

2024 A4LE LE SOLUTIONS AWARD

Storm Lake Early Elementary School



EXECUTIVE SUMMARY

Uninspiring Environment

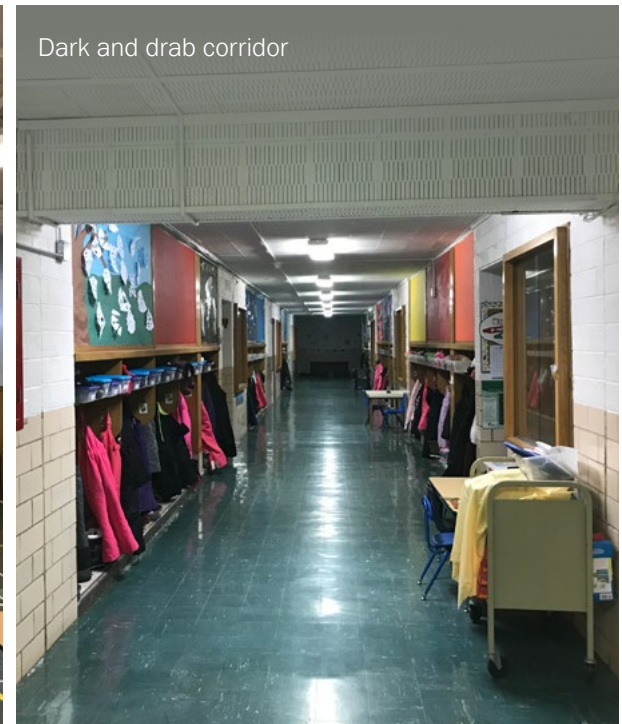
Imagine a child's first day on their educational journey - the first time they step into a school building. This is the first day of the rest of their life.

Now imagine a child entering a dark, damp, uninspiring, and aging facility that marks this momentous occasion. That was the experience in Storm Lake, Iowa, until the community rallied and said, "we need more for our kids". Their solution is a phased project that drastically improves the learning environment for Pre-K, kindergarten, and 1st grade students.

The following pages tell the vibrant story of the new Storm Lake Early Education Center, where students are greeted with a welcoming and colorful environment that sets the stage for limitless opportunities for these young learners.



Outdated gymnasium and cafeteria



Dark and drab corridor



Uninspiring classroom

EXECUTIVE SUMMARY

A Love for Learning

Drawing inspiration from nature reminiscent of summer camp, outdoor adventures are calling at Storm Lake Early Elementary School. Unbounded adventure is always just around the corner for the littlest of learners in this school.

A call to energize, inspire, and ignite young minds into a lifelong love of learning was the primary design focus. This desire prompted non-traditional learning spaces to emerge bursting with energy and enthusiasm enhanced by a vibrant color palette.

From the moment students are greeted at the “campground” to when they “hike” to their learning neighborhoods, they are fully immersed in a world of color and pattern enthusiastically inviting them to foster relationships and discover the next adventure around the bend.

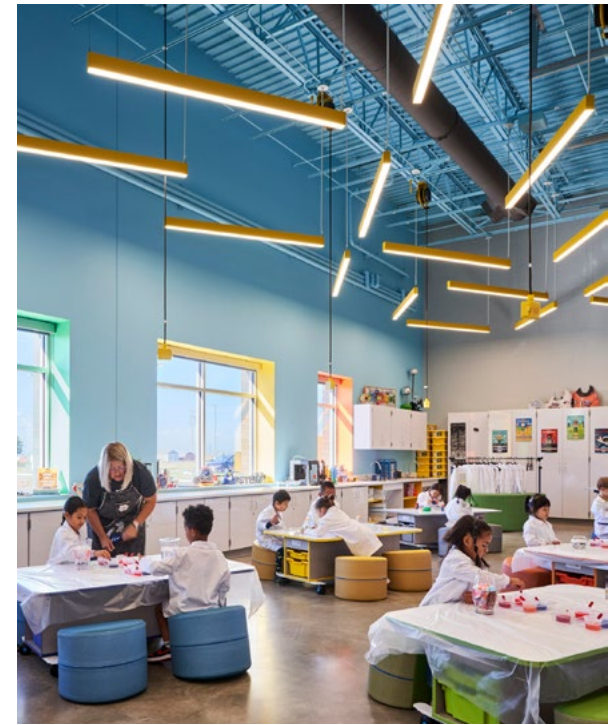
As they enter, visitors and students are introduced to the school’s “lighthouse” spaces consisting of a STEM lab, music room, and media center. The lighthouse provides the space and tools for students to explore all the world has to offer while cultivating a foundational love of learning. Beacon spaces, with their soaring ceilings, abundant natural light, connection to outdoors, and spirited murals spark an interest and inspire the most eager of young minds to dream big!

