

Canyons School District Mount Jordan Middle School

2016 MacConnell Award Submission





figure 1: Mount Jordan Middle School

“Walking the halls of the newly constructed Mount Jordan Middle School reveals a truly state of the art campus.”

MAYOR TOM DOLAN

Executive Summary Mount Jordan Middle School

OVERVIEW

There is a reality in education that is often overlooked in the development of a new facility. It is in the pile of unused supplies that were once thought important to education and are soon to start gathering dust. It is in the qualified teacher, who has dedicated 30 years to the training of young minds and is now facing a jump in technological advances that has to be incorporated in their style of teaching. It is in the district, who questions how to move forward while still respecting the current needs of the population to whom they serve. The conundrum then becomes how to design for the future while still respecting where education is today.

It is not often that an architect gets to design a facility in tandem with the development of a new 21st Century curriculum in a new school district that is still defining their identity. Canyons School District formed when it split from a larger district, and inherited the aging 1950's middle school that was identified as needing

immediate replacement. They saw this as an opportunity to commit to learning by pushing the boundaries of current pedagogies and creating a space for learning that is safe, cost-effective, and fully supportive. Rather than an assortment of limitless possibilities, it became even more important to address the specific needs of the students, community, staff, and stakeholders.

Through a series of intensive project visioning sessions with stakeholders, defining characteristics of both the program and supporting facility began to emerge. A new STEAM curriculum was identified as a necessity, as well as adaptability to the diverse teaching styles often seen as we transition into 21st Century Learning. A building that was fully integrated as a teaching tool allowed the resulting design to become playful, while fostering student engagement and collaboration. *(Continued)*



figure 2 & 3: Learning Communities

Executive Summary

(continued)

DESIGN

The school's interior is broken down into six innovative and open Learning Communities (figure 2 & 3), which consist of large scale learning studios that are clustered around open collaboration centers. This center supports active multi-group and project-based learning activities. In addition, small breakout rooms and think tanks give a place for quiet individual learning and small group discussion. The variety of spaces, sizes, and functions empower educators to engage their students in the STEAM curriculum.

Vibrant colors, stunning views of the Wasatch Front Mountains, and an abundance of natural daylighting create a visually stimulating environment. Whimsical lines sweep through the building, correlating with important historical events in science, mathematics, history, art, and engineering. The floor becomes an opportunity to study the solar system, the exterior of the building the human genome, and a demonstration wetland garden further boosts the school's science program, giving students a hands-on, interactive learning experience. Unique partnerships with the surrounding community enabled the enhancement of art functions within the school, including a Broadway-style auditorium that serves both the school district and the community.

Executive Summary

(continued)

PROCESS

By carefully curating the collaboration process, the design team was able to give the Canyons School District a creative, engaging STEAM-based middle school with the flexibility to support the community and students now and in the future. The Mount Jordan Middle School truly is a positive example of the power that comprehensive educational design provides to the educational process.



Key Facts

- 6th-8th Grade
- 1,200 Student Capacity
- 206,670 Square Feet
- 20.2 Acre Site
- \$38,557,151 Construction Cost
- August 2015 Occupied



figure 4: Exterior

Planning Process

Located in the Southeast Salt Lake Valley, Canyons School District is a newly created school district in Utah. Created through an agreement to split from an existing district, Canyons began operation in July of 2009.

To understand better the needs of the 33,000 students and 41 school facilities, the district began with a district-wide facility assessment. The district selected the design team to perform these assessments, which ultimately led to a well-developed facility masterplan that outlined needs and strategies to meet the established educational goals and vision for the newly formed district. Mount Jordan Middle School was included as one of the highest priorities for replacement in the masterplan given its age, condition, and important role as a community center.

In 2012, the School Board for the Canyons School District approved an innovative STEAM initiative for their middle school students. The new curriculum provides a creative project based learning approach to help students develop critical thinking skills in science, technology, engineering, arts, and math. Just as the STEAM curriculum was being defined and implemented, the design team concurrently began the planning process for the replacement of Mount Jordan Middle School. The challenge of designing a school that fully supported the STEAM curriculum that was still in development required an innovative programming process that has set the standard for future STEAM education in the district.

The unique planning process included many critical activities including:

- Stakeholder Visioning Sessions
- STEAM Curriculum Workshops
- Teacher Focus Groups
- Student Engagement Workshops
- Concept and Design Charrettes
- Community Council Workshops
- City Arts Meetings

STAKEHOLDER VISIONING SESSIONS

A stakeholder group was established to provide high-level vision and direction for the new school and to reach consensus on the many facets of the design.

During the first meeting, the design team led the stakeholder group through a fun and collaborative project visioning process (figure 5). With this, the group established the many characteristics of the design vision. The result of the Stakeholder Visioning sessions and subsequent meetings was community and district consensus in the overall vision and design direction for the new school (figure 6). Throughout the design process, decisions and ideas were tested against the initial vision statements to ensure the direction continued to meet the project goals.

