



Alexandria Area High School
2015 JAMES D. MACCONNELL AWARD SUBMISSION

Executive Summary



Learning from Defeat

Like so many other great stories, the story of the new Alexandria Area High School begins with a major setback. It begins in 2003 with the community of Alexandria defeating a bond referendum for a new high school by a significant margin. In the aftermath of this disappointment, new district leadership committed time to engage the community in a deep conversation about facilities to understand what happened and how to move forward together.

They learned that the community was not involved in the process. They learned that the community didn't really understand why they needed a new high school, and that they felt the district should tend to other pressing needs first. They learned the proposed high school was not yet designed, nor did it have a proposed site. Perhaps the biggest lesson they learned was that the community needed to see the new high school before they could support it, and wanted to be included in the design process.

In response, the district set out on a new path and in 2007 the community supported a capital bond addressing the community needs for a new elementary school, early childhood center

and district administrative center. This bond also included funds to purchase a site for a future new high school. This work was completed, with community involvement, and in 2010 it was time to engage the community in the planning for the new high school.

In November of 2010, over 100 community members came together to participate in a three-day collaborative visioning and design charrette workshop at the old high school. They came together to co-create a clear and compelling shared vision for the new school, to define the educational program with this vision, and finally to develop a virtual 3D model in real time on the new site in alignment with the vision and program. The workshop culminated with a celebration/presentation by the community design team to over 500 people who showed up to see the results. The actual design of the new facility varies little from what was presented that evening.

In September of 2011, Alexandria School District 206 passed a \$65M capital bond with strong community support to build the "best of the next kind" of 21st Century High School. The following award submission documents the results.



Scope of Work + Budget



Scope of Work + Budget

“We see an inviting and sustainable community that mirrors the District’s rich tradition, provides a flexible digital learning environment and serves as a regional center for academics, the arts, and activities for all ages.” - Vision Statement

This statement, created on the first day of the design charrette workshop, has served as a reference point for everyone involved in the design and construction of the new school, (the district’s construction manager has been involved from the beginning) and nicely embodies the community’s vision for the new high school. The total project budget was approximately \$72 million and it was occupied in June of 2014 in preparation for the first day of school in September.

The educational program called for a comprehensive high school supporting an enrollment of 1,400 students in grades 9-12. The bulk of the academic programming is offered in four ‘academies’ in a pair of nearly identical 3-story academic wings, small learning environments that feature a vast array of flexible learning spaces bathed in natural light and drenched in technology, along with a variety of specialized hands on learning labs. The program includes both an Activity Center complete with a Fitness Center that is open to the public; and a Performing Arts Center featuring a 1,000-seat theater (designed in collaboration with several community arts groups)

along with state-of-the-art instructional spaces for music and drama programs. The heart and soul of the new facility is the light filled community commons, a warm and inviting “eat, meet, greet” space that is designed to support a wide variety of large community gatherings.

The school is located in the southeast corner of the city on a 137-acre site that contains a variety of sensitive natural wetland areas. Balancing the exterior program requirements of the school with the natural features of the site was an important part of the planning and design process and extending and caring for these sensitive features is now an integral part of the school’s science curriculum. The project team is pursuing LEED Silver certification for the building, one of the many goals set for the project reflecting the community’s aspirations for and commitment to a sustainable future.