“

The design has allowed us to approach school differently compared to the more traditional model to which so many are accustomed. What once was hindered by the environment is now within reach thanks to some creative thinking and planning.”

- Michael Sullivan

Principal
Storm Lake Early Elementary School



EXECUTIVE SUMMARY

Collaborative, hands-on learning spaces, which didn't exist within the district prior to this school, are shifting the community's mindset to new and exciting learning opportunities.

The STEM lab allows these youngest learners to experience and 'see' themselves as a scientist. It inspires and instills the confidence they need to experiment and fail to learn.

Each grade-level neighborhood is built around adaptable discovery areas that allow students to express their creativity while also fostering friendships. Mobile furniture, activated seating, and furniture choice support highly flexible spaces and inclusive learning modalities for all in this active and rapidly growing age group.

As a bonus, a large two-storied atrium art studio is centrally located in each grade-level neighborhood. With its ceiling painted sky blue and abundant natural light pouring in from the clerestory windows, this space truly inspires and contributes to a positive learning environment for students and teachers alike. Here, students proudly showcase their art creations directly across from the studio on a whimsically painted mural wall reinforcing the locality theme of each neighborhood that celebrates the learning progression.



“ I love the versatility of everything being mobile, which allows us to change up the learning spaces. I can be in my room teaching or in the hallway while having students conduct observations, work on challenges outside, transform spaces into robotics labs, and much more. The possibilities are endless.”

- Jacquie Drey

STEM/CS Teacher
Storm Lake Early Elementary School

Scope of Work

Owner Storm Lake Community School District
Location Storm Lake, Iowa
Project Type Early Elementary School

Phase One

Grade Levels Kindergarten
Project Size 68,000 SF
Student Capacity 304
Construction Cost \$14,840,000
Construction Delivery Method Design - Bid - Build

Phase Two

Grade Levels 1st Grade
Project Size 31,800 SF
Student Capacity 288
Construction Cost \$11,400,000

future Phase Three

Grade Levels Pre K
Project Size 33,200 SF
Student Capacity 320
Construction Cost Est. \$14,700,000

School Community

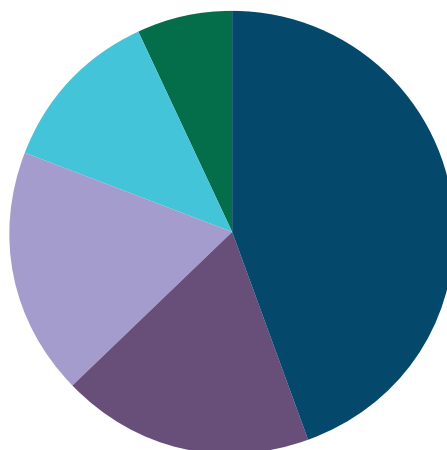
Located in the northwestern part of Iowa, the Storm Lake Community School District is a rural public school district that serves the town of Storm Lake and surrounding rural areas. Beginning in 2020, enrollment grew to 2,841 students. The district currently operates five schools (early childhood center, early elementary school, elementary school, middle school, high school), with plans to retire the 70-year-old aging early childhood center once the three phases of the early elementary school are fully constructed.

The 2020 census ranks Storm Lake as the most ethnically diverse city in the state, with over 60% of the 11,269 residents self-identifying as non-white. Additionally, 86.4% of students enrolled in the public school district are non-Caucasian.