During the consensus process, the stakeholder committee established the following four vision, goals and objectives for the school:

Students

Focus should be on the students first. The school should provide an inviting, accessible and engaging learning environment that enhances a student’s educational experience.

Community

The school should be a welcoming and strong educational center that builds on the rich, established academic tradition of the community. The building will serve to strengthen the relationship with the surrounding city and continues in its role as the heart of the community.

Curriculum

The school should fully supports districts innovative STEAM curriculum, 1 to 1 technology initiative, and foster principles of project based 21st century learning.

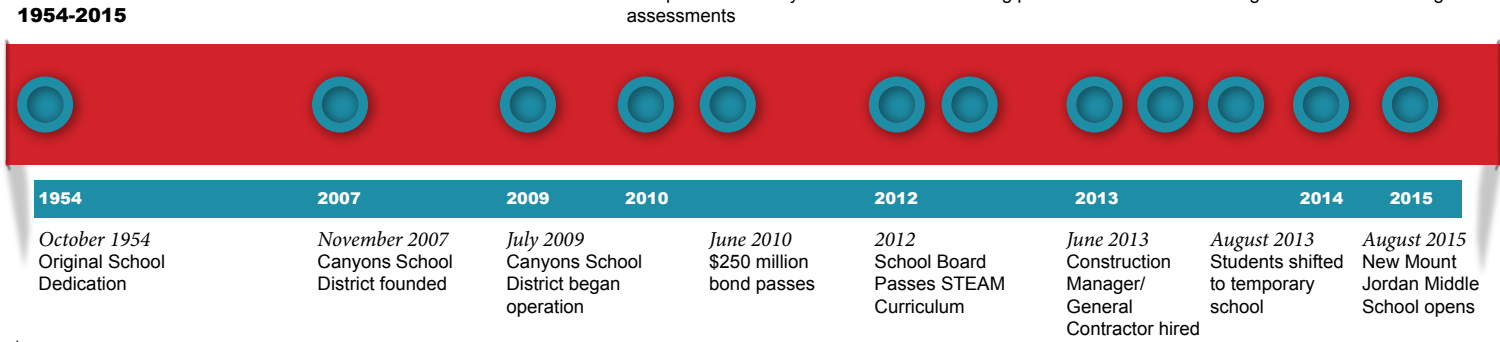
Social Responsibility

The building should be constructed on budget and be maintainable over its entire life. It should be highly sustainable and become a teaching tool to educate others on the role of sustainability.