Floor Area: 282,000 SF

Student Capacity: 1400

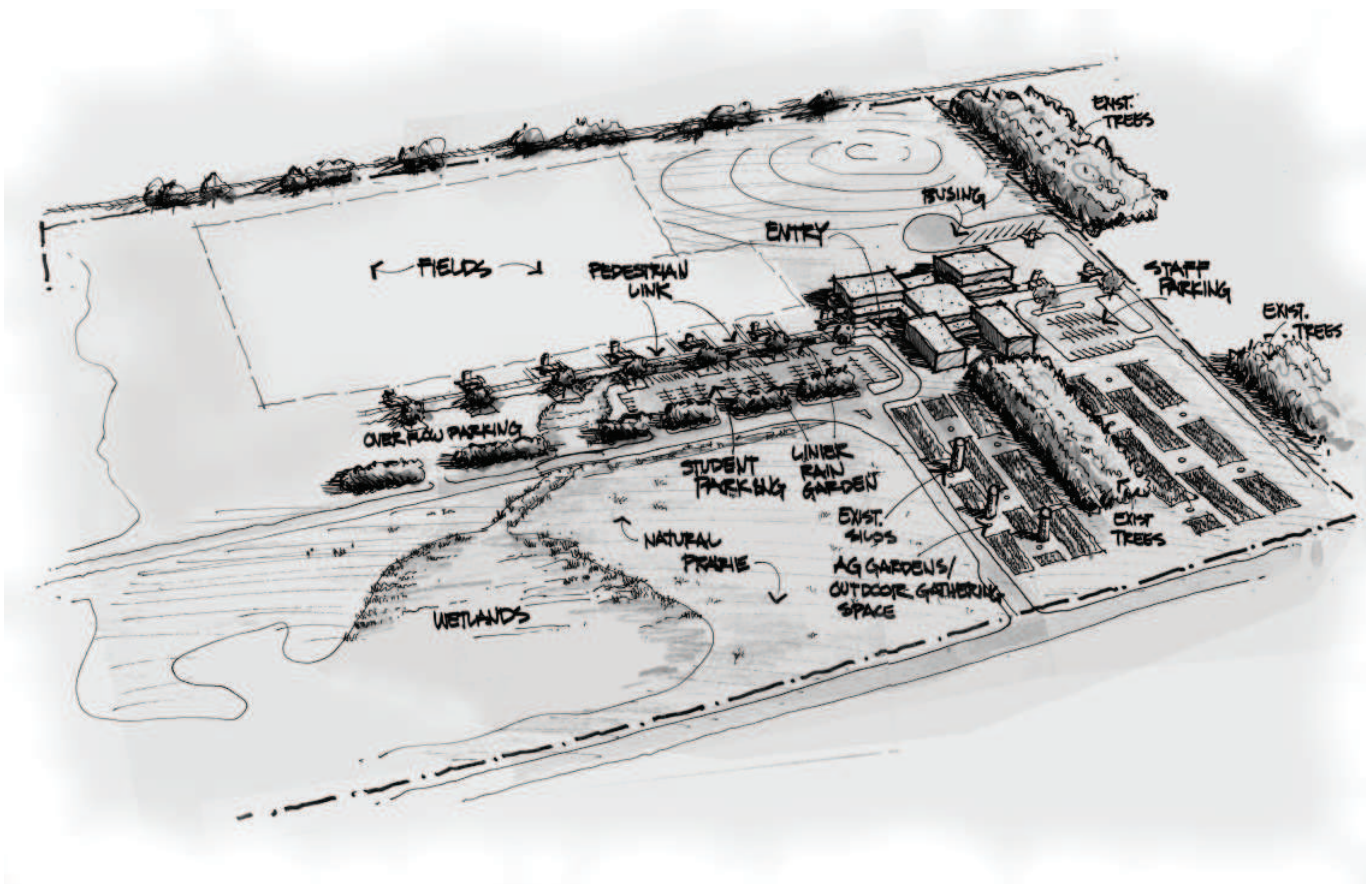
Grades Served: 9-12

Floor Levels: 3

Date Occupied: August, 2014

Construction Cost: \$61,000,000

Total Project Budget: \$73,000,000





Community Engagement Process

Community Engagement Process

“The best way to predict the future is to design it.”
 -Buckminster Fuller

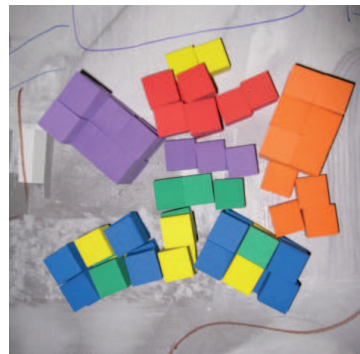
Not everyone thought that voters in the Alexandria School District 206 would approve a referendum for a new high school in 2011. The economy was sluggish, still recovering from a deep recession. The \$65 Million price tag was steep and local taxes were on the rise. But the vote on September 27, 2011, saw a total of 5,554 residents (57 percent!) of the community in favor of the referendum. Many of these voters were likely swayed by the pre-planning process because this time, they were invited to be an active part of it.

After the failed referendum in 2003, this time the School Board worked with the Design Team to create a new process focused on engaging and listening to input from members of the greater community. The Design Team held “Opportunity Forums” centered on themes that the School Board had identified as important: Performing Arts, Activities, Sustainability and Community Partnerships. All members of the community were invited to participate in the process and share their desires for incorporating these themes into the new school. The information gathered in these sessions helped to inform and shape the design of the new school.

A key message that came out of these Opportunity Forums was that the community lacked space to come together and they saw the High School as an opportunity to build their community around their students. From this point in the design process, the school became more than simply a high school, but a resource that the whole community could share. These discussions also emphasized the importance of developing strong community partnerships and finding ways for local businesses and individuals to get directly involved in school planning and student development, creating a win-win for all.

In addition to the Opportunity Forums, the Design Team led two multi-day Community Design Workshops with participation by more than 100 members of the community including students, parents, teachers, business partners and district leadership. The purpose of these workshops was to co-create a clear and compelling vision for the new school and to align the educational program and learning environment with this vision.

Community Design Process Timeline



Community Design Workshops

I see.../We see...

With a goal of co-creating a clear and compelling Vision for the new high school, the Design Team led two multi-day design charrettes with students, parents, teachers, business partners and district leadership.

The first step in creating a shared vision involves being clear about individual expectations. Participants were invited to individually write "I see..." statements indicating their personal visions for the new school. The individual statements were discussed in small groups to be incorporated into "We See..." statements. From here, one member from each of the small groups formed a new group charged with combining the statements into a final comprehensive "We See" statement that captures the essence of the common ground of the group.