Storm Lake's diversity is the result of many factors, including refugee resettlement programs and an abundance of meat packing jobs drawing migrant workers to the town. For instance, Tyson Foods operates a large hog slaughterhouse, meat packing plant, and turkey processing plant in the city.

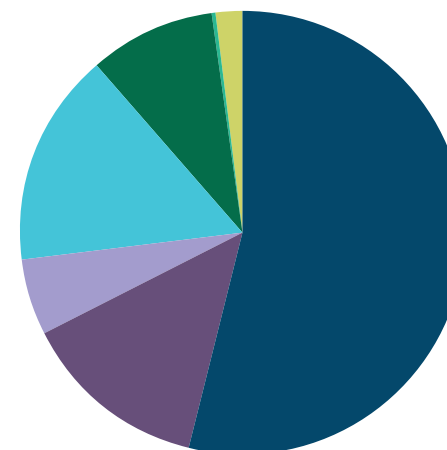
Workforce figures represent a higher percentage of laborers in production, transportation, and material moving occupations than any other occupation category. The production, transportation, and material moving occupation category makes up 44.5% of occupations of the civilian employed population in the city.

2020 CENSUS
Civilian Employed Population



- Production, transportation, and material moving
- Management, business, science, and arts
- Sales and office
- Service
- Natural resources, construction, and maintenance

2020 STUDENT POPULATION
2,841 students



- Hispanic
- White
- Black
- Asian
- Pacific Islander
- Native American
- 2+ races

Pivoting the Plan

Conversations began in 2016 regarding a new facility to alleviate overcrowding. At that time, district leaders knew a bond referendum voted on by the community would be necessary to fund the project. Between 2017 and 2018, the former superintendent and district leaders discussed various solutions and eventually settled on a \$29 million early childhood center that went before voters in December 2018. The early childhood center would relieve space at the middle school and elementary school, and eventually replace the outdated East Early Childhood School that had served students for more than seven decades.

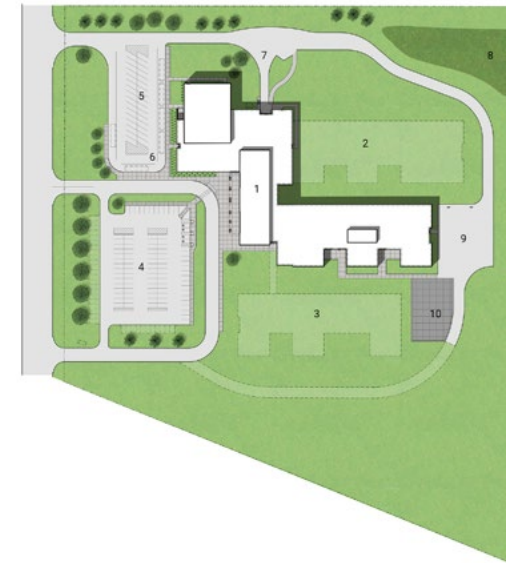
Leading up to the bond vote, the district learned that the Iowa Senate failed to act upon the House's extension of the one-cent sales tax for school infrastructure in May. The sales tax would have shaved nearly \$5 million from the tax increase ask to the community. Even with this unfortunate decision, the district moved forward with its bond referendum. Election results were devastating, failing by only 42 votes.

General voting history across the country shows a lack of Hispanic population turnout at the polls. With more than half the student population in Storm Lake identifying as Hispanic, district leaders recognized the challenge of convincing parents and family members to vote. This reluctance could have contributed to the unsuccessful attempt in 2018.

With failure comes opportunity. A new superintendent was hired during the bond campaign in 2018. After the failed election, this new leader regrouped with administration, staff, the community, and the design team to re-envision the future of the district. They dreamed. They planned. And they weighed options to determine the best path forward, which is a phased approach to deliver an early elementary school (rather than a dedicated early childhood center) that would eventually serve students in Pre-K to first grade. This option allows the community to fund smaller sections of the facility over a longer time frame, responsibly managing the incremental tax increase ask of community members.