figure 5: Visioning Session

Timeline



January 2010
Completion of facility
assessments

November 2012
Planning process

September 2013
Ground breaking

February 2014
Construction begins

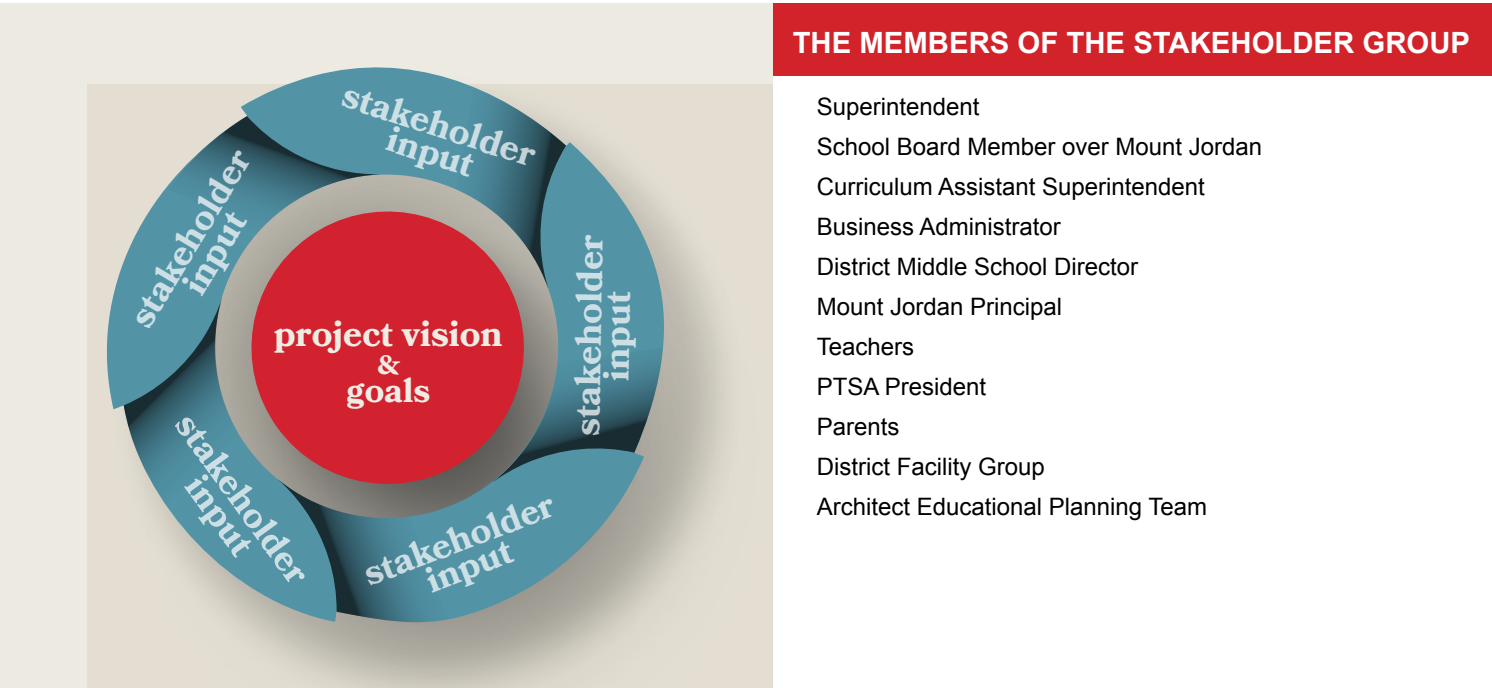


figure 6: Stakeholder Input

Planning Process

(continued)

STEAM CURRICULUM WORKSHOPS

The planning process for the Mount Jordan Middle School and the districts STEAM curriculum were developed simultaneously. Many STEAM curriculum workshops were conducted to help both the district and the design team understand the learning activities and methodologies that would be implemented with their new curriculum direction.

The investigation and dialogue during the workshops drove the Evidence Based Learning (EBL) team to think about the new STEAM curriculum in different ways. By uncovering how the district planned to engage middle school students in the STEAM based learning methodologies, the design team was able to understand the characteristics the learning environment required to support the educational objectives. Because of the concurrent development of the STEAM curriculum and the building’s program document, a symbiotic relationship developed between the curriculum and space design of the school. The result is a middle school that fully supports the STEAM curriculum in all aspects of its design.

The outcome of the STEAM curriculum workshops were the following design criteria:

- Support collaboration at every scale (student to student, students with teacher, teacher with teachers, teacher with administration)
- Teaching spaces should be flexible and usable in a variety of ways with an ability to support adaptation for future programs and pedagogies
- Spaces should be provided for large group discovery (more than one class together)
- The building should account for space for kinesthetic activities and hands-on learning
- Provide spaces for multiple uses, including creative, verbal, experimental and collaborative activities
- Provide space for small group discussion, and individual tutoring
- There should be places for quiet contemplation and individual study
- All areas of the building should have convenient access to learning and presentation technology
- Support creation and playback of student created media including podcasts, YouTube, Maximum use of natural light and ventilation is critical
- Creative and stimulating colors, textures, and patterns should be used throughout the building to educate and enhance the learning environment

- Acoustics and lighting must complement learning
- Technologies should support seamless movement between learning spaces and teaching activities
- Outdoor learning opportunities should be incorporated into the overall site design
- The school should be comfortable, imaginative and fun.

STEAM CURRICULUM WORKSHOP MEMBERS

- District Evidenced Based Learning (EBL) Specialists
- Curriculum Directors
- Curriculum Assistant Superintendent
- District Middle School Director
- Mount Jordan Principal
- District Facility Director
- Architect Educational Planning Team
- Graphics Specialists

TEACHER FOCUS GROUPS

A critical element in the planning for the new Mount Jordan Middle School was the Teacher Focus Groups. Teacher groups from all departments met with the design team, school principal and district facility director to investigate how the new design might support current and developing programs and pedagogies. The teachers offered insights into what they were doing and hoped to do in the new facility. The principal was a huge proponent of project based 21st Century learning methodologies and was a crucial part of the conversation. She was able to inspire the teachers to think beyond what they had always done, and imagine what might be possible with the new school.

From these Teacher Focus Groups came awareness and empathy for the curriculum shift many teachers were going through. This led to the creation of educational spaces designed to support teachers regardless of where they are on the spectrum between 21st Century learning and traditional teaching methodologies. While the new school fully supports the interactive 21st Century methods of project based learning (figure 8), small group work, team collaboration, and student presentations, it also supports more traditional teaching methods (figure 7) that still have value in modern education. In the end, the most valuable result was that teachers and staff became vested partners in defining and supporting the project vision, and eventually the educational curriculum developed for the school.



