

EXECUTIVE SUMMARY

Project Goals

The beloved original Des Moines Elementary School was more than 90 years old and identified for replacement in the 2016 bond. Built for an earlier era, the building was operating beyond its useful life with outdated heating, ventilation, and plumbing systems that were costly to repair and at risk of failure. It was also not compliant with current fire or earthquake codes.

When contemplating the replacement of Des Moines Elementary School, Highline Public Schools recognized the need for a 21st century, state-of-the-art facility that supported the types of educational programs and teaching methodology that their elementary school students would need to successfully compete in our increasingly technological society and global community. The students, teachers, parents, and citizens of Des Moines shared this vision, and the November 2016 passage of the bond by local voters confirmed this commitment.

Zenith Park Transformed

The 17-acre Zenith Park site was selected for the replacement of the aging school. The new 85,786 square foot elementary school completed in August 2019, celebrates the sloping terrain while preserving the flattest areas of the site for playfields and parking. The school is designed to accommodate 700 PreK-5 grade students while the core of the facility will have the potential to support a capacity of 750 students. The intent of developing the facility's core functions allows for the accommodation of a larger student body as the City of Des Moines growth projections come to fruition.

Bringing the Vision to Life

From the onset, the planning and design process was one of partnership and collaboration with the district, teachers, students, parents, and community to embrace their needs, hopes, and dreams to envision what the school could be. The overarching desire was to build a larger school while maintaining the culture and intimacy of the smaller neighborhood school they were leaving. The result is a beautiful, vibrant, and welcoming elementary school where students are encouraged and challenged everyday to be the best they can be.

The school provides a variety of engaging teaching and learning environments. Classrooms are spacious and flexible to quickly adapt to the task at hand. Whether collaborative school work or independent study, this flexibility accommodates different learning styles and provides a richer experience for both teacher and student. In the bright, open corridors, students can comfortably stretch out in a nook to read, hang out on one of the benches to connect with their peers, or occupy the more structured shared learning areas equipped with wireless high-speed technology.

At the heart of the school is the bright, colorful, and engaging library, providing a child-friendly atmosphere where students receive group instruction, study or read independently, and connect to online and media resources. Sustainable features in and around campus become teachable moments, inspiring students to become lifelong stewards of the environment.



The outdated Des Moines Elementary School will be repurposed for community use

"Thousands of students have walked the hallways of Des Moines Elementary School since it opened in 1925. This school is filled with treasured memories that will last a lifetime. While the final day of school in the old elementary school included tears and hugs, there was plenty to celebrate as students, staff, and families look forward to the next chapter. Come September, the Des Moines Dolphins will be in a beautiful new school at the Zenith Park site."

- Highline Public Schools Article



PROJECT DETAILS

Grades Served

PreK-5

Student Capacity

750

Building Size

85,786 SF

Site Area

13.41 Acres

Occupancy Date

2019

Construction Cost

\$39.6M

SCHOOL + COMMUNITY ENGAGEMENT

Urban Center with Small Town Feel

Des Moines is a city in King County, WA with a population of about 32,000 and is located on the east shore of Puget Sound, approximately halfway between Seattle and Tacoma.

Founded in 1867, modern day Des Moines is surrounded by urban centers yet retains its distinct small town feel. There are spectacular views of Puget Sound, Olympic Mountains, and Mount Rainier. A major marina with public boat launch, city parks, public beaches, a State Park, and public fishing piers are all within the City limits.

Des Moines Elementary School is part of Highline Public Schools, educating more than 19,500 total students. The district's geographic boundary also includes parts of SeaTac, Normandy Park, Burien, and Seattle, for a total of 23 PreK and elementary schools

Des Moines Elementary School Mission Statement

I am a Teacher. I am a Learner. We are successful at Des Moines Elementary!

"At Des Moines Elementary School we value each of the roles within our community. We view students, families, teachers, and staff as integral components to ongoing success. We see every member of our community as having something to offer, something to gain, and many ways to demonstrate success."