- SITE PLAN LEGEND** ▲
- 1. STORM LAKE EARLY ELEMENTARY
 - 2. FUTURE ADDITION
 - 3. FUTURE ADDITION
 - 4. MAIN PARKING
 - 5. ADDITIONAL PARKING
 - 6. SCHOOL BUS PICKUP / DROP OFF
 - 7. LOADING AND RECEIVING
 - 8. STORM WATER DETENTION
 - 9. HARD COURT PLAY
 - 10. OUTDOOR PLAY



Storm Lake Early Elementary School

A Community Defined

Visioning for the Future

Stakeholders include district administrators, staff, students, and community members. While parents of young learners benefit, the young learners themselves reap the greatest reward from this project. They have the most to gain by transitioning out of a 70-year-old dark and uninviting facility into a bright, vibrant, inviting space as they begin their educational journey.

To ensure all stakeholder voices were heard during the design process, eight visioning and programming sessions were held. Participants included school district administrators, staff and educators, as well as board members, community members, parents, and leaders with the Head Start program. The outcome of these sessions helped to identify priorities and drive the vision and design of the facility.

Design team members also conducted “day in the life” exercises to personally experience what it’s like to be in pre- or elementary school again. From reading on the floor to socializing and learning together, they inserted themselves directly into the environment for inspiration.

“ Our new space is inviting, open, and bright, and it allows everyone to add some creativity to each space. The intention was to allow any place to be transformed into a learning environment suitable for students’ needs, while also serving as a place where the community felt welcomed and inspired.”

- Michael Sullivan

Principal
Storm Lake Early Elementary School

Initial Project: Early Childhood Center



Responding to the Community

Future-Ready Design

Criteria established by key stakeholder groups and the planning team is the foundation for the design, which accommodates current and future growth in the district. Although the original design in 2018 supported a dedicated early childhood center, small modifications to the building and program have created an early elementary school for students in Pre-K to first grade.

Design and construction spans three phases, an approach widely accepted throughout the community. Phase one, completed in 2021, serves Kindergarten students and features 14 classrooms, special education areas, administration, staff support spaces, commons, kitchen, media center, music, art, and full court gymnasium that seats 500. Phase two adds 10 first grade classrooms and phase three adds 14 Pre-K classrooms.

In anticipation of projected enrollment growth, the facility is designed to support an additional four first grade classrooms and four Pre-K classrooms if needed. This solution offers the community a seamless plan to expand with infrastructure already in place.

Solidarity Among Cultures

District and community leaders came together to design the best educational experience for students, regardless of race. Rather than dividing the community and building smaller schools on opposite sides of town, the decision was made to build one large early elementary school that allows all students to learn together. After they advance from this school, they transition through the district's elementary school (grades 2-5); middle school (grades 6-8); and high school (grades 9-12). This solution is the most equitable option that ensures all students experience the same opportunities and environments for learning. It unites the most diverse community in the state.

Successfully reaching all parents was paramount for the 2019 bond election to even start this project, especially on the heels of a failed bond attempt. The restructured bond totaled \$15 million for phase one. All educational collateral distributed by the district featured both English and Spanish documentation. Plus, translators were present at every community meeting to ensure parents understood the plan and the project they would see on the ballot.



Future-Facing Vision

Storm Lake Early Elementary School is the embodiment of the intentional criteria established by key stakeholder groups and the planning and design team. The design is clean, methodical, fun, and child centric. It offers a variety of spatial types to meet the changing needs and wants of students. It's a school that pushes the needle to future-facing education for the community and all kids.

During the visioning phase, district staff, educators, and community members voiced strong support for more specialized learning opportunities. This vision comes to life in the flexible and adaptable spaces found throughout the building. Expansive spaces such as the commons and gymnasium cater to large crowds, while breakout spaces outside classrooms are perfect for smaller groups.

Grade-level neighborhoods run along a main circulation spine that delineates community use spaces from classroom spaces. This helps to reinforce collaboration within classroom neighborhoods and promote community integration within the school.



