Benjamin W. Murch Elementary School Modernization and Addition

DISTRICT OF COLUMBIA PUBLIC SCHOOLS

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1. Executive Summary

Benjamin W. Murch Elementary School’s modernization and addition creates a 21st century learning environments, by providing an abundance of flexible spaces for learning inside and outside the classroom. The school’s addition faces Davenport Street, and the glass connection between new and old becomes the school’s new front door and lobby. The addition’s massing and materials co-exist with and complement the current Murch Elementary School building without imitating or overpowering it. The addition has two variations of red-toned brick, both of which are compatible with the original school’s brick and stone color. The color of the brick and the arrangement of the classroom windows throughout the addition harken back to the existing building in proportion and scale. The existing building’s datum line (created by the transition between the stone base and red brick) is also referenced throughout the new building. Below this datum, the new building’s darker brick base gathers the individual wings together and grounds them to the site.

Adjacent to the lobby, the addition’s masonry-clad mass is formed into two classroom wings, or pods. These pods, which house Pre-K and Kindergarten classrooms on level one and 4th and 5th grades on level two are separated by an outdoor learning garden that is accessed through the centrally located Pre-K and Kindergarten commons. The open space between the pods allows each classroom to have natural daylight as well as to break down the addition’s overall scale.

The academic pods, lobby, and athletics pod (facing the play fields to the North) are tied together by a new circulation spine. In plan, it is an extension of the existing building’s circulation system, tying the two buildings together. The spine connects all the school’s common spaces together, with access on each level. The media center, located in the existing multipurpose room and in new infill space, forms a central heart to the school.

The cafeteria is located on the lower level in the southeast corner of the site. This arrangement preserves the view of the existing building from the southeast and permits the roof of the cafeteria to be used as an early childhood play space. The arrangement of the cafeteria also allows it to function independently for community events and voting. Finally, the two buildings connect at the Nexus, an open collaborative environment, which offers views of the entry and cupola on the Second Level and transitions the differing floor level alignments of the addition and historic building. The spine ties the individual pods together creating a visually coherent addition. As students travel along the spine, glimpses of the existing building are always present. Whether it is views of the cupola, the existing multipurpose room or the other parts of the existing building, Murch Elementary School’s present is always tied to its past.
### 2. Scope of Work and Budget

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<tr>
<th>Description</th>
<th>Details</th>
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<tr>
<td>Date of Completion</td>
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<td>Student Population</td>
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<td>Site Area; Acres</td>
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<td>Building Area: Renovation</td>
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<td>Number of Stories</td>
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<td>LEED for Schools 2009</td>
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<td>Construction Cost</td>
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3. School & Community Engagement

The school district created a School Improvement Team (SIT), which partnered with the design team from the beginning of concept design through construction. The SIT committee consisted of teachers, staff, parents, students and neighborhood stakeholders. The design team used various activities to solicit hopes, concerns, generate ideas and receive feedback. These meetings were instrumental in shaping the final design. Early in the project we divided into small groups and placed 3D printed program blocks on the site. The SIT used this activity to illustrate one of their clear goals for the project; maximizing the site’s contiguous open play space. Conducting multiple meetings and participating in these activities allowed the community’s voice to be heard and led to concrete changes in the design, such as, placing the parking in a garage under the gym and placing the cafeteria under the Pre-K / K playground in the Southeast corner of the site.

We also spent time discussing where the front door should be. In conversations with the SIT committee the design team understood the need to have a centralized entry that could be accessed on two sides. These conversations led us to place the entry off Davenport Street and make it easily accessible from the playground.

As the design progressed the partnership between the community and SIT continued. Together in Schematic Design we used an activity call the “Brown Paper” exercise. In this activity, hundreds of precedent images were placed on butcher’s block paper. The committee took hours writing what they did and did not like about the images. As we came together and discussed their comments we were able, together, to form a clear vision for the character of their school. The SIT committee was not the only group who participated in these activities. The students themselves were able to play with the 3D blocks and they were able to comment on the precedent images. Finally, in construction as the configuration of the playgrounds were being finalized we engaged a group of students in a variety of activities to inform the type and arrangement of the playgrounds. Their input influenced the final design, aligning the daily student flows and equipment placement, making the final design better.
3. School & Community Engagement
1. HISTORIC BUILDING
2. CONNECTING SPINE
3. NEW ACADEMIC PODS
4. ARTICULATE MASSING, CREATING NEIGHBORHOOD SCALE
5. CAPTURE GREEN ROOFS
6. CONNECT OUTDOOR LEARNING ENVIRONMENTS
The schools desire for a Montessori influenced curriculum did not always align with the district’s education specifications. Unable to make the program bigger, the design team, working with the SIT and the district we were able, together, to shift program square footages, find efficiencies and use the building’s pod layout to create opportunities for the school’s curriculum. This is best demonstrated by how the Pre-K and K pods have direct access to a variety of learning spaces, which include the lower school commons, group breakout rooms and an outdoor learning courtyard.

