2015 Exhibition of School Planning and Architecture

McKinley Middle School

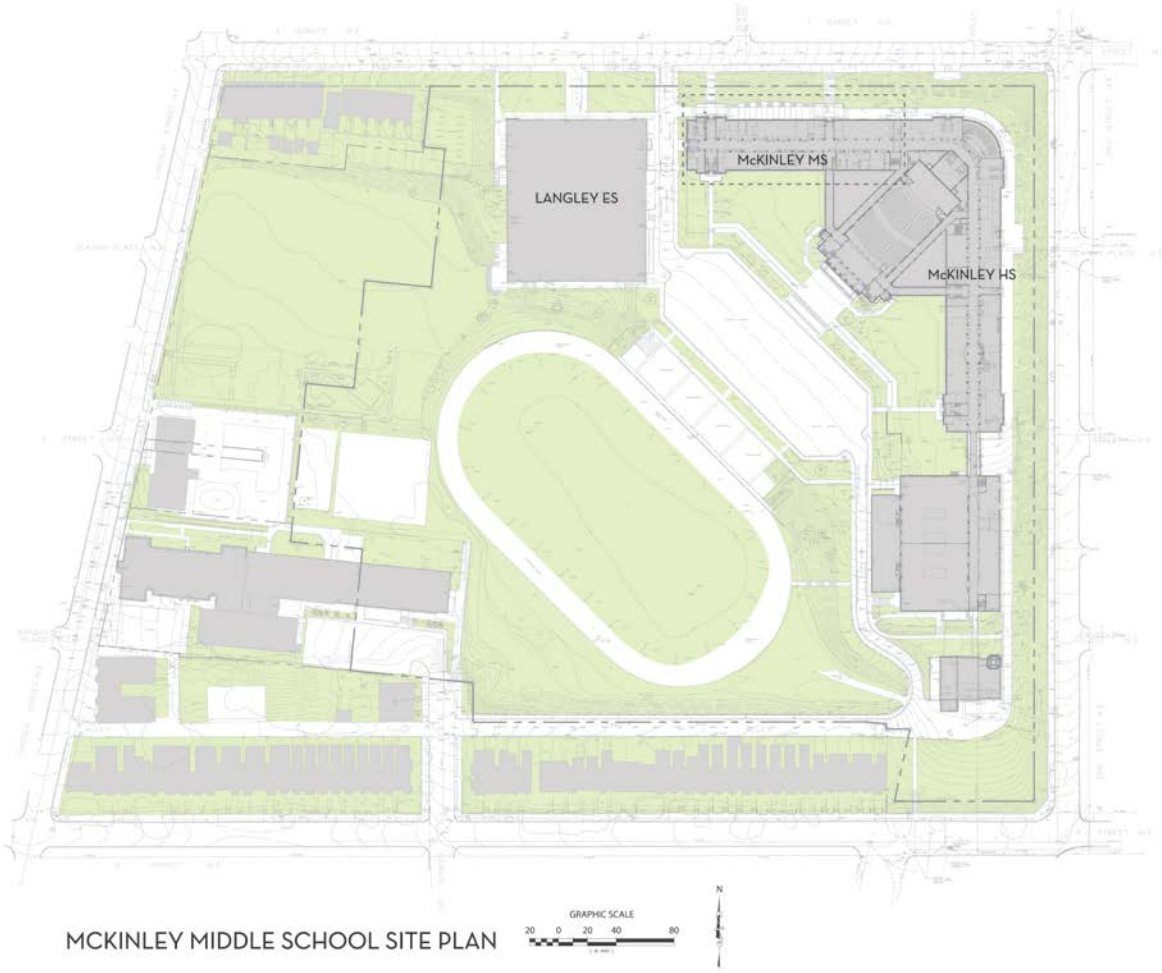
Category: 21st Century Learning Environment Renovation

DC Public Schools

Washington, DC

The McKinley Middle School is an adaptive reuse of surplus space within an historic DCPS school facility. The goal of the project was to create world class environments for 21st century S.T.E.M. (Science, Technology, Engineering, and Math) education. The 60,000 sq. ft. school was designed for 340 students.