Assets within the Community

The original Zenith Park is within a short walking distance of the scenic Des Moines Marina. The park included a playfield and a wooded area that housed multiple wetlands and was traversed by Massey Creek. It was a popular gathering place for the surrounding community to enjoy nature and outdoor activities just steps from their homes. The goal was to celebrate the natural landscape, which resulted in the development of a walking trail connecting the existing adjacent neighborhood to preserved wetlands and creek, honoring the elements that were important to the community.

The community-led Capital Facilities Advisory Committee, along with valued community input, approved boundary changes to accommodate a new middle school and the new Des Moines Elementary School. This critical adjustment allows for reduced class sizes, promoting better teacher-student interaction.

The highly involved school community was an asset in helping to determine what the school would eventually become—a place where students could learn, play, and thrive, and the community could utilize for gatherings and continue to enjoy the expansive grounds for decades to come.



17-acre Zenith Park selected as the new home of Des Moines Elementary School is located in close proximity to scenic waterfront and urban center

Valued Stakeholder Partnerships

From the onset of the project, the district desired an inclusive and collaborative process for programming for the new elementary school. Leaders identified groups of stakeholders to develop the educational specifications.

Each committee listed below was charged with specific roles and provided input throughout the process. All staff, administration, student, and community feedback fed into the Planning Workshop Committee (PWC), where the information was distilled and composed into design goals for the new elementary school facility:

<u>District Leadership</u>: The programming process was led by the School Board of Directors and Core Administrative Team. The School Board reviewed and approved project milestones.

<u>Core Administrative Team</u>: District leaders including the Superintendent, Planning Principal, Capital Planning and Construction Executive Director, Director of Education Specification

and Transition Planning for New Construction, Teaching and Learning Executive Director, and the district's Project Manager made key decisions throughout the programming process.

Planning Workshop Committee (PWC): This team consisted of selected individuals representing elementary school staff and administration, and district administration. This visioning group was an active participant of the programming process and served as a focal point in identifying the needs, goals and objectives for the project.

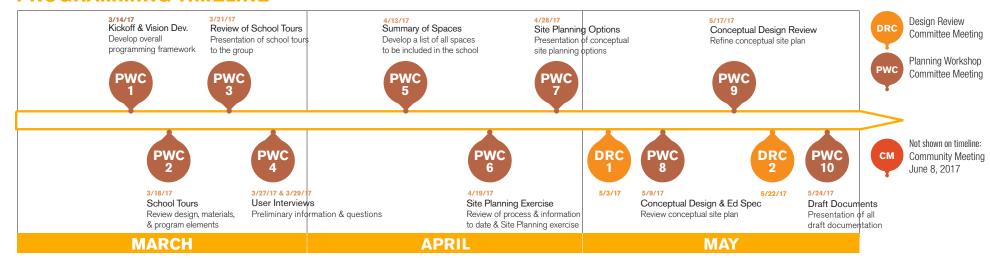
Design Review Committee (DRC): Selected individuals representing Des Moines elementary school staff, district staff, parents, and community members met several times early on to review and provide feedback on the outcomes derived from the programming process bringing feedback to the PWC to consider, and address the feasibility of the comments provided and incorporate them into the programming process.

Des Moines Elementary School Staff and Administration: The architects, project manager, and planning principal met with teachers and staff in small focus groups to discuss the specifics of each departments programming needs for the new facility.

Des Moines Parents and Community: The community was invited to attend community meetings held at strategic points in the design process. About 20 to 25 community members attended the meetings, which allowed them to share thoughts regarding the new construction and gather feedback from the community regarding departments within the new school.

With information collected, the design team created the educational specifications for the new school, which was then passed back to the staff, administration, and finally to the PWC for review and comment to ensure the values and priorities of each department had been accurately portrayed.