figure 7: Traditional Classroom



figure 8: 21st Century Learning Classroom



figures 9 & 10: Breakout Space & Think Tank

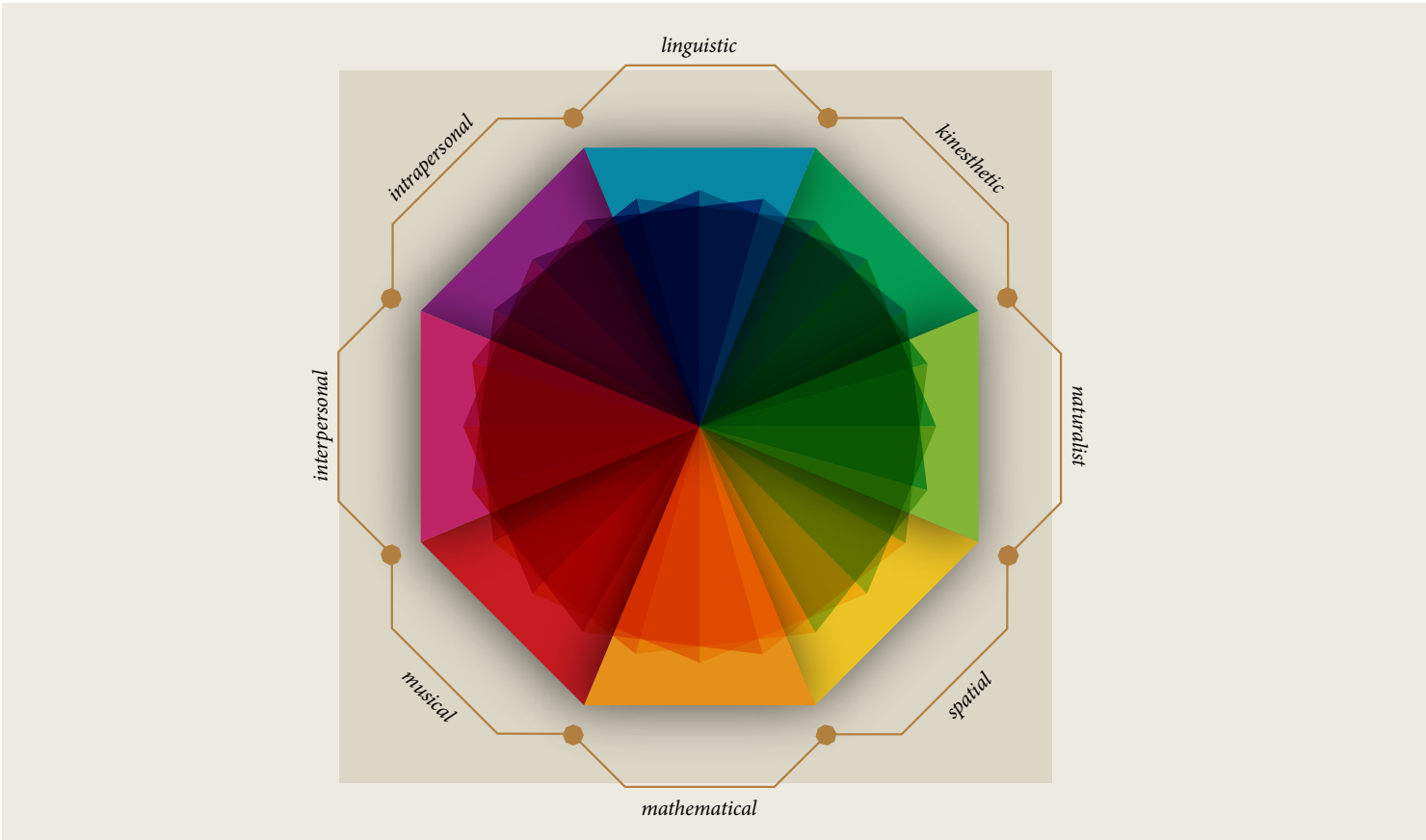


figure 11: Learning Styles

Planning Process

(continued)

STUDENT ENGAGEMENT WORKSHOPS

The design team had the opportunity to meet with many students during the initial programming of the building. The student engagement sessions focused what students valued in the educational process and how best they learn. It was encouraging to see that the students quickly realized they all had different learning styles (figure 11). The tone of the meetings and the project quickly shifted as the design team realized we needed to support universally all the students learning styles.

Many ideas that are implemented in the school originated from the student interactions including the creative use of color, downplaying the importance of lockers, and innovative educational technologies. One of the most meaningful interactions was when one of the students, Dominick, raised his hand and said that he learned best when it he was alone and not distracted by things around him. The conversation turned to how the design team could support the way Dominick learns best. Together the students came up with the idea to add smaller rooms next to the main classroom where a student could remove distractions (figure 9). The students realized that the teacher would still need to see the student so they proposed adding windows into the space. The result of the student's idea was the addition of the breakout spaces linked between each of the learning studios (figure 10).