*Imagine it's 5 years out, and the new Alexandria Area High School is successful beyond your expectations. Imagine you're giving someone a tour. **What do you see?***

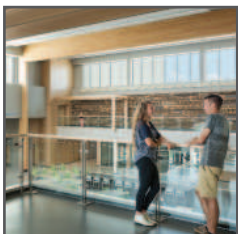
I see.../We see...



greater community using the building



technology and media designed around flexibility



natural daylight



campus feel with areas for collaboration



The comprehensive "We See" statement was positively endorsed by the whole group:

WE SEE...

The future High School will be an inviting and sustainable (eco-friendly) community that mirrors the District's rich tradition, provides a flexible, digital learning environment and serves as a center for academics, arts and activities for all ages.

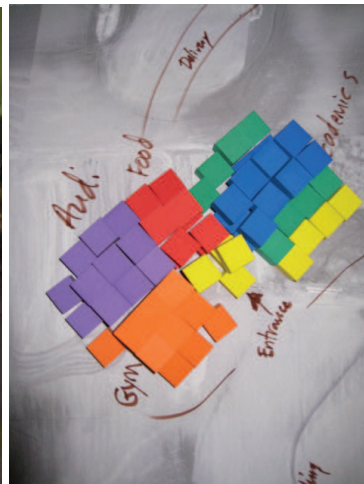
Individuals were asked to share their visions for the new school focused on key areas such as Community, Technology, Sustainability, Resources and Environment. Above are some resulting common threads.

Community Design Workshops

Think Outside the Blocks

“Think Outside the Blocks” is an exercise in which all participants were split into small groups and given a set of multi-colored blocks. The blocks represent program areas and groups were asked to design the adjacencies of the program areas on the site. After reviewing all schemes, two clear concepts emerged. They were dubbed the “linear” and the “heart” schemes. From here, the Design Team created 3D models of each, and after presenting to the larger group, it was decided the the “heart” scheme better met their priorities and vision. This became a defining element for the organization of the school on the site. The focus for the rest of the workshop became the flexible learning neighborhoods.

The inclusive community process resulted in a school that is a community hub for academics, the arts, and athletics, with community partnerships planning key roles for learning and in support of the new facility.



“This community has always been extremely supportive of education. It is what makes the community work.”
-Terry Quist, Superintendent of Alexandria School District



AERIAL VIEW FROM NORTHEAST: HEART SCHEME



AERIAL VIEW FROM NORTHEAST: LINEAR SCHEME

Community Design Workshops

Outcomes

The intensive and inclusive community process helped establish priorities, align resources with those priorities and facilitate efficient decision making, resulting in a shared vision for a school that became a guide for the entire design process.

At the end of the community design charrette, the vision, the placement of the school on the site, its size and its program were established. Each community member that participated in the workshops became personally invested in the success of the project which helped to build trust and support for the new facility throughout the life of the project and beyond.

\$5.15 million was raised through a capital campaign, donations, miscellaneous grants and other revenue. By the time voters went to the polls in 2011, \$3.35 Million had already been pledged.

Because of the intense involvement of the community in the design process, there was immediate buy-in because it was designed collectively. The new building represents the community vision and now serves as a community center.

Businesses and business leaders were involved in the planning and design, as well as designing the curriculum. Several partnerships were created that resulted in fundraising, donation of company time and resources and ongoing mentorships with students and members of the business community.

A true testament to the effectiveness of the process, the new school's final design varies little from the designs that were developed in these first workshops.

"Thanks to the combined efforts of many, we were able to design the best high school we could at the least possible cost."

-Dean Anderson, Chair, Alexandria School Board



A donor wall in the Commons Area lists the major contributors to the AAHS Capital Campaign, which, along with grants and other revenue, reduced the taxpayer portion of the project by \$5.5 Million. Designated signage on various rooms throughout the school recognizes individuals, businesses and community organizations that contributed to the capital campaign at a certain level. More than 100 parties have helped reduce the cost of the new school for taxpayers.



