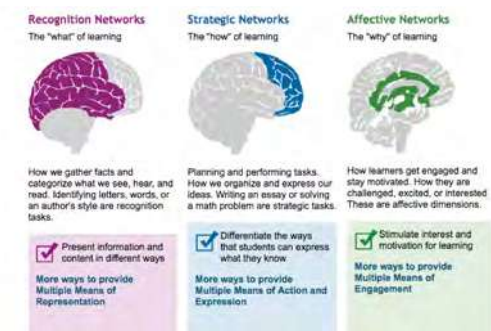
- Common Intellectual Mission
- Relationships
- Exhibitions
- Community Meetings
- Relevance
- Display



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Universal Designs for Learning

- Principles for curriculum Development
- Multiple means of:
 - Representation
 - Expression
 - Engagement
- Independent and small group work



Source: CAST - What is UDL? (<http://www.cast.org/teachers/udl/>)

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Push-In / Differentiated Instruction

- Co-Teaching
- Learning Stations
- Equity and Access
- Varied Modalities and Venues



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Center-Based Instruction

- Materials for one type of subject grouped together
- Independent learning and exploration
- Child-accessible ○ Hands-on and minds-on



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Health and Wellness

- Movement
- Varied Contexts for Learning
- Indoor/Outdoor Play
- Fitness (i.e. Yoga)
- Outdoor Connections



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Technology Integration

- Blended Learning 1:1
- Technology as a Tool
- Production of Technology and Information



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Anytime, Anywhere Learning

- Extended Learning Spaces and Times
- Self-Paced and Small Group
- Student Projects



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Real World Connections

- Authentic Contexts
- Performance Assessment
- Product Creation



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Hands-On Exploration

- Project-Based Learning
- Performance Assessment and Exhibition
- Product Creation and Display



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Maker Thinking and STEAM

- STEM as Meta-Discipline
- Art and Humanities as Glue
- Design Thinking Process



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Next Gen Science Standards

Science Practices Next Generation Science Standards	Ask Questions	Investigate	Use Math	Communicate
	<ul style="list-style-type: none"> What am I observing? What does this evidence mean? What is the relationship between these variables? How can I make my model more accurate? What evidence do I need to answer my question? What hypothesis can I state based on my observations? Is the data used correctly in the argument? 	<ul style="list-style-type: none"> Use the Scientific Method State the goal of the investigation Predict outcomes Plan a course of action that will provide the most evidence to support conclusions Use scientific tools to make very data can be considered evidence Reduce error in procedures 	<ul style="list-style-type: none"> Use computers to analyze very large data sets for patterns and trends Use mathematical representations to support scientific conclusions Create algorithms (a series of ordered steps) to solve a problem Use digital laboratory tools to observe, measure, record, and process data Make quantitative predictions 	<ul style="list-style-type: none"> Be a critical consumer of information about science Critically read scientific texts to determine the central ideas and obtain scientific information to describe patterns in evidence Use multiple sources to obtain information used to evaluate the validity of claims and methods Communicate ideas by using tables, diagrams, graphs, models, interactive displays, and equations as well as orally in writing and discussion
Design a Model	Analyze Data	Explain	Argue	
	<ul style="list-style-type: none"> Models include diagrams, physical replicas, mathematical representations, analogies, and computer simulations Models highlight some ideas and simplify others Models are used to help find questions and explicit goals to get data to predict, describe, claim Models are based upon evidence. New evidence changes the model 	<ul style="list-style-type: none"> Construct and interpret graphical displays of data Use computers to tabulate, graphically represent data, visualize, and statistically analyze Use math to represent relationships between variables and identify patterns Take into account sources of error Is one variable the cause (control), or do both just happen at the same time (correlation)? 	<ul style="list-style-type: none"> An explanation includes qualitative or quantitative relationships between variables that predict and describe phenomena Design investigations that generate data to determine explanations to questions Apply scientific reasoning to show why the data or evidence is adequate for the explanation or claim Construct an explanation using models and representations 	<ul style="list-style-type: none"> Argue when investigating a phenomenon, supporting a claim about a relationship, building a case, and using evidence to evaluate claims Arguing involves when gathering, comparing, and assessing competing ideas and methods Regularly provide and respond to critique about one's evidence, procedures, models, and questions by citing relevant evidence and posing and responding to questions