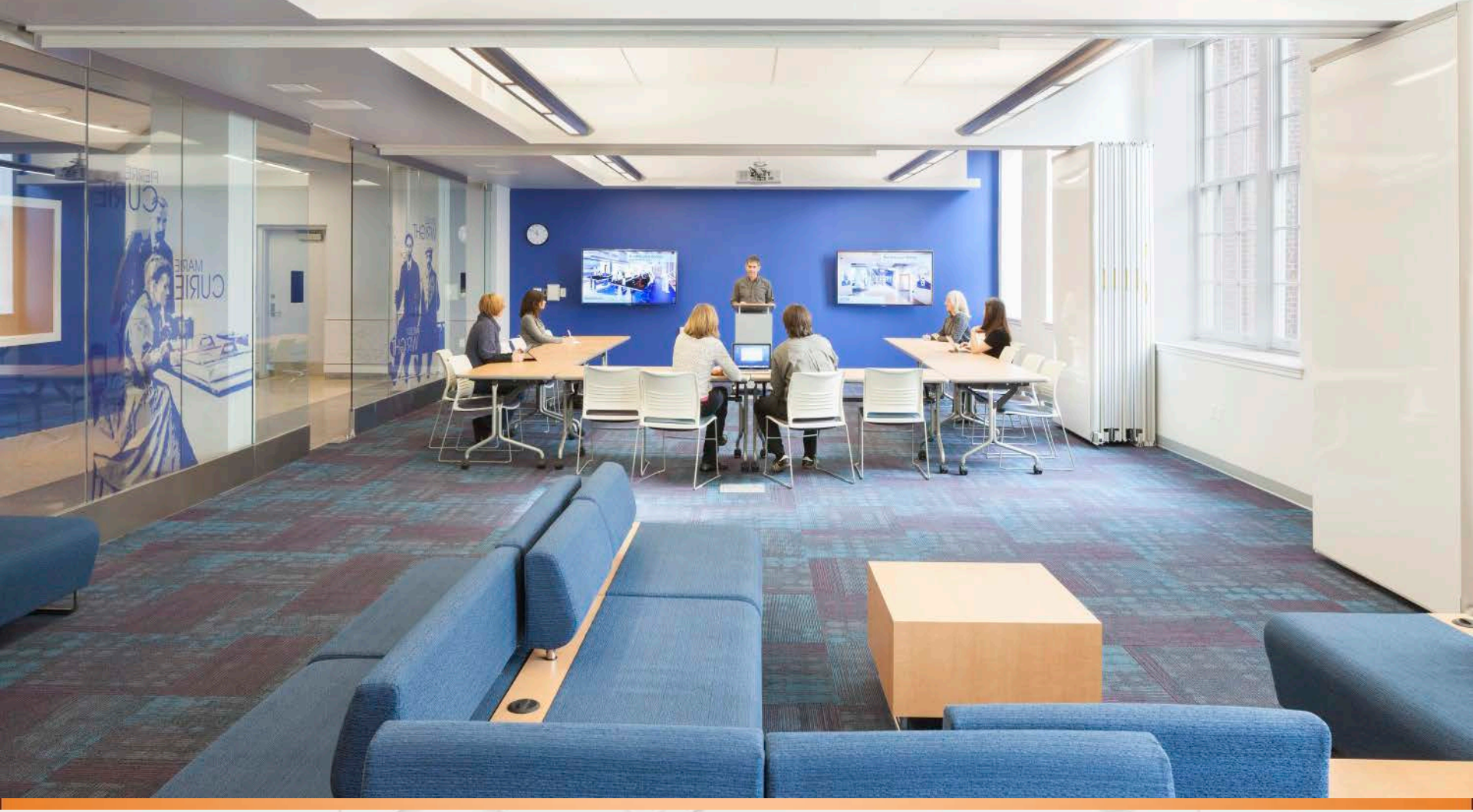
McKinley Middle School



McKinley Middle School

Community Environment: School Culture – Placemaking

A central component of the design is the vibrant weave in transparency that promotes a collaborative environment, piquing curiosity and showcasing the innovative work of the students. The engaging interiors include vibrant graphic identity and design components. Large-scale images of inventors and icons within the fields of science, technology, and education, including Annie Easley, George Washington Carver, Steve Jobs, and Sally Ride, appear throughout the building providing inspiration and wayfinding for the students.