CONCEPT AND DESIGN CHARRETTES

Because of the newness of the STEAM curriculum, the district had difficulty imagining what types of educational spaces they would need and how they would be used. A critical step was developing a formal Educational Specification and Program. From this document, critical elements were reviewed and conceptually designed. Ideas were reviewed against current district spaces and teaching methodologies to see what improvements could be made. Careful attention was paid to how the developing learning community concepts could facilitate STEAM engagements. Design iterations were developed and refined to clarify each program component. As each building component was defined, the design team presented multiple concept studies on how the spaces could be linked together. The result is a building designed around a main pedestrian spine. The key program elements, like the learning communities, arts wing, physical education, administration, information commons all originate off the central spine. This gives the entire building a strong organizational and manageable flow that contributes to overall security and usability of the design.



figure 11: 1st Floor



figure 12: 2nd Floor

Planning Process

(continued)

COMMUNITY COUNCIL WORKSHOPS

Over many years, the existing Mount Jordan developed strong connections to the surrounding community. It was easily understood by the design team that it was critical to interact and collaborate with as many people as possible in the local community. This was done through community workshops that comprised of the Community Council, a formal group that has been part of Mount Jordan for many years. The Community Council consisted of elected parents, local leaders, the principal and a teacher representative. In addition, the workshops involved the school's PTSA president and school board members. The workshops were conducted after a design concept was developed and became a great tool to test initial design ideas. The workshop forum gave the Community Council the opportunity to understand fully the school district's vision, question decisions and offer suggestions and improvements. By refining the design based on the community's inputs, the public felt vested in the success of the project. This engagement added value to the project not only during design, but also when the doors opened on the first day.

SANDY CITY ARTS MEETINGS

In addition the formal workshops with the Community Council, a unique partnership between Sandy City's performing arts program and the district was developed to strengthen the arts program in the school. A financial contribution allowed for the development past a typical middle school auditorium into a full Broadway styled performing arts space for community and school use (figure 13). The resulting 600-seat facility has a full fly loft, catwalks, enhanced sound and lighting systems, and full stage. This unique addition to the project emphasizes to students the importance of arts in the STEAM curriculum, and provides them with a state-of-the-art space to develop and learn. Shortly after the opening of The Theater at Mount Jordan, it hosted a successful run of a full production of Into the Woods by the Sandy Arts Guild and a season of The Nutcracker.



figure 13: Auditorium



figure 14: Site Plan



figure 15: Existing Site

Educational Environment

SITE DEVELOPMENT

Based on the overall project goals the design team realized the importance of maintaining the strong community connections of the site to the surrounding neighborhood. Given the adjacency to the district's transportation facility, warehouse, and district offices the design carefully considered how the new middle school would fit into a long-range masterplan for the surrounding site. Studies were developed that outlined possible options for the all of the district property that reimaged the role of the middle school within a larger, STEAM community. The result is a forward thinking approach that proposed Mount Jordan become the anchor tenant for future academic campus that would eventually include a higher education satellite campus and office space for developing tech companies. By rethinking traditional community connections, the design team ideated opportunities to creatively support education and enhance 21st century concepts of collaboration and knowledge sharing.

(figure 14) Within the site, care was given to maintain safe pedestrian/vehicular circulation and connections to the adjacent neighborhood. The parent and bus drop off areas were intentionally separated to help defray congestion at key times. Parking was provided around the site but was intentional screened and minimized with landscaping elements.

The site was thoughtfully developed to create outdoor learning opportunities. Exterior teaching and gathering spaces were provided in areas that normally would be dedicated to empty circulation routes. Between the grade level houses are informal learning areas with meandering benches and a mixture of hardscape and vegetation, and a formal learning area with a raised seating area large enough for a class to meet (figure 10). The wetland area supports environmental awareness and science curriculum and outdoor basketball courts are used during lunch to give more time for their growing bodies to move and play. These simple gestures helped activate the exterior spaces and create a safer site environment.

Educational Environment

(continued)

BUILDING ORGANIZATION

The core building block for the educational environment is the Learning Community (*figure 15*). Each learning community has two learning studios, two learning labs, a science-learning lab and either a special education or a Spanish immersion learning studio. Between each learning studio is a smaller break out space that provides a location for small-scale teaching and tutoring. The core learning community spaces are all organized around a shared collaboration area. This collaboration space is sized to handle multiple classes to gather at one time but is still intimate enough for smaller, breakout activities. From the central collaboration space students and teachers have access to a shared conference space (think tank), student restrooms, storage and a teacher preparation room. All of the core subjects are taught in the learning communities.

A grade level house is formed as one learning community is stacked on another. The school has three learning communities lined up on the east side of an open circulation spine. The entire elective and non-core classes, the information commons (media center suite) and the administration block are organized on the west side of the circulation spine. The building is bookended by the physical education area (gym, locker rooms, running track, fitness studio) and performing arts wing (band, choral, debate hall, auditorium). The simple organization and clear circulation contribute to a positive learning environment as students avoid the anxiety of feeling lost. The configuration along the main spine also allows natural light to be easily brought into all of the building.

Each of the learning studios are designed to support Middle School students engaged in STEAM learning activities. Every learning studio, learning lab and primary teaching space has windows for natural daylighting and views that help create an inviting, warm atmosphere. The spaces are large enough to support a variety of classroom configurations and learning activities. Each studio contains plenty of general storage in addition to a lockable storage cabinet to secure and charge the rooms 1-to-1 mobile tech cart.