Guiding Principals

Student Achievement

Academic growth, increased participation in fine arts and extracurricular activities

Facilities

Updated, safe, and diverse environments

Communication

Celebrate happenings within the school

Parent Involvement

Increased community participation and diversify district committees

Child Centered & Adaptive

Grow students' individuality, designed for students as primary users

Colorful & Creative

Stimulate young minds

Fluid & Flexible

Learn anywhere at any time, support multiple teaching modalities

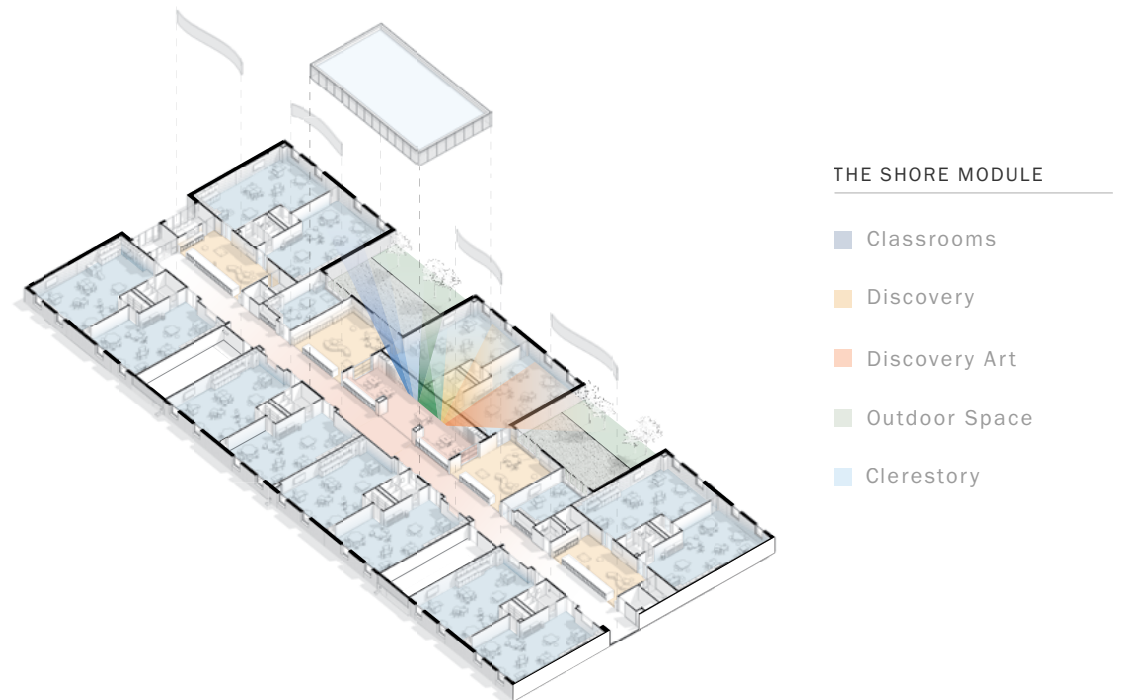
Embrace Diversity

Support all ages and abilities

EDUCATIONAL ENVIRONMENT

Future-Facing Vision

Classroom neighborhoods are organized around a flexible discovery area that provides additional educational space for students. These open, technology-filled discovery areas take on a unique and identifiable character for each neighborhood.



EDUCATIONAL ENVIRONMENT

Inspiration to Explore

Adjacent to the media center are three garage doors that open to a STEM lab. For these students, this is the first introduction to science and other STEM curriculum. This hands-on space gives kids permission to explore, elevating beyond what some kids experience in their home life or would have experienced in the 70-year-old early childhood center.

Natural Connections

Natural daylight and views to outdoor learning environments tie together indoor and outdoor learning opportunities. A direct physical connection from the discovery area to the outside extends learning beyond hard walls of the building and frames a multi-use space for students, after school programs, and community events.

Large volume spaces, such as the commons/cafeteria, media center, STEM room, and music room are visually connected to the main circulation path of the school, creating a hub for activity and interaction among students and staff. These common-use spaces are utilized by all grade levels and are organized in a simple manner to take advantage of construction efficiencies. They also serve as a place to celebrate, recognize, and showcase student work.

The perimeter location of the commons, gymnasium, and media center allows for community use outside of school hours.