Learning does not stop in the classroom. To encourage lifelong learning must be omnipresent and joyful in all areas of the school. Murch Elementary school is designed with a range of formal and informal learning environments throughout the school. Whether it is group study rooms, the Lower School Commons or the Nexus students and teachers have different sizes and types of spaces to meet. The corridors are also designed to spark student’s creativity. In the Spine, light shining through colored glass creates a blue-colored rhythm down the corridor. The walls in these corridors are filled with student work.

The school’s learning environment continues outdoors. The site includes sports fields, several play structures, colorful site furniture and a number programmed outdoor learning environments. These environments include a bird and butterfly pollinator garden, a labyrinth and school farm, which sit on top of the green cafeteria roof off the main entrance. A special courtyard is also designed for Pre-K and K students containing a learning garden and play turf. The site includes permeable paving and an extensive rain garden/bioretenion system surrounding the site. An accessible pathway connects the playgrounds to the school and community.
NEW BREAKOUT NOOK OFF EXISTING CIRCULATION
5. Physical Environment

The historic Murch school offered a severe site utilization challenge. Guidance from the Historic Preservation Office indicated their desire for the street-facing elevations to be as visible as possible, retaining primacy on the site. The steep slope of the site to the west created an opportunity for the cafeteria program to be a primary new face for the school at the SE corner by the lowering the cafeteria below the historic elevation, opening the southern and eastern faces to views and light and installing a rooftop Pre-K play area that becomes an inviting front entry element to the main entrance.

Where new and old meet there is always tension. It can be deemphasized and hidden, or it can be exposed and celebrated. The floor-to-floor heights in the new building is two feet taller than the existing building. On Level Two the need for this transition led to the Nexus. The Nexus is a circular breakout learning space, large enough for a class to meet, which also happens to have a ramp and stair. It is here the details of the existing building are exposed and the space opens to views of the copula, the existing building’s most historic element.

Carefully connecting new and old; the design team focused on how the two should connect and the materiality and massing of the new addition. The addition is separated from the existing building by the building’s entry, a glass hyphen. The entry is reduced in scale to avoid interrupting the existing building’s quoins and cornice. The color of the brick and the arrangement of the classroom windows are influenced by the existing building’s rhythm. The addition’s darker brick base gathers the individual wings together and grounds them to the site, similarly as the existing building’s granite base does.

The new Murch two-and-half story additions, the result on intense neighborhood and agency engagement are recessed from the street, sit compatibly across from two-story residences by integrating green spaces intermittently across its facade, and utilizing a mixture of warm brick, contemporary glazing and natural materials. The open space at the north relates to the NPS “Fort Circle Parks” area and the new below-grade cafeteria at the SE give the Murch site edges a comfortable fit into the low scale residential neighborhood. The main entry allows students and visitors to view and pass directly through the school into recreation areas beyond.
EARLY ELEMENTARY PLAYGROUND
Benjamin W. Murch Elementary School’s modernization and addition created a 21st century learning environments, by providing an abundance of flexible spaces for learning inside and outside the classroom. The addition was designed around three key concepts. First, it emulates the existing school in the size, material, and configuration of the classroom wings. Second, the classroom wings engage a new central spine – a main street – that connects the addition to the existing building in both building massing and internal circulation. Finally, the addition was positioned to maximize the site’s contiguous open play space, an important feature for the surrounding community.

The Murch project involved intense engagement with parents, neighborhood stakeholders, review agencies and Murch students. Beginning with early program genesis meetings to organize community thoughts, hopes and desires, to multiple open forums to engender support for site utilization schemes, recreational options and access additional funding to construct the resultant design directions, the Team was an integral part of project evolution. The final recreation, landscape and garden designs, involved design session with students of all grades to determine the right mixture of open and structured play elements on the site.

The results is an energetic public resource highly used every day.