Wall surfaces in the school are carefully designed to support the learning process. Labs and studios have smart board projection, white boards and a full tack wall for pin up space. Public areas have display monitors and whiteboards for small break out activities. Wall graphics and display cases throughout the building provide opportunities for students to learn about historic STEAM concepts and exhibit their own contributions.

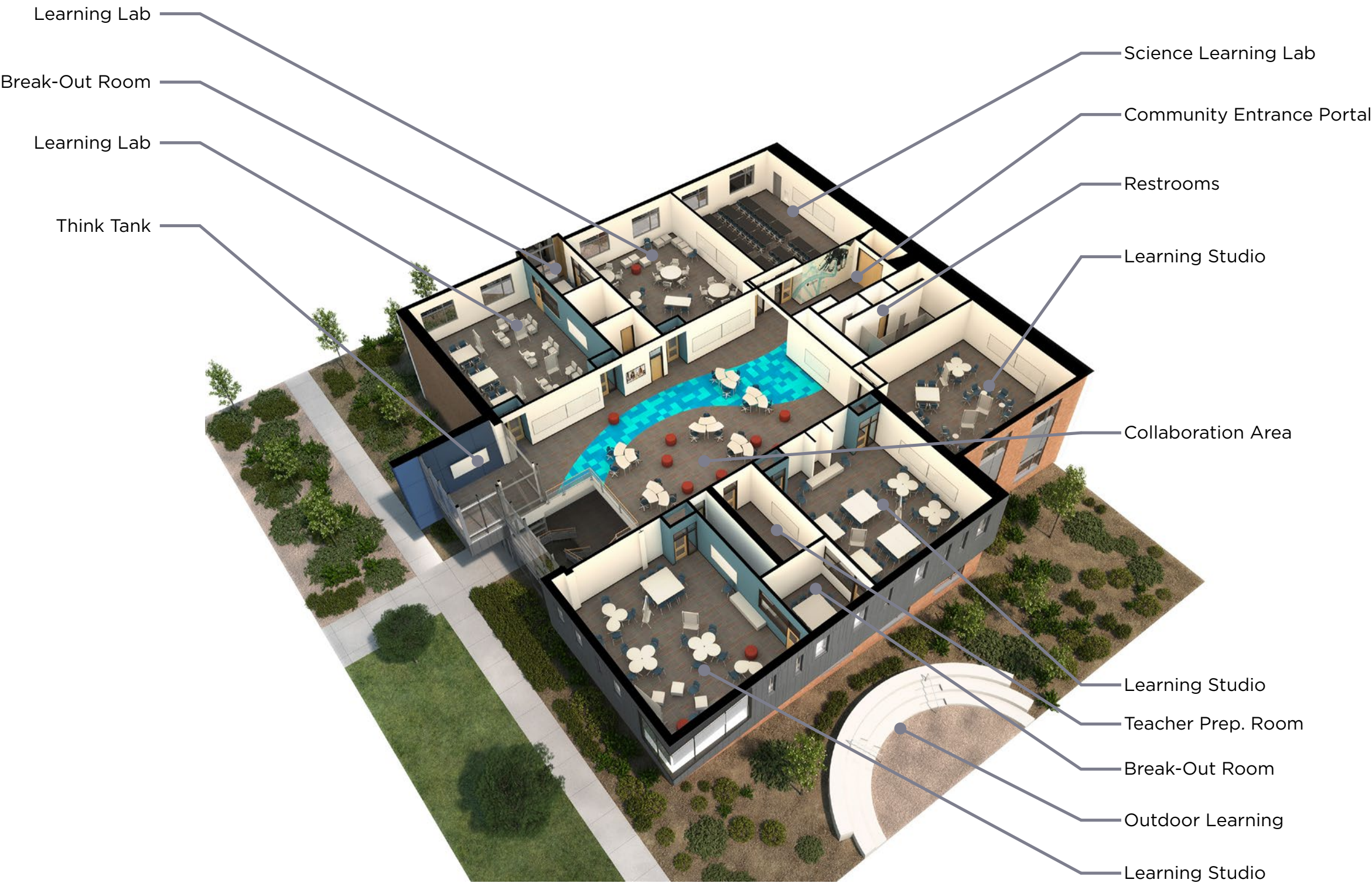


figure 15: Learning Community

Educational Environment

(continued)

BUILDING AS A LEARNING TOOL

The real success of Mount Jordan is the design team understanding that the building had the potential to become a teaching tool. The design team looked for opportunities to convey STEAM principals in patterns, materials, colors, and structures. For example, the VCT flooring pattern throughout the building represents various scientific diagrams like the solar system, Cartesian coordinate system, musical scale and molecular structures (figure 17). The structure in the building, including a large 100' tube steel truss above the kitchen area, are left exposed and highlighted to emphasize the role of engineering in the building. Running down the length of the 600' main spine on both levels is a timeline wall graphic introducing students to the historical context of achievements in STEAM (figure 16). Large, vibrant graphic panels greet students

as they walk into each of the grade level houses and highlight key influential scientists and artists (figure 18). The pattern in the exterior charcoal colored metal panel reflects the human genome pattern. Additionally, the team developed an on-site wetlands area that not only used for on-site storm water detention, but also becomes a teaching tool supporting the earth science program and a place for students to perform environmental experiments. With all these intentional design moves, the building is able to spark curiosity and wonder for students and staff and invites them to become a part of the learning process.