Community Environment : Collaboration Suite

A unique collaboration suite and a media lab support professional development and experimentation for educators. It also supports studies in digital media and communications, while providing an environment for digital content creation, project demonstrations, and distance learning. Each suite and classroom is equipped with voice amplification systems to enhance communications in active, project-based learning environments.

Learning Environment : Classroom - Adaptability and Flexibility

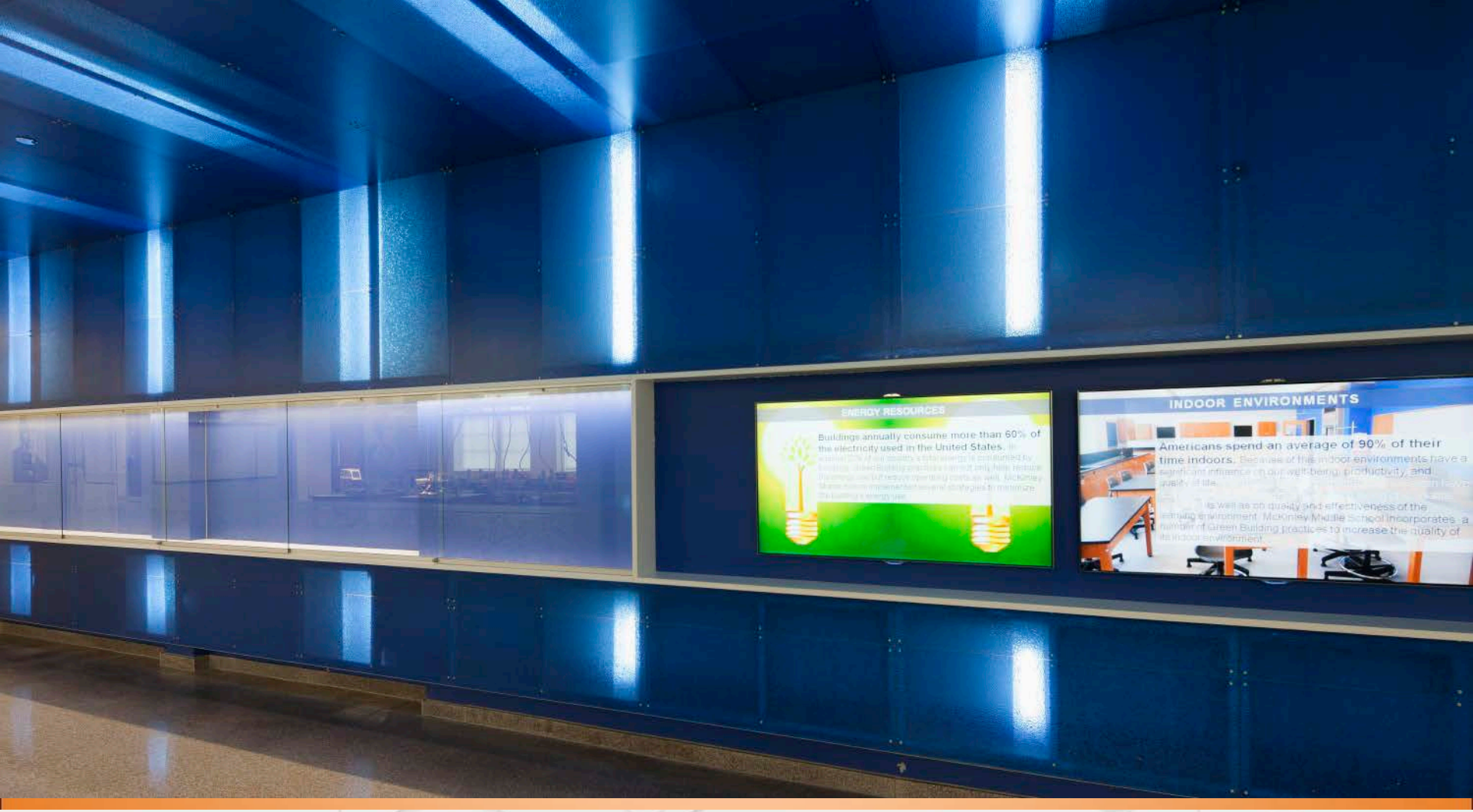
The various learning spaces were designed to foster a passion for lifelong learning, to support the development of life skills, and to promote personal and social growth in a project-based learning environment. A variety of adaptable learning environments support 21st century education within multiple modes of learning throughout the school. Classrooms feature flexible furnishings as well as robust and scalable technology infrastructure.