Teaming and Collaboration

- Meaningful Integration of Disciplines
- Cohort Groupings / Reduced Student Load
- Teacher and Student Collaboration



Arts Integration

- Creative Expression and Communication
- Active and Varied Display Venues
- Music and Performance
- Design and Maker Thinking



After School Enrichment

- Drama
- Sports
- Robotics
- Art
- Coding
- Maker Thinking



Common Core ELA Shifts

Common Core Shifts for English Language Arts/Literacy

- Regular practice with complex text and its academic language**
Rather than focusing solely on the skills of reading and writing, the Standards highlight the growing complexity of the texts students must read to be ready for the demands of college and careers. The Standards build a vision of text complexity so that all students are ready for the demands of college- and career-level reading no later than the end of high school. Moving toward text complexity—and meaningfully connecting to reading comprehension—is a focus on academic vocabulary words that appear in a variety of content areas (such as science and civics).
- Reading, writing and speaking grounded in evidence from text, both literary and informational**
The Standards place a premium on students writing for sources, i.e., using evidence from texts to present careful analyses, well-defended claims, and clear information. Rather than asking students questions they can answer solely from their prior knowledge or experience, the Standards expect students to answer questions that depend on their having read the text or texts with care. The Standards also require the cultivation of narrative writing throughout the grades, and in later grades a commitment to sequence and detail will be essential for effective argumentative and informational writing.
- Building knowledge through content-rich nonfiction**
Building knowledge through content-rich non-fiction plays an essential role in literacy and in the Standards. In K-5, building the standards require a 50/50 balance between informational and literary reading. Informational reading primarily includes content-rich non-fiction in history/social studies, science and the arts. The K-5 Standards strongly recommend that students build content general knowledge both within each year and across years in K-12. ELA classes place enough greater attention to a specific category of informational text—non-fiction—than can be found traditionally. In grades 6-12, the Standards for literacy in history/social studies, science and technical subjects ensure that students can independently build knowledge in these disciplines through reading and writing.

- Complex Text
- Academic Language
- Evidence from Text
- Building Knowledge
- Content-Rich Nonfiction

Common Core Math Shifts

Common Core State Standards Shifts in Mathematics

- Focus strongly where the Standards focus**
Focus: The Standards call for a greater focus in mathematics. Rather than trying to cover topics in a more superficial, less-deep curriculum, the Standards require us to dig deeply into and develop the new time and energy is spent in the math classroom. We focus deeply on the major work of each grade so that students can gain strong foundations, solid conceptual understanding, a high degree of procedural skill and fluency, and the ability to apply the math they learn to solve problems inside and outside the math classroom.
- Coherence: Think across grades, and look to major topics within grades**
Thinking across grades: The Standards are designed around coherent progressions from grade to grade. Learning is carefully connected across grades so that students can build new understanding on foundations built in previous years. Each standard is not a new event, but an extension of previous learning.
Linking to major topics: Instead of allowing additional or supporting topics to distract from the focus of the grade, these concepts across the grade level focus. For example, instead of data displays as an end in themselves, they are an opportunity to do grade-level word problems.
- Depth: In major topics of pursuit**
 - **conceptual understanding,**
 - **procedural skill and fluency,**
 - **and**
 - **application with equal intensity****Conceptual understanding:** The Standards call for conceptual understanding of key concepts, such as place value and ratios. Students must be able to work with them from a number of perspectives so that they are able to see math as more than a set of disconnected or disjointed procedures.
Procedural skill and fluency: The Standards call for speed and accuracy in calculations. Students are given opportunities to practice core functions such as single-digit multiplication so that they have access to more complex concepts and procedures.
Application: The Standards call for students to use math flexibly for applications in problem-solving contexts. In content areas outside of math, particularly science, students are given the opportunity to use math to make meaning of and access content.