Educational Environment

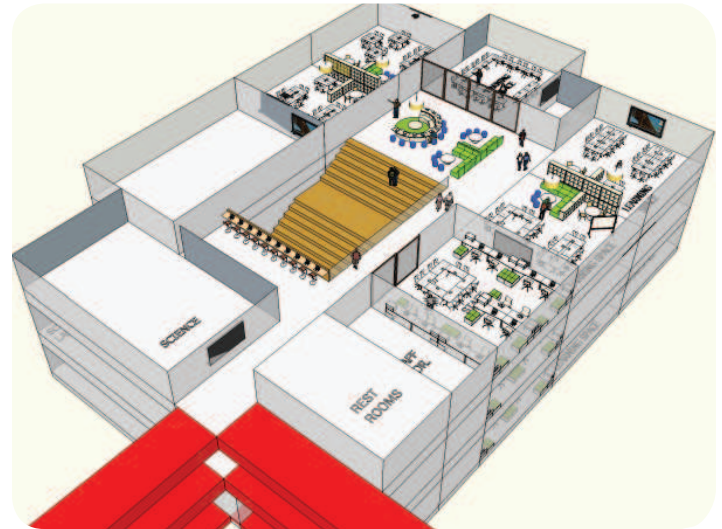


Educational Environment

Flexible Learning Neighborhoods & Personalized Learning

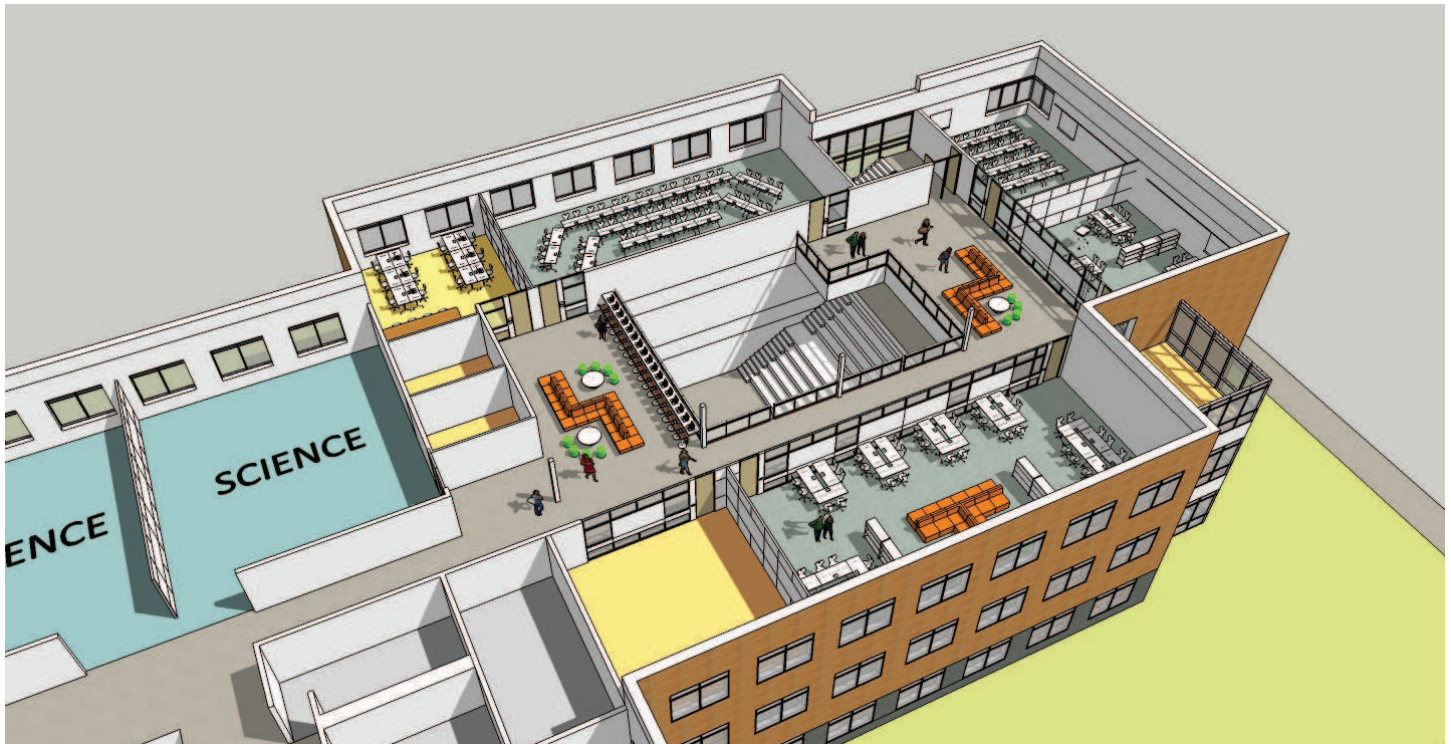
Alexandria Area High School is organized into Small Learning Communities collectively known as The Academies of Alexandria. This model provides a personalized, supported learning environment where core curriculum is integrated with a sequence of courses in the areas of engineering, manufacturing technologies and natural resources; health sciences and human services; and business, communication and entrepreneurship. Teachers work closely with approximately 250 students in their academy versus the entire student body.

The four academies are located in two identical wings that feature an open building design. In each wing, a different academy is located on the first and third floors, with shared space located on the second floor. A set of "Learning Stairs" is located in each wing that provide flexible learning space, assembly space for viewing speakers or performances, or just space to hang out.