PROGRAMMING TIMELINE









Project Challenges

The design of the school was not without its challenges. During programming sessions with the committees, several key themes emerged:

The community was understandably concerned with the plan to replace their beloved natural Zenith Park setting with a school. Significant community outreach throughout project development was critical to the success and acceptance of the project. Secondly, there was a strong desire to maintain the culture and intimacy inherent in the existing small neighborhood school as the school body moved into a much larger school anticipated to house up to 750 students. Third, the safety and security of students and staff were paramount. Multiple levels of subtle but seamless security measures had to be implemented.

Finally, situated just 2.75 miles from SeaTac International Airport and directly under its flight path, noise mitigating features to the exterior and interior of the building were necessary to provide a comfortable environment conducive to teaching and learning.

Value of Process and Project to the **Des Moines Community**

Vital planning workshops guided our architectural team into designing a school that supports the educational specifications. School staff, students, families, and community members helped plan, design, and name the new school. At every step, stakeholders were involved in meetings and critical decisions so that we could design the school that THEY had envisioned.

As a result, the integration of valuable feedback from lessons learned from the poor functionality of their old school—with the goals, educational standards, and their mutual hopes and dreams, were successfully brought to fruition.

EDUCATIONAL ENVIRONMENT

Educational Vision and Goals of the School

When contemplating the replacement of Des Moines Elementary School, the district recognized the need for a 21st century state-of-the-art facility that supported the types of educational programs and teaching methodologies the elementary school students would need to successfully compete in our increasingly technological society and global community. Their vision was for a high-performance, flexible facility that was welcoming, comfortable, and engaging.

Five guiding principles informed the design of the new elementary school:

Quality Learning Environments: Students and staff will experience healthy learning environments that provide open spaces for collaboration and engagement with varying grade levels and support self-directed learners.

"I feel like I was truly heard and respected, and that I got what I asked for."

Karen Smith, Teacher-Librarian Des Moines Elementary School School Identity: The design will compliment and reflect the school's unique connection with the surrounding community and provide opportunities within to celebrate diversity, student growth, interests, and citizenship.

<u>Sustainability:</u> The design will be efficiently maintained to its maximum useful life. The school and grounds should include sustainable features to help educate students, staff, and the community on the importance of taking care of our habitat, energy and resources, and become life-long advocates for the environment.

Flexible Environment: The design will accommodate a variety of collaborative spaces among staff and students, as well as the larger community, while remaining cognizant of changes in future technologies, programs, and student projections.

<u>Safety and Security:</u> The design will provide a secure campus with ample visibility for supervision to ensure staff and students are emotionally and physically safe.



Gather 'round it's story time! Teacher-Librarian Karen Smith engages the imagination of 3rd grade students through traditional story telling.

Flexible Learning Environments Foster Engagement and Collaboration

The design of the classroom environment was based on personalized learning. This process began during the initial programming stage. The design team listened carefully to the stakeholders and teachers regarding the curriculum, teaching methodology, gathering styles, and learner styles, as well as the tools needed to teach. This valuable information was applied to frame the understanding of the elements necessary to create a personalized experience for students, while empowering teachers to instruct at the highest level possible.

The result is an engaging learning environment that provides students and teachers the freedom to adapt spaces to fit their needs at any given moment. Comfortable modular tables and chairs on wheels allow students to create whatever space they desire in order to focus on the task at hand.

Whether a small breakout space, large group activity, utilizing a spacious and comfortable music room floor for hands-on practice or play, or for independent study, classrooms can easily adapt to daily teacher and learner needs, accommodating constantly evolving educational delivery methods. Transparent, visually interconnected spaces allow for easy supervision while simultaneously highlighting and celebrating the exciting academic nature of the classroom.

Since students learn at different rates, the flexibility provided in their environment can accommodate different learning styles, create wonderful opportunities for engagement and collaboration—and as a result, provide a richer, more diverse teaching and learning experience.













Shared Spaces Encourage Both Independent and Collaborative Learning and Socializing

Learning and collaboration at Des Moines Elementary School doesn't just happen in the classroom. Several spaces were thoughtfully designed to help support the school's teaching and learning methodologies.