While the original design frames outdoor learning alcoves, or campfires, these spaces were removed from the overall project budget. To ensure the campfires become part of the school, the STEM instructor is applying for grants and soliciting donors to fund the spaces. Once approved, she will engage students at Storm Lake High School to construct the benches and planters, providing older students with a hands-on project that will benefit the school and greater community.



Outdoor Learning *conceptual rendering*



EDUCATIONAL ENVIRONMENT

A Test Case for Furniture

Furniture is a key element that can have the greatest impact on learning, either positively or negatively. Selecting the right type, size, and shape furniture is paramount, especially when the district and community make a significant investment in a new facility.

District leaders understand the role furniture plays in the development of a child. Young learners don't sit quietly for hours on end. They move. They wiggle. They are active. And the furniture package at this early elementary school had to respond.

Once space types for the new school were identified and defined, the design team engaged educators in an exercise to determine how to best furnish the school. Together, educators and designers took a virtual gallery tour to browse different types of furniture available that support different learning models. Next, teachers broke into grade-level groups and began to design their classrooms, selecting furniture pieces that they would test at their existing school.

For three months, students and educators tested various pieces before the final selection, allowing educators to see how students respond, and which pieces would enhance their learning experiences.

“ *Everything is flexible, which is critical to the teaching and learning that takes place. It's an enormous upgrade from my previous space, where I felt confined with very few options and opportunities to change the environment.*”

- Jacquie Drey

STEM/CS Teacher
Storm Lake Early Elementary School



RESULTS

Kid-Centric Environment

Students deserve to learn in an inspiring environment, not a dark and cramped space. They find their passion for learning early in their educational journey, and a colorful and cheerful environment goes a long way in fueling that passion.

The early elementary school transitions students from a 70-year-old facility into a modern design. Spaces are filled with color and natural light, fun graphics engage students, while age-appropriate and flexible furniture allow them to be kids and wiggle.

Hands-on learning spaces are abundant. These types of spaces didn't exist within the district prior to this new school, resulting in a shifting mindset to new and exciting learning environments. The STEM lab allows young learners to explore and 'see' themselves as a scientist, a potential career that could have seemed out of reach for some students in previous years. These types of environments are the first these students will experience in their educational journey. They inspire and instill the confidence they need to experiment and fail to learn.



“*The STEM lab is an amazing industrial tech space that gives students the feeling they can achieve anything at high standards—and the space offers the tools to do just that. The space allows me to have so many pockets for learning throughout the room. It is a dream space for teaching!*”

- Jacquie Drey
STEM/CS Teacher
Storm Lake Early Elementary School

RESULTS

Community-Driven Approach

In September 2019, the community set a phased plan in motion to address the district's growing space and facility needs, and to provide a modern environment where kids want to be. Phase one is currently open and operational. It includes 14 Kindergarten classrooms, a media center, areas for art and music, a kitchen, commons area, and administration offices. Phase one also includes a full-size gymnasium that is shared with the community.

Patrons continued their support for phase two of the project in September 2022. The \$9.95 million bond referendum passed with nearly 74% approval, significantly above the 60% majority needed. This outcome is a direct result of the community's support of the phased plan and for equitable opportunities for all young learners, regardless of race. Phase two opens in 2024.