- Concepts and Skills
- Problem Solving
- Thinking Across Grades
- Conceptual Understanding
- Fluency
- Application

Academic/Growth Mindset

Hierarchy of Learner Needs



... Integrity, responsibility and Perseverance...

PUBLIC SCHOOLS of
BROOKLINE

Design
Patterns

New School Design Patterns

Greeting and Gatekeeping



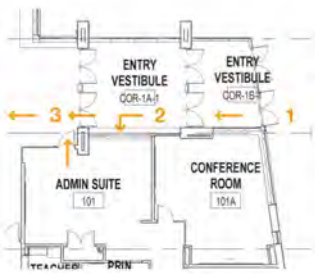
New School Design Patterns

Welcoming Entry



New School Design Patterns

Safety and Security



New School Design Patterns

Wayfinding and Streetscapes



New School
Design Patterns

Clusters of Learning

UPPER SCHOOL GRADES 6-8

SHARED CORE SPACES

LOWER SCHOOL GRADES K-5

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Hunking K-8 – New Vista with JCJ

New School
Design Patterns

Learning Communities

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New School
Design Patterns

Classroom Neighborhoods

SPED Resource

Team Room

Teacher Planning

General Classroom

West Bridgewater MHS – Flansburgh / New Vista

New School
Design Patterns

Agile and Flexible Classrooms

SMMA

MLK Lower School – Perkins Eastman

New School
Design Patterns

Flexible Furniture

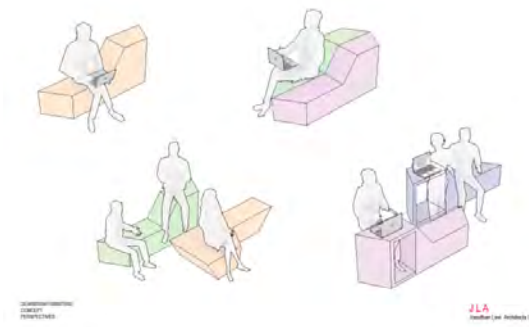



Anzac Park Elementary - Sydney

VS Furniture

New School
Design Patterns

Student Configurable Environments



JLA
JLA Architecture LLC

New School
Design Patterns


Classroom Zones




City Neighbors - Isaacson