FLEXIBLE LEARNING NEIGHBORHOODS

THE ACADEMIES OF ALEXANDRIA

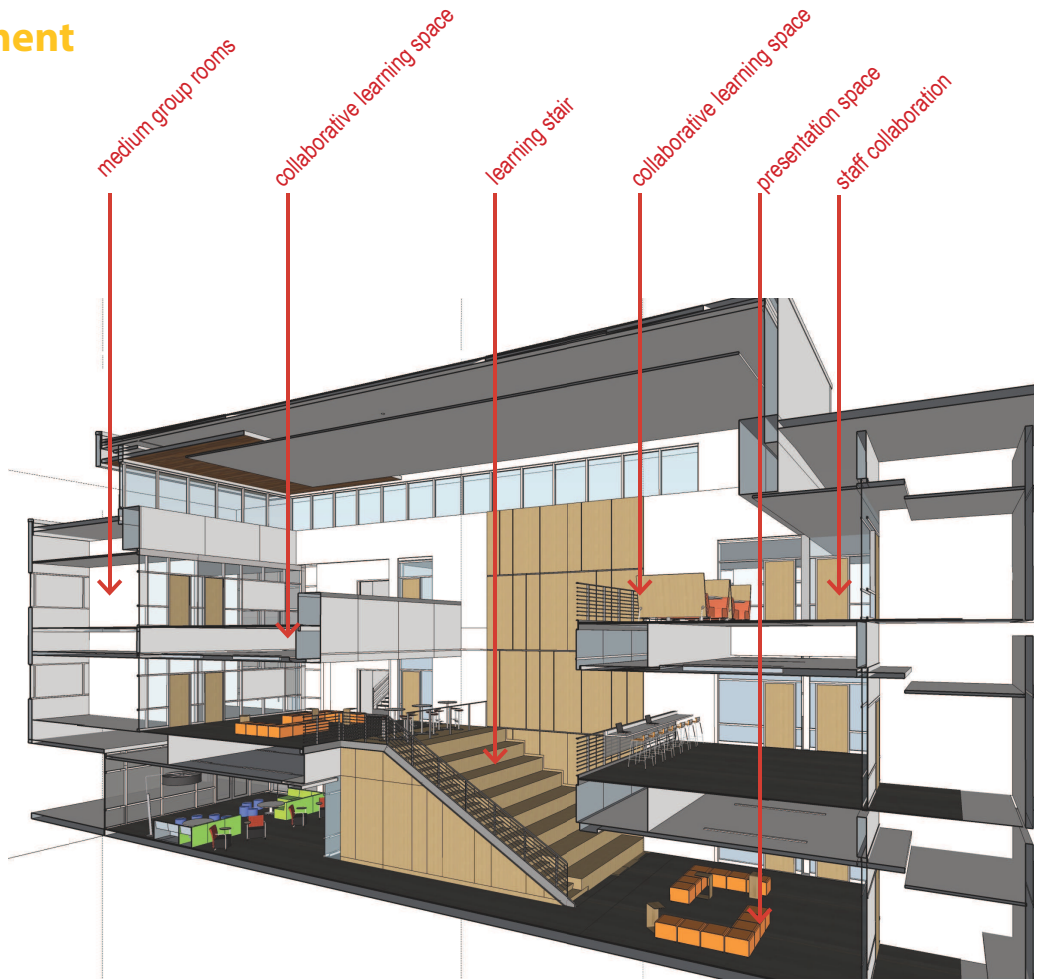


Educational Environment

Collaborative Settings

Teachers no longer have their offices in classrooms, allowing the rooms to be used by various classes and other staff throughout the day. All teachers in each academy have their offices in one main area within that academy. The open office concept allows for more collaboration and team networking. A staff lounge area offers staff members a place to go for breaks during the day.

Rather than student desks, classrooms are equipped with rolling tables and chairs that can easily be moved or stored. The flexible, open room designs provide optimal learning environments for different styles of teaching and learning.



Educational Environment

Specialized Learning

Designed as a "Community Center," nearly every part of the school is activated by the greater community. Business partners are directly involved in educating the future workforce and volunteers offer time and resources to students.

Local medical professionals share real world applications with students in the Health Sciences and Human Services academy. Local engineers present their work and assist students with projects in the Design Build Lab. Local chefs and other members of the hospitality community offer assistance in the Culinary Arts studio. With these partnerships, students have hands-on opportunities to learn about different fields from actual practitioners. These same local business leaders have also helped to reshape the curriculum, eliminating courses that are no longer relevant courses and adding others in order to get the right courses that would help develop the desired qualities of their future Workforce.



The Culinary Arts program has a large classroom full of stainless steel, gas-powered equipment located directly off the Commons area and connected to an A La Carte store. The store will be student run, featuring items that the students learn to prepare in class.



The Design-Build classroom is located off the Commons area. A wall of windows will allow people to look in at the students taking part in the Engineering and Manufacturing Academy programs. This area was made possible by a collaboration of several manufacturing companies in the area, which supported it through financial or equipment donations. The academy includes numerous Computer Numeric Control (CNC) tools, including a plasma cutter, saws and a refurbished CNC mill.



With donations from the community, the music rooms (orchestra, band and choir) are equipped with rosewood flooring which provides optimal acoustics. Each room is also equipped with a sound mixer for recording and playback of music.