figure 16: STEAM Timeline



figure 17: VCT Floor Pattern, 1st Floor



figure 18: Grade Level House Entry Graphic



Educational Environment

(continued)

EDUCATIONAL TECHNOLOGY

The use of technology was a key success at Mount Jordan and met the owner's requirement that the school be a 1-to-1 facility. This meant careful planning and design to make sure technology in the building was flexible, available at multiple scales/locations and facilitated the 21st century learning activities (*figure 19*). The team worked with the district to develop built in charging stations for technology carts that could be secured in each classroom. This allowed each teacher the convenience of dictating when and how technology was used in the daily curriculum. Technology data hubs, projectors, AV and sound enhancement systems, collaboration and information monitors are present throughout the building as a resources, not a focus, to help facilitate learning at multiple scales and locations.

figure 19 & 20: Technology & Color



figure 21: Building Exterior

Physical Environment

One of the unique things about Mount Jordan is its careful use of color (*figure 20*). The new Mount Jordan looked for opportunities to use color to stimulate and reinforce building functions. Starting with the exterior, bright metal panel colors were selected to help create visual prominence and character for the school. Bright red was used to help users understand where main entry and circulation points were located. Internally, the design team looked at how color could be used at various levels and intensities to promote activities within the building. Like its active function, the main circulation spine is visually engaging and vibrant. Highly saturated colors/patterns are used and each of the three grade-level houses each have their own color portal that serves as wayfinding. Within the learning community the vibrant, the primary house color is toned down and softer patterns and neutral colors are introduced.

Finally, within individual classrooms and break out spaces the colors take another step down in intensity to help reinforce the more intimate nature of active teaching. At each level of activity and space, color is carefully selected to help reinforce teaching activities and create a visually interesting environment.

(*figure 21*) The exterior brick masonry veneer is designed to be a simple backdrop against the vibrant, metal panel colors. The color of the brick masonry was deliberately selected to match the masonry of the original Mount Jordan. This ties the memory and history of the past with the present and future school. Engaging forms highlight each of the three learning communities. The strong primary color of the cantilevered entry helps announce where patrons enter the building. Durable concrete slats, a sustainable salvaged product, is used throughout as an accent material.

Physical Environment

(continued)

STRUCTURAL SYSTEM

For the design of the school, the team was challenged to create a building that would be open, full of natural light, flexible, and able to be constructed quickly. This was achieved through an efficient BRB system, a high-performing steel core in a concrete-filled steel casing that allows for more effective resistance to stresses. In the event of an earthquake, the system prevents buckling and enables the structure to withstand higher levels of seismic pressure, creating a safer environment for students and faculty. Because it

uses less braces and chevrons, the building is easily adaptable to modifications that support future teaching methodologies, and also offers cost efficiencies during construction. All areas of the building use this system, including the gymnasium and auditorium, giving the freedom to include design features such as a jewel box window along the running track (figure 24). Strategic areas of this innovative steel system have been left exposed for student study as both an engineering and artistic form (figures 22 & 23).

figure 22: Exposed Structural System



figure 23: Exposed Structural System



figure 24: Gymnasium



Physical Environment

(continued)

SAFETY AND SECURITY

To improve the safety and supervision at Mount Jordan Middle School, learning communities are organized along a “Main Street Corridor” that acts as the main path of circulation to all the major functions within the school. With this design and organization, the school administration can easily observe what is happening throughout the entire commons area. The openness and transparency throughout the school help prevent undesirable activities, including bullying, because the adults in the school can easily see what students are doing at all times. Each learning community has multiple means of egress that are planned in a way that allows them to be individually secured during a high-risk event.

All visitors enter the school through a secure vestibule that has the capability to buzz people into and out of the main office. Additionally, the school’s hall monitor has access to the 80+ cameras via an iPad as she walks the school. The cameras prevent unwanted activity and increase the sense of safety within the school because of the perception that everything can be seen. The safety and security measures designed within the school contribute to a comfortable, pleasant and safe atmosphere empowering the students to focus on learning.