New School
Design Patterns


Extended Learning Spaces




Birralee Primary / School Thompson Architects

New School
Design Patterns

Learning Commons –
Multi-Purpose Space




Groveland Elementary School - ATSP Architects




New School
Design Patterns

Gathering Spaces





McAuliffe Elementary - HMFH





New School
Design Patterns


Community
Collaboration Space














New School
Design Patterns

Small Group
Collaboration Spaces







New School Design Patterns

Hallway Learning



Grover Elementary - JCG

Portsmouth Middle School - JCG

Runkle K-8 - DPC/Perkins Eastman

New School Design Patterns

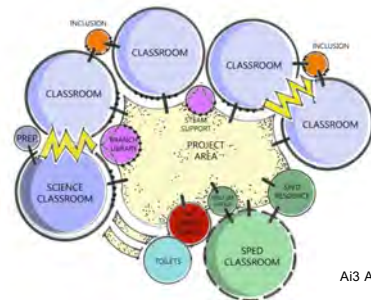
Anywhere, Anytime Learning



ATS&R Architects

New School Design Patterns

Push In Special Education



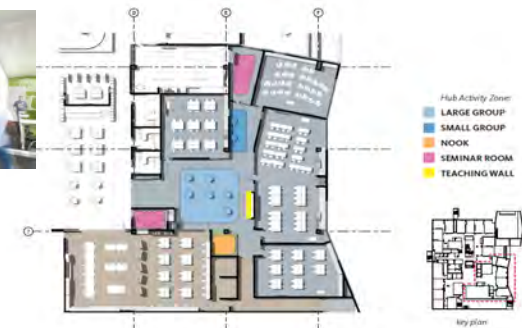
Ai3 Architects

New School Design Patterns

Varied Spaces



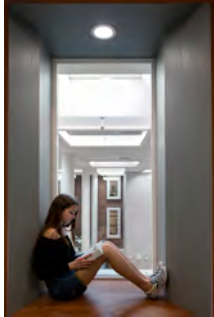


Da Vinci Schools - Gensler/New Vista



key plan

New School
Design Patterns

Quiet
Spaces







The Roeper School
Collegiate School

HMFH ARCHITECTS

New School
Design Patterns

Nooks and Caves

Buckingham County Elementary - VMDO
McAuliffe Elementary - HMFH

New School
Design Patterns

STEM/STEAM Adjacencies





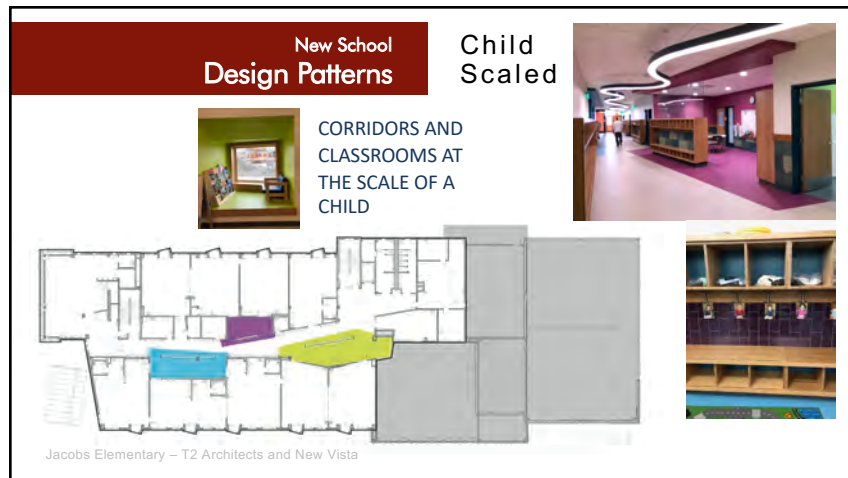
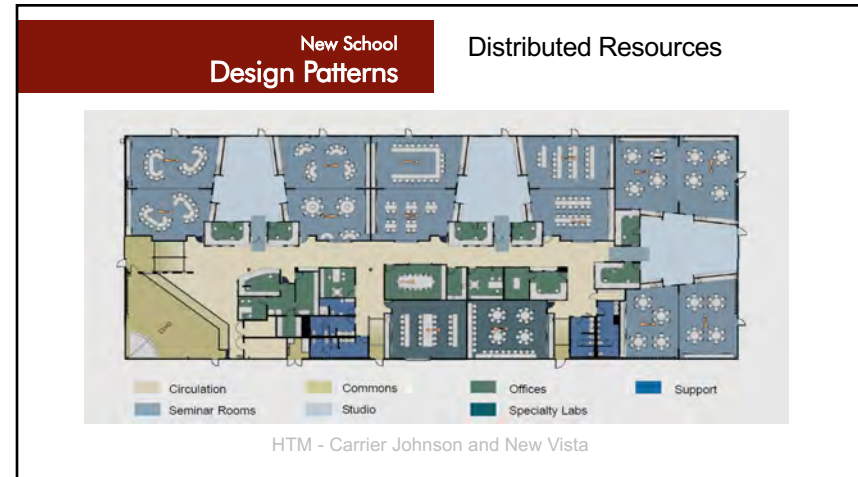
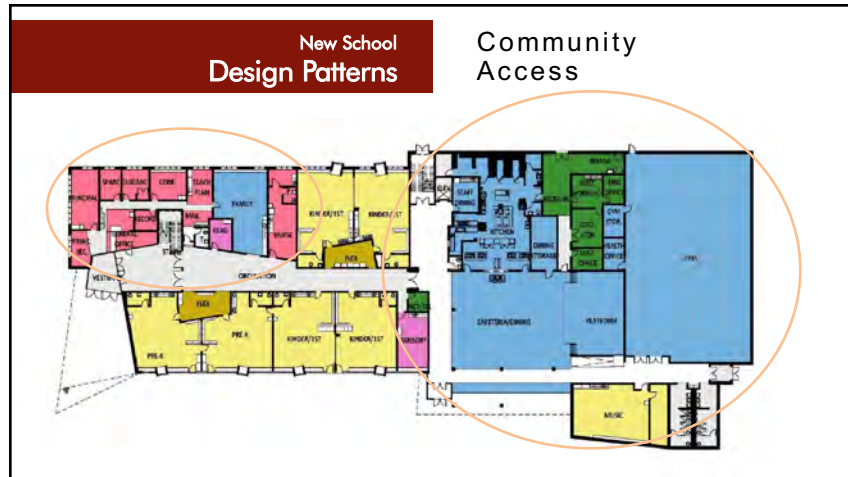
Winthrop Middle High School
HMFH ARCHITECTS