Spread throughout the school are small gathering areas that provide a multitude of options for formal and informal collaboration and conversation:

Intimately sized **Shared Learning Areas** open out to a corridor in order to increase size and flexibility beyond the space provided. Filled with natural light, scenic views of the surrounding school property and equipped with wireless high-speed connectivity and large whiteboards, these spaces are highly flexible and intended to accommodate a wide variety of unique teaching needs, student activities, and learning styles. Some of these include individual testing, tutoring sessions, student or staff conferencing, departmental collaboration, project work, independent or group study or socializing. These spaces are positioned so they can be monitored by staff from adjacent classrooms.

The larger-scale **Nooks** in the corridor and library are utilized for a variety of functions. Very popular among the student body, at any time during the day you may see students reading, relaxing, or socializing—building connections with their peers.

Bench Seating in the Active Corridors provides a casual spot for students to 'hang out' with their peers, pause for a few minutes to relax between classes, or take in the landscaped views of the beautiful campus.

Library and Media Center Incorporates Child-Friendly "Living Room" Atmosphere

It was clear very early in the process that the Library and Media Center needed to be something special. The outdated former elementary school did not provide the functionality, flow, or tools to support the evolving needs of 21st century learners or thrive as a vibrant center of activity. This new library must adapt to the users' needs, rather than the user having to adapt to the space.

Filled with natural sunlight through a bank of high windows, this welcoming, open, and inspiring academic hub champions the importance and excitement of learning in a child-friendly "living room" atmosphere. Pops of bright colors, patterned furniture, and movement created by a mural of seagulls in flight, create a whimsical, fun, and engaging environment—where students look forward to spending valued time.

Flexible spaces with comfortable, agile furniture can be easily rearranged, allowing students and teachers to create, share, and collaborate. The library is also technologically equipped to allow students to connect to online and media resources. The Teacher-Librarian has now incorporated this technology in her lessons.

Small student groups utilize the center to collaborate, study, research, and project work. One or more classes can inhabit the library at the same time to receive group instruction, sit on the kid friendly rug to enjoy story time led by the Teacher-Librarian, read independently, or focus on individual study tasks.

Further supporting a commitment to the school community, the use of the library by large student, parent, or community groups is also welcomed and encouraged!













Multi-functional Activities Wing

The activities wing is home to the Multi-Purpose Room, Gymnasium, Music Rooms, and Community Room. This wing can be zoned in a variety of ways to suit a multitude of user groups. Situated in close proximity, all of the elements function as flexible spaces for events, meetings, and community gatherings:

The Multi-Purpose Room is the more than just a place to enjoy a meal. It serves as a gathering place for students to take a break, relax, mingle, and build friendships. It's also an educational space for performances on the spacious stage.

The **Gymnasium** is a vibrant space with a high ceiling with wood beams. A bank of clerestory windows fills the space with natural light. This multi-functional gym supports team sports such as basketball, volleyball, and badminton, as well as daily gym classes for students to play, build teamwork, and develop socializing skills to promote lifelong fitness and wellness.

The Music Rooms welcome students to learn the vocal and instrumental components of music education, creation, and performance. These flexible spaces allow students to engage with each and learn to work together and play together.

The **Community Room** is a comfortable space fitted with flexible casework and a kiln to support both robust curriculum offerings and the local community after hours. The room is highly sought after by the PTSA, after-school programs such as the Des Moines Parks and Rec, and the district.

PHYSICAL ENVIRONMENT

Built on a Challenging Site

Housing 700 students, Des Moines Elementary School is a two-story building utilizing a design that nestles into the sloping site. Placed on a challenging site, the building is careful woven between wetland buffers and sensitive areas while gracefully stepping down with the topography. The school was strategically sited to maintain the open playfield at the main intersection, while tucking the classrooms away from the busy street. Parking and playfields were improved, and a new covered play area provides a sheltered area for basketball. The building itself was organized to keep public areas accessible and tuck the semi-private classroom spaces away from the street. The use of bright, playful colors provides a welcoming and energetic presence along 16th Avenue.