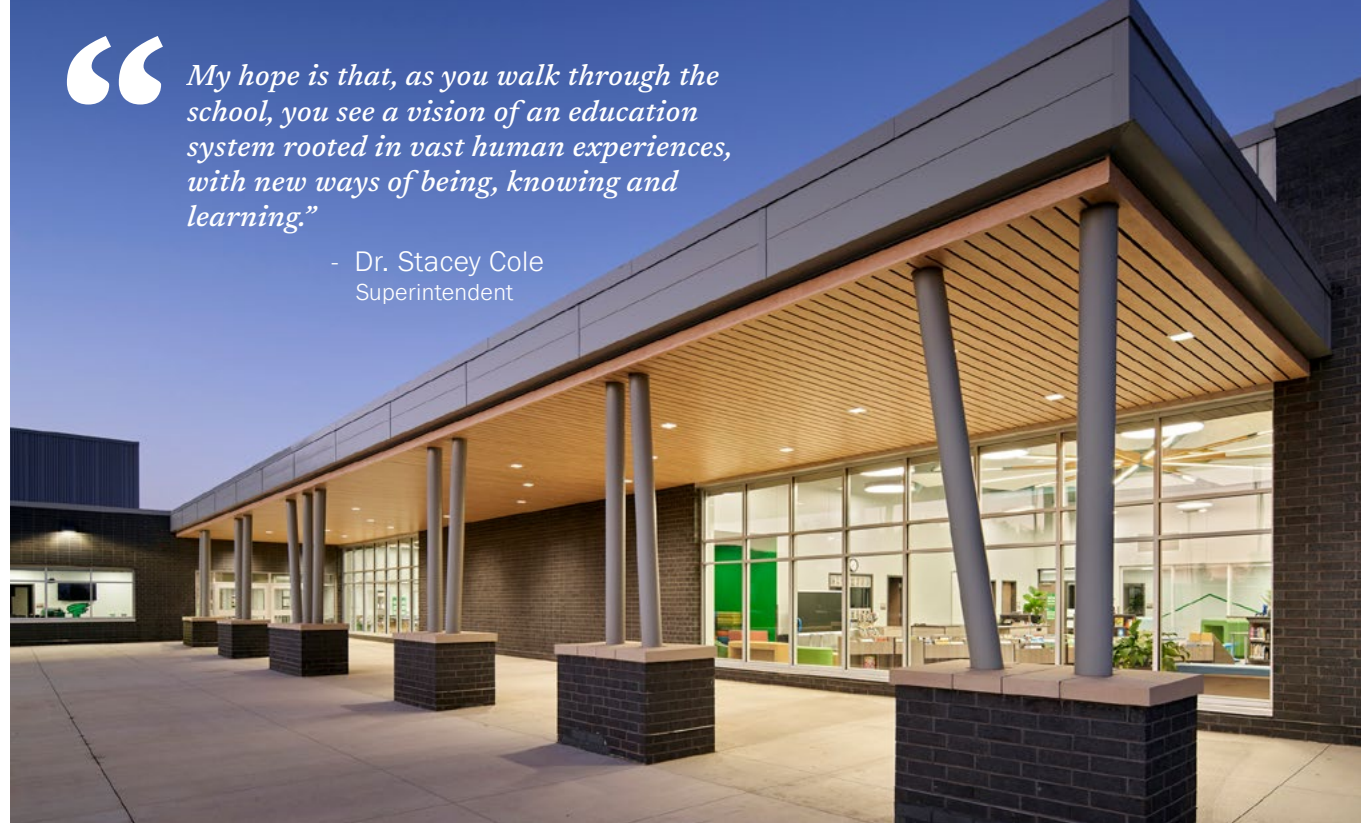
Building off the overwhelming support from the two previous bond elections, the district now moves into the planning stages for the third phase of the project. A bond election will be called in the coming years, and if successful, the building will welcome Pre-K students.

The community called for a change in plans and delivered when called upon. The initial ask was reduced from \$29 million to \$15 million. The project was divided into three phases. And the community responded in favor. The failed bond attempt in 2018 ultimately became the springboard for a unified educational experience for all Pre-K to first grade learners.

“

My hope is that, as you walk through the school, you see a vision of an education system rooted in vast human experiences, with new ways of being, knowing and learning.”

- Dr. Stacey Cole
Superintendent



A Nod to Nature

→ Exterior Inspiration

WARM COOL

→ Exterior Materials

WHITE - THE LIGHTHOUSE	BLUE - THE WATER	BROWN - THE DOCK	LIGHT BLUE/GRAY - THE SKY	LIGHT GRAY - PEBBLES

A Summer Camp Experience



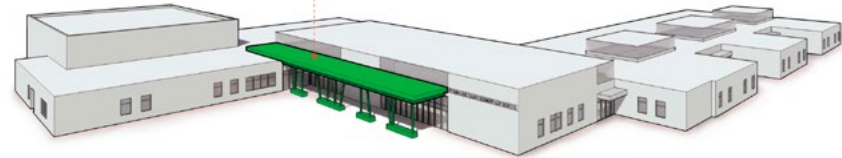
The Water

Movement around the building; Variations in the brick pattern make the conventional material playful and interesting.