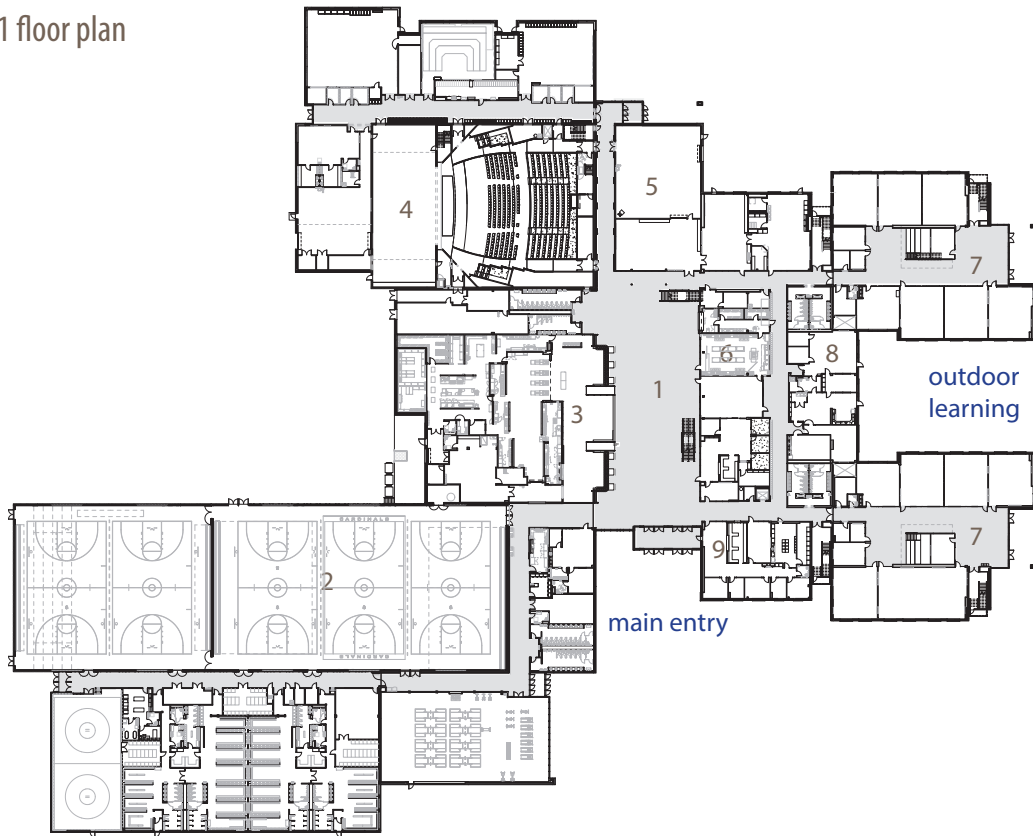
Physical Environment



Physical Environment

Layout

level 1 floor plan

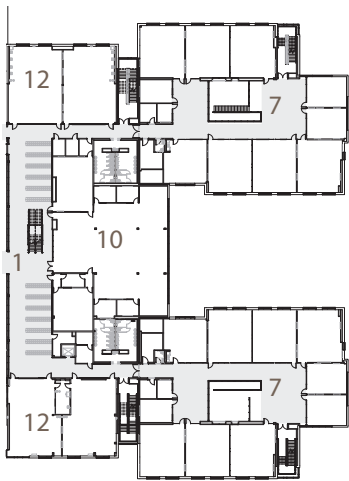


- | | | | |
|---|---|----|--|
| 1 | commons | 7 | learning neighborhoods:
learning studios; small & medium
group rooms |
| 2 | activities / fitness laboratory | 8 | life skills laboratory |
| 3 | kitchen / cafeteria | 9 | administration |
| 4 | performing arts theatre,
music and drama rooms | 10 | media center |
| 5 | design build lab | 11 | mechanical |
| 6 | culinary labs | 12 | science labs |

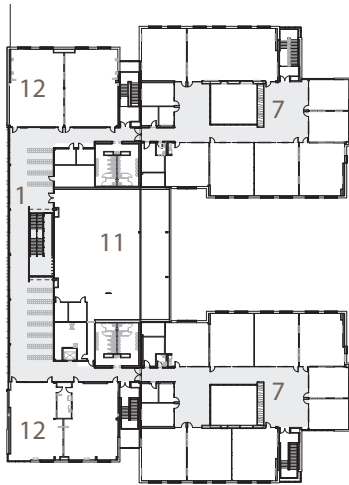


Physical Environment

Layout



level 2 floor plan



level 3 floor plan



Physical Environment

Community Commons

The Community Commons is the heart of the school. It serves as an informal gathering space that connects students and community. It also serves as the school cafeteria and a pre-function space for the theater and other activity spaces. Alexandria, Minnesota is known for its resort character and is a large hospitality community. The design of the Commons celebrates this “north woods resort” character with abundant wood columns and beams that reflect the trees of the area and terrazzo flooring in a pattern of a beach and lake with ‘docks’ extending into the space. This grand day-lit space creates a sense of student belonging and connectedness with a variety of informal and flexible places to gather.



Physical Environment

Learning Studios

The classrooms feature walls made of glass panels that are easy to pop out and change to allow learning spaces to be reconfigured as needed in order to adapt as technology and students' needs change. A wall can be removed to make two spaces into one large room. The walls have cavities for wiring and technology that can be changed and updated as needed.

Furniture also plays an important role in the success of 21st Century Learning Environments. For relatively small investment, flexible furniture options empower students and teachers to reshape the environment to support a wide range of learning activities throughout the day. For this project, the students were an active part of a selection committee that tested the furniture for a year before making their final recommendations.