Learning Environment: Learning Spaces and Engineering Lab

By creating opportunities to engage in multi-media and experimental projects, the learning spaces are designed to better foster 21st century skills – environmental literacy, communication skills, creative and critical thinking, and collaboration - through project work. The unique engineering lab features an overhead distribution of compressed air, vacuum, and power; mobile workstations; and lab tables that can be raised and lowered for working while students are standing or seated.

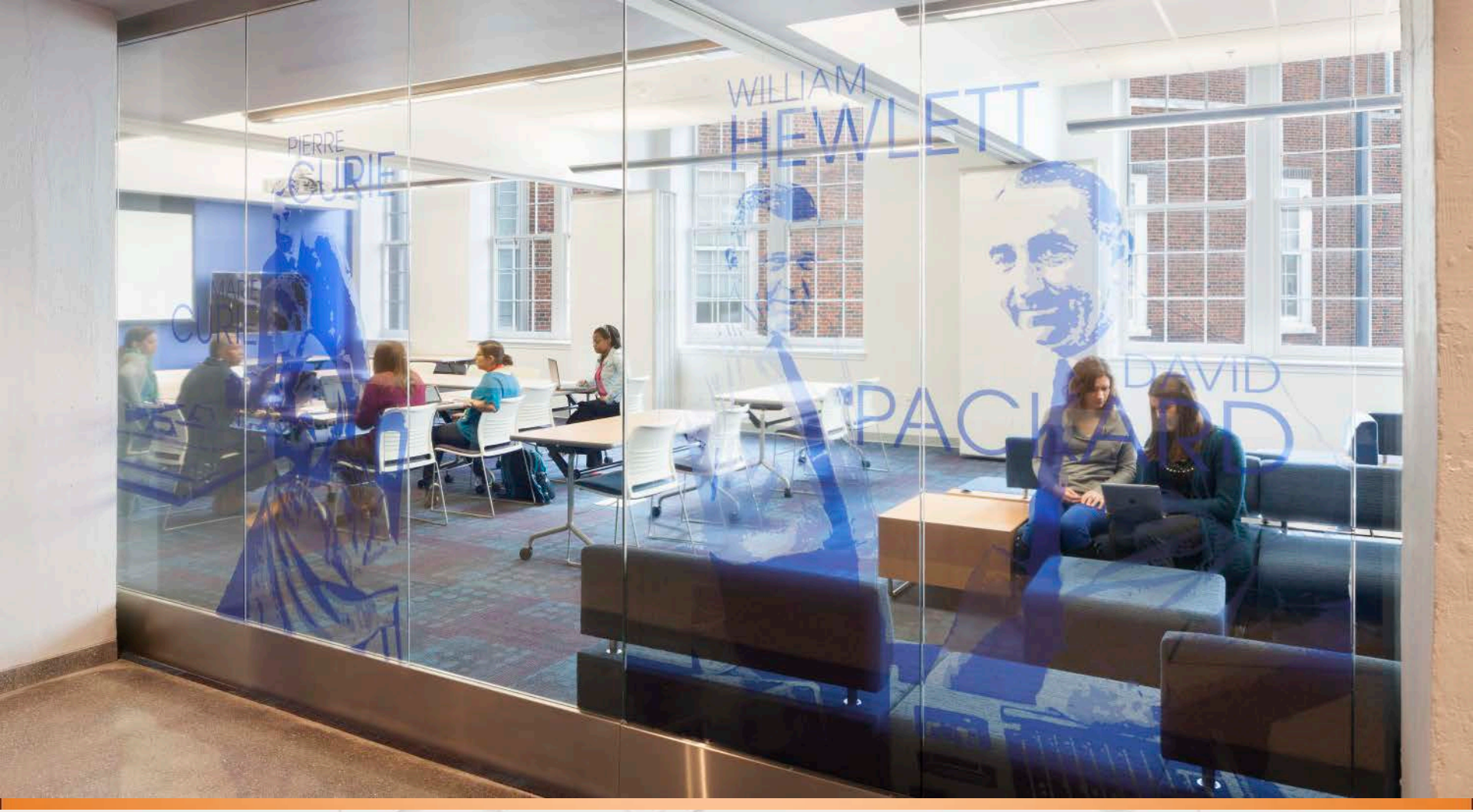
Learning Environment: Technology and Furnishings