figure 25 & 26: Hallway & Main Office



SUSTAINABILITY / EFFICIENCY

Although not specifically designed to meet LEED standards the design and owner team were very conscious of the need to provide an environmentally responsible building. The large amount of natural daylight throughout the building, particularly in the classrooms, means that learning activities can occur without the need for artificial light. The building is equipped throughout with addressable LED fixtures that will help with the overall energy performance of the building and allow for future reconfiguration if needed. From a site perspective, the team developed an on-site wetlands area that not only is used for on-site storm water detention, but also becomes a teaching tool and place for students to perform environmental experiments (figure 27, photo taken days after planting). Where possible, materials were selected based on their

regional availability, recycled content and life cycle maintainability. The design team was very conscious of the need to provide an environmentally responsible building that would reflect the STEAM character of the building’s program. Sun studies were completed to ensure that the maximum amount of natural light could be brought into each teaching and collaboration space. It was determined that in addition to fixed sunshades on southern exposures, if the classroom wings were located on the east side of high clerestory spine the building could provide natural shade from the harsh western sunlight. The result is a building where teaching and learning can occur in inviting spaces that are naturally daylight.



figure 27: Wetland Learning Area

Process & Project Results

Throughout the design process, decisions and ideas were tested against the initial vision statements developed with the steering committee to ensure the direction meet the project goals. The key ideas resonated in all of the design ideas and end results.

STUDENTS

Goal

Focus should be on the students first. The school should provide an inviting and engaging learning environment that enhances a student’s educational experience.

Result

By engaging students, faculty and staff the design team was able to understand the mindset of middle school students. Care was given to provide a safe, inviting environment that fostered opportunity for peer-to-peer and peer-to-teacher interaction. Dedicated space was given to a range of activities and learning styles. By clustering students in learning communities (*figure 28*), an atmosphere of collaboration and unity is formed. Additionally, vibrant colors and information graphics create a fun environment where STEAM learning takes center stage.

Key

SUPPORTING ELEMENTS

- Vibrant use of colors and form
- Engaging curiosity through STEAM timeline and graphics
- Multiple levels of learning at various scales and locations
- Spaces provided for quiet contemplation and study
- Active main spine gives students safe location for socialization
- Outdoor learning spaces provided



figure 28: Learning Community



figure 29: Auditorium

Process & Project Results

(continued)

COMMUNITY

Goal

The school should be a welcoming and strong educational center that builds on the rich, established academic tradition. The building will serve to strengthen the relationship with the surrounding city and continues in its role as the heart of the community.

Result

The strong academic tradition of the old Mount Jordan has been reborn with the new building. By working closely with the city and neighborhood, the Middle School is becoming a stronger community connection. This is a critical success because the school now vested partners that will only help to enhance the security and educational opportunities for the students. The unique Broadway quality theater space integrates the community in the heart of the building and helps reinforce the critical ‘A’ in STEAM education (figure 29).

Key SUPPORTING ELEMENTS

- Stronger relationship built with Sandy City
- Financial contribution from city increased overall project scope/budget
- Community involvement in all facets of planning process
- Strong pedestrian routes provided to adjacent neighborhood
- Master plan developed for possible community and educational Cameras, IT infrastructure and proper site design creates safe, defensible building.

Process & Project Results

(continued)

CURRICULUM

Goal

The school should fully supports districts innovative STEAM curriculum, 1 to 1 technology initiative, and foster principles of project based 21st century learning

Result

Mount Jordan Middle School has become a model for other districts in the state on how curriculum can be integrated in the planning process of new schools. By carefully curating the curriculum the design team better understood the functionality and needs of the individual spaces outlined in the Ed Spec. Built in flexibility in both technology and teaching spaces allows for future uses and pedagogies to be easily incorporated into the curriculum. Spaces throughout the building are tailored to various scales and types of learning. By acknowledging that every student is unique, the design team was able to create a school where every student had the opportunity to learn in a way that best suits them.

Key

SUPPORTING ELEMENTS

Larger learning studios provide adequate space for more active project based learning activities

Technology and display spaces are prevelant throughout the building and available at multiple scales (1 to 1, small group, full class, multi-class, school)

Enhanced auditorium and lecture hall help emphasize the role of Arts in STEAM education

IT backbone throughout the building allows for flexible adaption as needs change



figure 30: Interior



figure 31: Exterior

Process & Project Results

(continued)

SOCIAL RESPONSIBILITY

Goal

The building should be constructed on budget and be maintainable over its entire life. It should be very sustainable and become a teaching tool to educate others on the role of sustainability.

Result

Throughout the school, the design team looked at how best-practices of sustainability could be incorporated to improve the overall life-cycle of the building. Enhanced insulation systems renewable resources, natural daylighting, efficient storm water management and durable finishes all contribute to the district’s ability to maintain the school for the next 75 years. Additionally, if and when education shifts the flexible steel structure will allow the district to re-invent another iteration of Mount Jordan without needing to build again. Most importantly to the district and taxpayers, the project came in on budget and was constructed on time.

Key

SUPPORTING ELEMENTS

- The building was built for the established district budget.
- Review sessions with district maintenance staff held to understand concerns.
- Life cycle costs provided for critical elements (flooring, steel structure, etc) to understand where dollars should be allocated.
- LED lights throughout reduce overall electrical consumption
- Natural lit spaces enhance learning environment and provide energy efficient lighting scheme.
- Wetlands area used as on-site storm retention and teaching tool.
- Flexible steel structure provided to allow for future adaptations.