RAPID RECONFIGURATION: The images above depict how flexible furniture can be easily arranged for a variety of class configurations, offering endless possibilities for different teaching and learning styles.

Physical Environment

Learning Studios



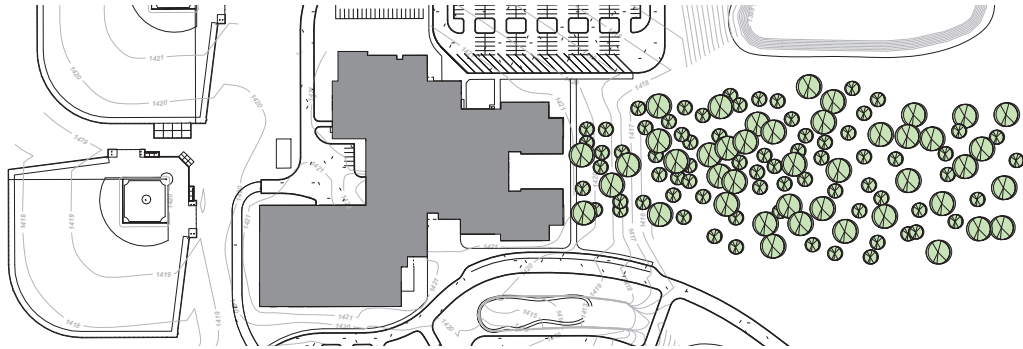
Learning studios are flexible and adaptable with small and larger group settings as well as more traditional sized spaces. The learning studios are also constructed with flexible walls that allow the school to change its configuration as curriculum or technology changes.



Physical Environment

Connectivity

The design of the school focused on visually open and connected learning spaces, including connections to the outdoor environment. The Learning Studio wings were designed to surround an existing grove of oak trees that were preserved in the development. This grove encloses an exterior courtyard, which is used as an additional learning space in spring and fall.



The existing grove of trees creates the fourth wall of an exterior courtyard, providing opportunities for outdoor learning.

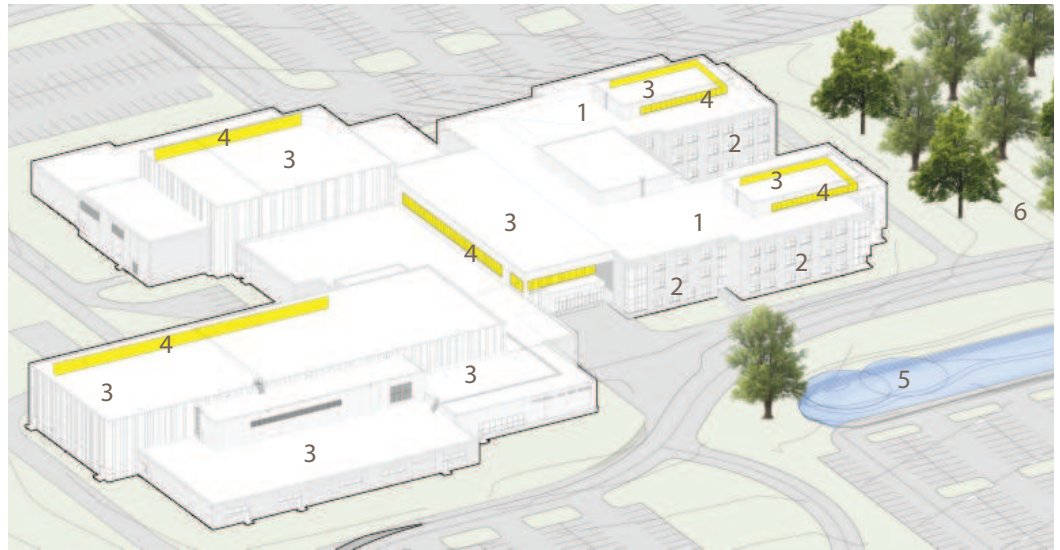


Physical Environment

Sustainability

Multiple sustainable strategies were used throughout the school to reduce energy use and make best use of resources. The building orientation and architectural design captures natural sunlight throughout the building. The landscaping includes native grasses and vegetation and preserves existing wetlands and trees. Stormwater is used as a source of irrigation.

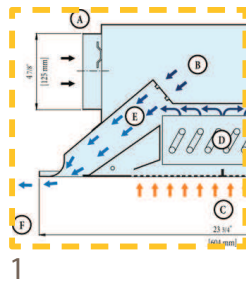
Alexandria Area High School applied to the US Green Building Council for LEED (Leadership in Energy and Environmental Design) Silver designation, which recognizes the best in class for green building design and construction.



The learning studios were sited centered on an existing grove of trees on the site, not only to preserve the trees, but to serve as a windbreak.



AAHS is a candidate for LEED Silver designation.