The integration of flexible and adaptable furnishings with laptops connected to a wireless network infrastructure is a key feature throughout the school that supports project based learning. Classrooms are fitted with networked projectors, wireless connectivity, smart boards, and variable lighting controls that can accommodate a variety of configurations and learning modes. Self-directed, one-on-one instruction, and small and large group project work, with traditional and digital media, are accommodated within the various learning environments.



Physical Environment: Galleries

Planning for the school's development emphasized the promotion of personal achievement and academic success which led to several innovative, yet cost-effective design solutions. Conjunctively, the school features multi-purpose hallways that also serve as dynamic galleries to showcase student achievements, with display cases, digital signage, and a variety of video media formats. The galleries convey standards for outstanding work products, cultivate pride, and allow for the personalization of the learning environment.



Physical Environment : Use of Transparency

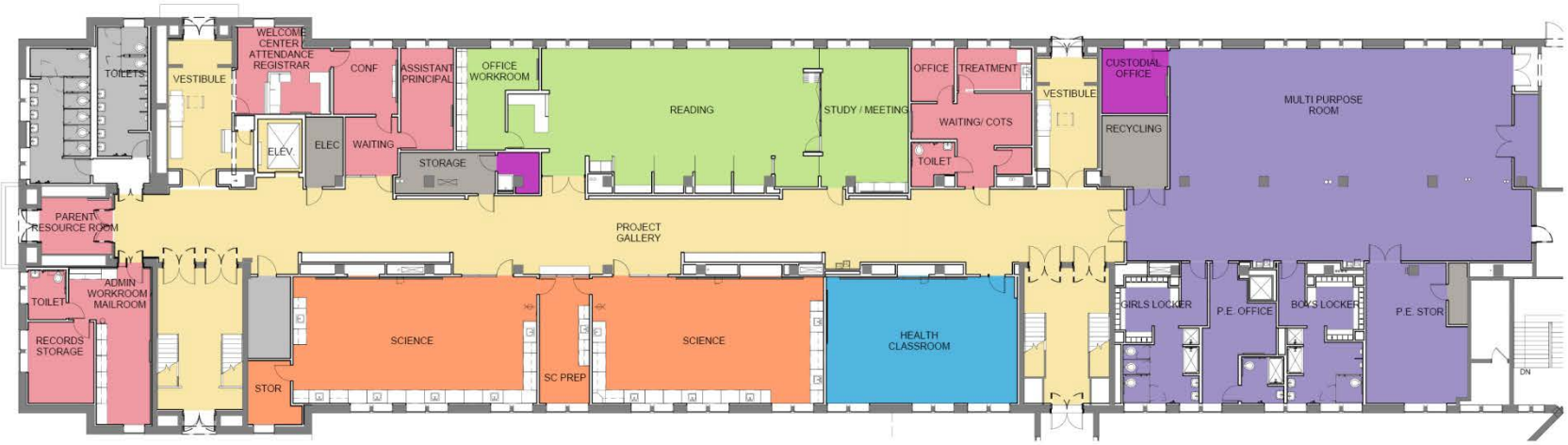
Working within the existing building core and shell, glass panels are used to create a sense of transparency and volume, reinforcing collaborative, project-based learning, which is essential to STEM. Natural light from the original large windows fill the classrooms and science/technology laboratories effectively displaying the architectural character of McKinley Middle School and revealing the forward-looking goals of the stakeholders, while respecting the historic core of the landmark structure.