A new walking trail connects the adjacent neighborhood to the school and provides a venue to explore the established wetlands and Massey Creek, where interaction with the habitat helps promote environmental stewardship.

Separation of circulation paths for pedestrians and vehicles as well as bus and automobile loading/off-loading areas were methodically designed for the safety and efficiency of vehicle and pedestrian flow.

Fitting within the Larger Context of the Des Moines Community

The school's prevalent small community feel is a direct reflection of its unique connection with the surrounding community. The school itself provides opportunities within to celebrate diversity, student growth, health and well-being, and citizenship.



Acknowledging the loss of their neighborhood park to make this facility possible, the site incorporates new fields, improved parking, and play areas that serve as a community gathering space after school hours. Zoned night lighting for parking areas, pedestrian paths, and buildings ensures public safety and promotes community/school partnerships.

The learning courtyard, play equipment, and courts were designed to serve all community users, with emphasis on the age level and educational program of the students at the facility. The wetlands, Massey Creek, and trail create opportunities to experience the natural environment as a meaningful and inspiring part of the learning experience, as well as maintaining some of the beloved features the community can continue to access and enjoy.

Much needed street improvements include a new center turn-lane into the school entrance and additional sidewalks.





Natural Environment Encourages Learning and Exploration

The Learning Courtyard acts as both an outdoor learning space and student garden. Sheltered between the split-level wings, this courtyard utilizes the grade-change by incorporating a small amphitheater, pergola, and raised beds served by a rainwater cistern. Already a favorite spot of the community, interested community partners have reached out to sponsor a student gardening program utilizing this space.

Explorers can walk down a trail through a forested area to access the wetlands and Massey Creek. Tucked into the foliage is an open space for gatherings, instruction, or an opportunity to sit, relax, and enjoy nature. Prominent rain gardens are utilized to filter potential pollutants and protect the existing wetlands. Together, these areas work together to create many opportunities to learn about local habitats and become stewards of the environment.

Playtime Integral to Physical and Emotional Well Being

The expansive playground includes open and covered courts, and colorful, fun, kid-friendly equipment, providing a variety of areas where imagination, dexterity, and physical and emotional strength can be developed. Improvements to the existing playfield provide opportunities for students, staff, and community to participate in soccer, softball, and baseball, as well as other field sports and recreational activities.

A secure play area dedicated to PreK and Kindergartners is strategically nestled between classroom wings where they are protected from inclement weather.

Strengthening the School's Core

The district desired an elementary school that could accommodate a student body capacity of 700 students, but the core facilities could support up to 750, in order to allow for the future addition of classrooms in the event that the City of Des Moines growth projections come to fruition.

From a prominent entry, patrons enter a bright and airy lobby with views out over the sheltered kindergarten playground and to the wetlands beyond. As students travel through the building towards one of six small learning communities, they step down gracefully though the ground level utilizing an extensive system of ramps that follow the natural topography.

Classroom wings are organized with intuitive and engaging wayfinding graphics to create intimate learning communities for students at each grade level and provide a navigational road map to the other classroom communities. Each learning community is supported by dedicated areas for small group instruction; however, special 'nooks' and gathering areas can be found across the facility. The youngest grades are located on the lower level where they can quickly access the playground and activities wing. Grades 3-5 are located on the upper level in close proximity to the Library.

The active corridor bridges between classroom wings and integrates a small gathering space near a series of specialist offices. Accessed directly from the active corridor is the learning courtyard, which acts as both outdoor learning space and student garden. A sheltered space between the wings, this courtyard uses the grade-change by incorporating a small amphitheater, pergola, and raised beds served by a rainwater cistern.















Wayfinding Helps Create Intimate Student Communities

The design strives to encourage a culture of belonging through colorful, playful, and intuitive wayfinding signage and navigation throughout the school.