New School
Design Patterns

Teacher Teaming



Field School - JLA



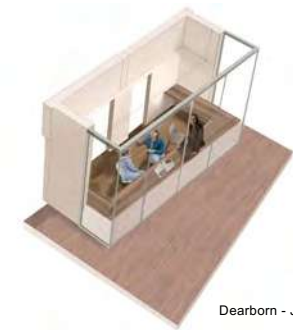
New School
Design Patterns

Distributed Dining
Cafeteria Zones



New School
Design Patterns

Professional
Work Areas



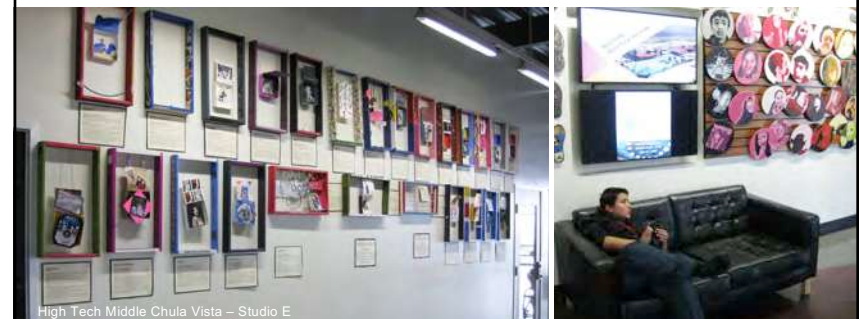
New School
Design Patterns

Visible Learning and
Transparency



New School
Design Patterns

Display and Exhibition



New School
Design Patterns

Outdoor
Connections



HMFH Architects

New School
Design Patterns

Engaged Outdoor Play



HTH North County – Studio E

HTHCV K-8 – Studio E

New School
Design Patterns

Outdoor
Gardens



Runkle K-8 - DPC/Perkins Eastman

New School
Design Patterns

Sustainability





HTHCy – Studio E

High Tech Elementary, North County C – Studio E

New School
Design Patterns

Building
as Teacher

MLK Lower School - Perkins Eastman

New School
Design Patterns



Branding and Identity



Da Vinci Schools – Gensler and New Vista

New School
Design Patterns

Media Space as
Gathering Hub

Field School – JLA
MLK Lower School - Perkins Eastman

New School
Design Patterns

Maker Spaces
and FAB Labs




Possible Project – HMFH
Explorer Elementary – Studio E

New School
Design Patterns

Cyber Dining







City Neighbors - Isaacson

New School
Design Patterns

Enrichment Spaces





New School
Design Patterns

Thoughtful
Renovation











City Neighbors School - Isaacson


New School
Design Patterns

Adaptive Reuse

flexibility in spaces and furniture...
while getting natural light deep into the
corridors



New School Design Patterns

Timeless and Traditional



New School Design Patterns

History and Storytelling



Which Design Patterns
resonate most for the
Driscoll School?

Blue Sky Ideas

Write about one or more aspirational
idea(s) and/or or space you would
like to see take shape within the
Driscoll School renovation and
expansion project.