1



2



3



4



5



6

- 1 chilled beams
- 2 operable windows
- 3 joint use of facilities-facilities are shared with City of Alexandria for community education
- 4 daylight - clerestory windows
- 5 rainwater harvesting for irrigation - no potable water for irrigation
- 6 existing trees preserved - serve as a windbreak

Results



Results

21st Century Learning Model

The Alexandria Area High School project has achieved success on many levels. The design process has been an integral part of the District's 21st Century Learning transformation process as it moved from a traditional, departmental model to an interdisciplinary academy-based model. The transformation of a traditional high school to a 21st Century Learning model has offered new possibilities for today's students and provided flexible options for adapting to the needs of future students. It has also inspired and been a major part of new staff development programs, creating a positive paradigm shift for this community.

By fully engaging the community, the district passed a \$65M capital bond with strong community support to build the "best of the next kind" of 21st Century High School with an additional \$5.15 million raised through community support. The project also led to numerous community partnerships with local businesses that have deeply affected and transformed course offerings that are specifically relevant to the Alexandria community and these partnerships will continue into the future.

With a focus on sustainability, many important initiatives were implemented resulting in a building that is operating exactly as intended.

Alexandria Area High School has caused quite a stir as a regional leader. Neighboring districts have been so impressed and inspired by the new school that they have even begun referring to it as "Alexandria University" and are beginning to consider ways to incorporate elements of the design in their own schools.

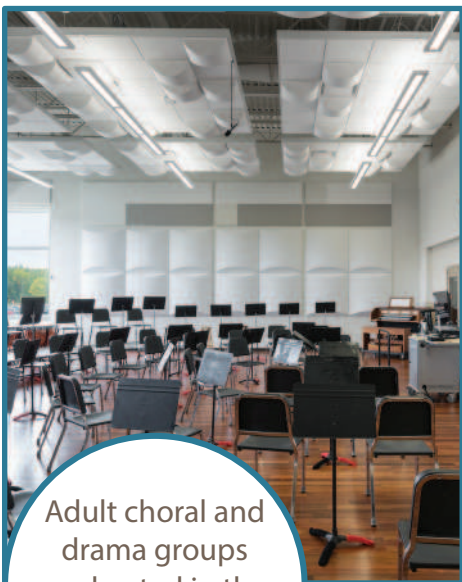


Results

Achieving Community Goals

The success of the community engagement process is paying off in dividends, as nearly every part of the school is activated by the greater community: business partners get directly involved in educating the future workforce and local residents enjoy participating in community education courses and attending events and performances. Last spring, as construction neared completion, the Principal was inundated with calls from the community asking how they could get involved and the following programs are a result of those calls.

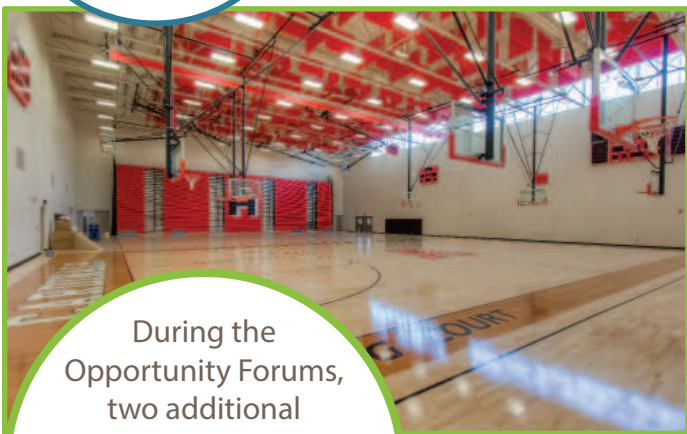
32 members of the community have volunteered to mentor the Freshman class. At the end of the semester the students produce a ten year plan.



Adult choral and drama groups are hosted in the Performing Arts Wing.



A cooking demonstration series is taught by members of the hospitality community in the culinary arts lab. Students sell their own food creations as lunch options in the *A La Carte Store*.



During the Opportunity Forums, two additional gymnasiums were added to accommodate Athletic Tournaments to spur the local economy.

Members of the manufacturing community visit the Design Build Shop weekly to discuss their current work and to help the students with their assignments.



Results

Community Hub

Life Long Learning

Alexandria Area High School will be a community hub for learners of all ages and will strengthen the district's capacity to support adult and community education programming.

Activity Center

The school also serves as a hub for entire community activities, athletics and performing arts, with state-of-the-art facilities.

The Activities Wing accommodates physical education classes during the day, after-school athletic practices and games, and plenty of additional space for community use. On-site Athletic Facilities were designed for a variety of activities for physical education curriculum as well as for community athletic programs and other multi-purpose community events.

The Performing Arts wing has dedicated space for theater, choir, band and orchestra, including a 1000-seat Performing Arts Center that is available for community events.



"I have performed in around 450 concert halls in the U.S. and around the world. You not only have one of the finest acoustic spaces anywhere in the U.S., but this is one of the finest I've ever played in anywhere around the globe. We were able to hear ourselves perfectly on stage, and this is something that doesn't happen very often. You should be very proud of this beautiful facility." -visiting musician from Russia



“It’s an example of what we need for the future: A community supporting the school and the school supporting the community.” - Senator Amy Klobuchar