As students travel through the building towards one of six small, intimate learning communities, they are led though the ground level utilizing a series of ramps that follow the natural topography, allowing access to all ground floor areas despite significant grade changes.

To help develop an engaging, fun, and kid-friendly navigation system, the design team looked to the community and the proud history of Des Moines for insight. Many themes emerged—from which we drew on the abundant native bird and marine life, choosing images of local wildlife that children would best relate to including native salmon, marine mammals, and birds.

Students are greeted at the entrance to each corridor with vibrant color coded circular floor graphics and whimsical salmon. Carved into wood paneling are large, engaging marine mammals (Lower Level: grades PreK-2) and birds (Upper Level: grades 3-5) to help students navigate and understand their relationship to other familiar nearby features—helping them comfortably connect to their environment.

The use of durable materials, high quality modular furniture, and washable fabrics are also color coded in each learning community.

Bringing the Outside In

The expansive sunlit foyer welcomes you to a warm and engaging school. A high ceiling with beautiful wood beams and benches, an underwater mural scene encompasses the entire wall, and fun, vibrant, whimsical shapes and colorful salmon that landscape the floor are repeated throughout the school.

The foyer branches left into the activities wing and right into the learning communities. Large floor-to-ceiling windows allow natural daylight to flood the wide corridors. Lobbies and corridors provide display space and wall surfaces to showcase student work, instill pride, and give ownership of the space to the students.

Views of the grounds can be viewed from the interior, letting the outside in. The use of natural wood is dominant throughout and utilized on surfaces such as stairs, railings, walls, and ceilings, creating a rustic northwest environment.

Sustainable Features

Des Moines Elementary School strove to meet the strict energy code requirement of reduced air infiltration set at 0.25 cfm/sf. The chilled beam system was selected as a response to stringent district standards paired with energy code requirements. Final testing shows the facility operating far below this target at 0.065 cfm/sf, and even exceeding the air tightness requirement for Passive House (0.08 cfm/sf).

Ample daylighting is balanced with LED fixtures to enhance instructional spaces, lower energy consumption, and reduce maintenance costs. Recycling bins are provided throughout the school for paper, glass, aluminum, and other materials with value.













Aircraft Noise Mitigation

Located just 2.75 miles from SeaTac International Airport with the school directly under its flight path, the constant air traffic was a prominent design challenge. To help mitigate the noise generated, the building envelope, roof, and mechanical systems were designed to combat aircraft noise utilizing funding from the Port of Seattle.

As the City of Des Moines does not have guidelines for airport noise reduction, the project utilized guidelines from the City of Burien's Municipal Code for Aircraft Noise Reduction, as well as the FAA's interior noise requirements for instructional spaces.

Promoting Safety and Security

School safety, security, and a positive school climate were not achieved by singular actions. It involved a comprehensive and collaborative strategy to help protect the physical and emotional well-being of the school's inhabitants. The clearly defined singular entry point through a vestibule with a double set of doors in direct view of the administration department provides the first level of protection. Student traffic patterns were carefully considered both on and off site, and high priority was placed on creating safe, clearly marked circulation paths.

A robust access control system automatically locks exterior and interior doors to instructional spaces, creating a protected environment for teachers and students.

Features such as wayfinding by incorporating intuitive signage, deliberate pathway treatments, and well-lit pathways, clearly and safely guide students and faculty on campus and better direct first responders. Creating an open environment in which students and staff can easily "see and be seen," help deter inappropriate student interaction.

RESULTS OF PROCESS AND PROJECT

Achieving Educational Goals and Objectives

The design of school buildings has profound physical, social, and psychological effects on the students, staff, and communities who occupy these spaces. From the onset, the design team engaged passionately committed stakeholders and teachers to understand how the design of the school, curriculum, and teaching methodology could be integrated to support a variety of teaching/learning styles and promote health and well-being.