Planning Process: 21st Century Learning Environments

In order to create a school and culture that prepares students for success in the 21st century workplace, real world work environments were used as models for the design of the learning environments. Trends in higher education and workplace design were investigated to identify relevant opportunities to promote a culture of collaboration and communication – within and across disciplines of study.

Planning Process: Sustainability

High-performance learning spaces are primary to the design parti with student and educator health and well-being at the forefront. Using a values-driven design process that prioritized solutions to support the school's mission, the design team delivered exceptional value for the project budget. McKinley Middle School exemplifies emerging trends in education architecture and has been lauded by District administrators, faculty, and students. Sustainable features are highlighted throughout the school to educate the next generation of global citizens on principles of environmental stewardship.



Department Legend

- Administration
- Core Academic Area
- STEM LAB
- Central Learning Hub
- Maintenance and Custodial
- Circulation
- Mechanical/Electrical
- Misc/Storage
- Restrooms
- STEM Core

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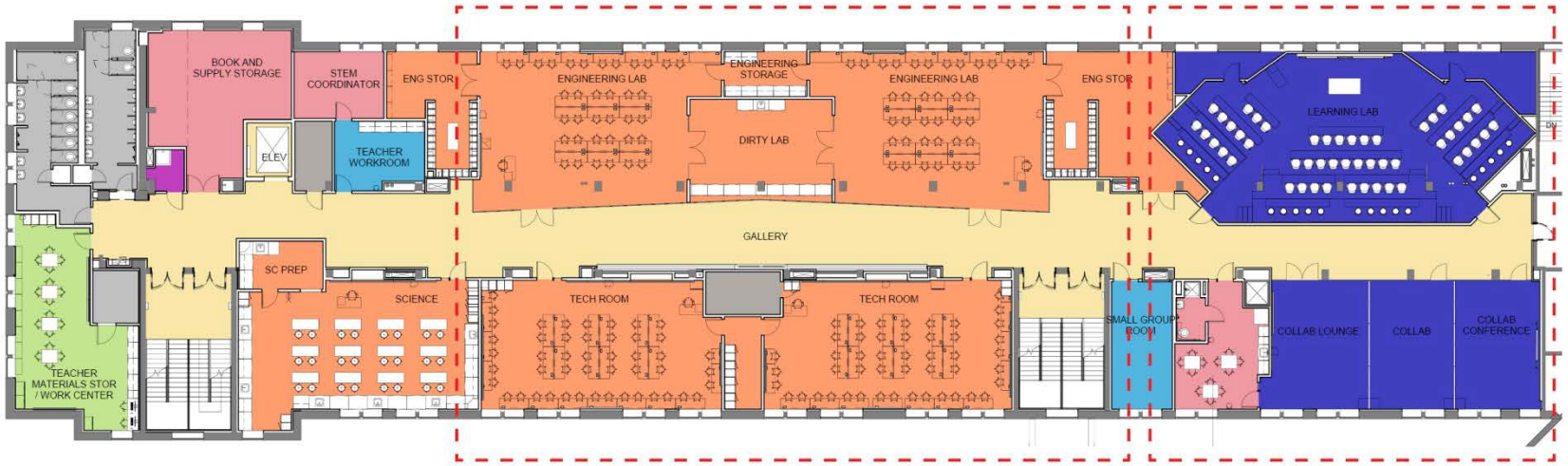
20′ 0′ 20′ 40′ 80′