Through this collaborative partnership, the team was able to deliver a beautiful, flexible, and engaging environment that provides students and teachers control over how they learn, where they learn, and at what pace.

Concealed features such as the robust access control system as well as building noise mitigation products into the construction to reduce aircraft noise from SeaTac International Airport, allow the inhabitants to feel safe and secure and creates an environment where students can focus comfortably while at school.

Achieving School District Goals

Was the project on-time and on-budget?

Through close communication, adherence to critical timelines, and sensitivity to the budget, we delivered the project on-time and on-budget.

Do the design and construction meet the needs to educate our students for the next 30 years and satisfy the overall desires and expectations of the community?

The functional, flexible, and personalized design of the school in combination with the use of durable, weather resistant, maintainable construction materials, helped to deliver a facility that was built to be loved and stand proudly in the Des Moines community for many decades.

Was there a thorough process to engage stakeholders in the design?

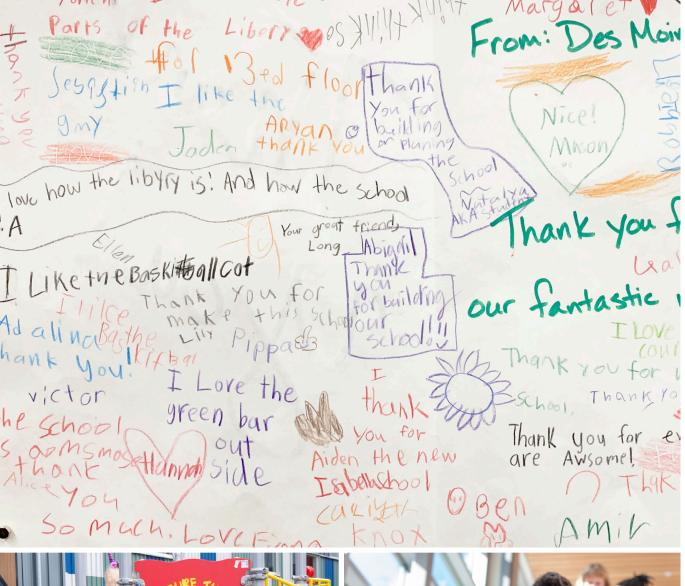
In alignment with our design philosophy, the district desired an inclusive and collaborative process. This shared objective in working with a myriad of stakeholder groups, students, staff, and teachers, was the catalyst to successfully bring the district's goals to fruition.

Does the project conform to the Educational Specifications?

Educational goals prescribed by the district for elementary schools were delivered through the combination of the design aesthetic that responded directly to the collaboratively determined form and function of the building, the challenging curriculum developed, and the dedicated teachers and staff who help create a dynamic, engaging, and fun learning environment every day for students at Des Moines Elementary School.



Superintendent Dr. Susan Enfield welcomes the community during opening remarks at the much anticipated Grand Opening event on September 26, 2019.







Achieving Community Goals

Raising the next generation is a shared responsibility. Identifying this community's hopes, concerns, and dreams provided the design team with a clear understanding of where the priorities lay.

The school has become a community hub that supports a diverse range of activities, creates positive and frequent interaction between members of the community, and forges a stronger bond between home and school; strengthening the relationship between students, parents, and teachers alike.

The teachable sustainable moments inside and around campus help to develop awareness, sensitivity, and encourage positive attitudes and personal lifestyle decisions to encourage both students and adults to embrace environmental stewardship. Preserving these critical areas of their beloved Zenith Park upholds an important commitment we made to the community.

The new elementary school provides the community's students and teachers with a state-of-the-art facility where teachers have the tools and flexibility to teach at the highest level, and students have an engaging and motivating environment where they are truly inspired to be lifelong learners.

Unintended Results/Achievements

The response expressed is that the building went beyond expectations and really compliments the community. Staff have seen an improvement in culture in this engaging, fun, and functional school. The school community acknowledges that they are still growing into the building and feel they have just begun to scratch the surface of its potential.