First Floor



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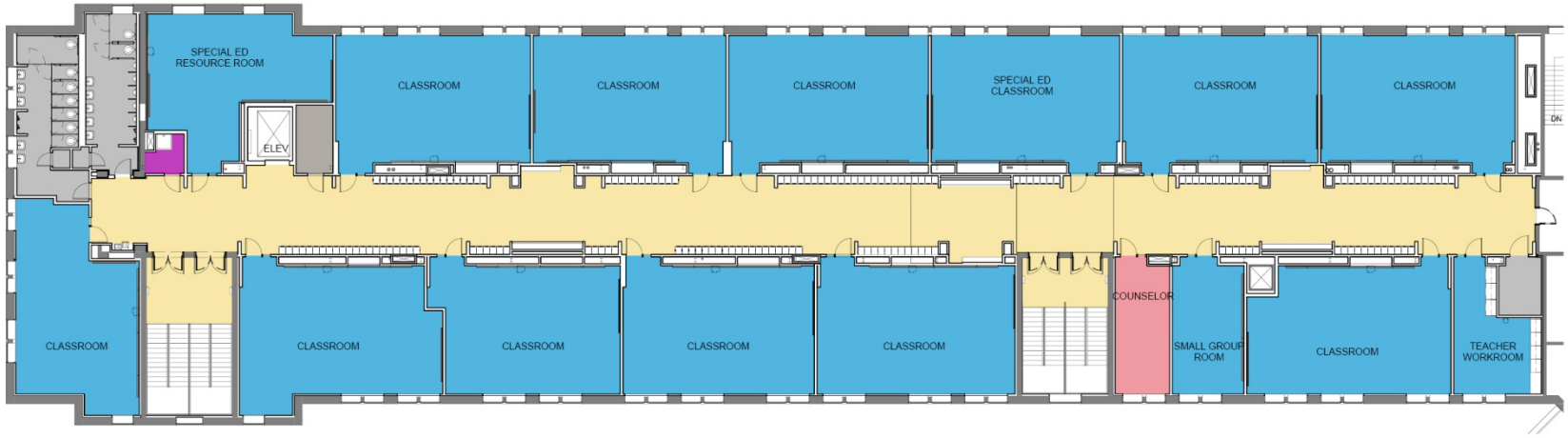
Second Floor



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Third Floor

Exhibition of School Planning & Architecture Project Data

Submitting Firm :	Quinn Evans Architects
Project Role	Architect/Prime
Project Contact	Daniel Curry, AIA, LEED AP
Title	Senior Associate
Address	2121 Ward Place NW
City, State or Province, Country	Washington, DC 20037, United States of America
Phone	202.591.2541

Joint Partner Firm:	DC PEP (Joint Venture between Brailsford & Dunlavey, and McKissak and McKissak)
Project Role	Program Manager
Project Contact	William Mangrum
Title	Senior Vice President
Address	1250 U Street NW, 3rd Floor
City, State or Province, Country	Washington, DC 200096, United States of America
Phone	202.289.4455

Construction Firm:	Broughton Construction
Project Role	Construction Management
Project Contact	Casey Stringer
Title	Principal
Address	1050 17th Street NW, Suite 440
City, State or Province, Country	Washington, DC 20036, United States of America
Phone	202.589.0066

Exhibition of School Planning & Architecture
Project Details

Project Name	McKinley Middle School
City	Washington
State	District of Columbia
District Name	District of Columbia Public Schools
Supt/President	Hanseul Kang
Occupancy Date	August 26th, 2013
Grades Housed	6-8
Capacity(Students)	340 students
Site Size (acres)	18.9 acres
Gross Area (sq. ft.)	62,000 GSF
Per Occupant(pupil)	182 GSF/Student
gross/net please indicate	1.175 GSF/NSF (62,000 GSF/52,757 NSF)
Design and Build?	Yes
If yes, Total Cost:	$11.58 Million
Includes:	Interior fit out, MEP systems