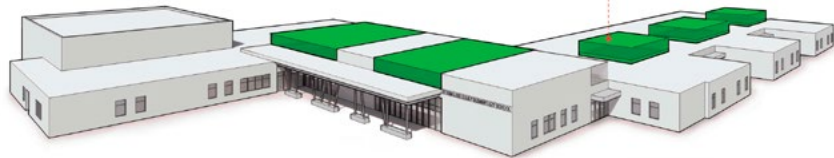
The Dock

A bridge to learning; an engaging canopy that transitions students from the outside world to the school setting. Like a dock the canopy protects students from the elements.



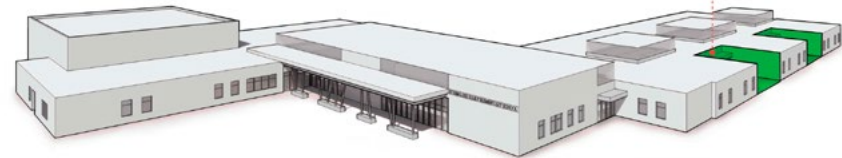
The Lighthouse

Nodes of illumination; kalwall highlights educational discovery zones while bringing light into the most interior spaces of the building.



The Campfire

Sparks of curiosity; outdoor classrooms encourage learning through exploration and meet an inherent desire for connection to the outdoors.



PHYSICAL ENVIRONMENT

Natural Exploration Concept

The spatial layout of the building, the visual connection to the outdoors, and the use of nature inspired materials, textures, and colors reinforce natural exploration.

The design team worked collaboratively with stakeholders to develop an architectural language for the building. Leveraging local components of lake, dock, lighthouse, and campfire, the design team abstracted these natural elements into formal elements at the building.

Water is visible in the movement of metal panel and brick patterning. The dock is evident at the front entry with columns and materiality. The lighthouse is resembled through clerestory elements, and the campfire is represented at outdoor learning spaces.



PHYSICAL ENVIRONMENT

Natural Exploration Concept

The clean-lined and modern architecture takes inspiration from adjacent farm fields and a massing concept. It flows naturally as the procession from the lowest depths of water to the highest heights of land and the unique experience that each element provides. It becomes a central beacon for the community and students to seek out new knowledge, overcome obstacles, and reach new heights.

Nature-based metaphors manifest themselves at key moments in the exterior forms – canopies, feature-walls, clerestory windows, brick/metal panel patterning.

Material considerations for the exterior of the building focus on modern building science for an energy efficient and durable building envelope that will last for generations to come. A blend of masonry, metal panel, translucent panels, and glazing in key locations define the functions within and create an inviting and aesthetically pleasing school. Utilizing masonry at the base of the building provides a durable finish and helps ground the building.

The use of glass adds natural daylight and views and offers a spirit of exploration into the classrooms that enhances learning. Natural tones of metal panel in conjunction with wood toned metal panel create a warm and inviting aesthetic with low maintenance materials.



PHYSICAL ENVIRONMENT

Secure Entry

A safe and secure entry is established through the location of the administration. Visitors are directed through a reception area before gaining access to the school. A lobby with technology and student work on display adjacent to the administration provides a place for parents to interact and connect with the staff, administration, and each other.

“*Our hope is that people will come out and see the kids and how much they enjoy the school and the ways they interact with it.*”

- Dr. Stacey Cole
Superintendent



PHYSICAL ENVIRONMENT

Focus on Wellness

Student & Teacher Wellbeing

This design represents more than fun colors and new learning models; it places significant emphasis on wellbeing for all students and educators. The most drastic difference from the 70-year-old environment to this new building is access to the outside. Daylight flows in and brightens the space. Views to nature draw kids' attention outdoors. Physical connections allow students to move between indoors and outdoors during their learning activities.

A new and efficient mechanical system enhances the indoor air quality and comfort through all seasonal changes experienced in Iowa. High-quality, low-maintenance and durable materials found throughout enhance the daily experience within the building.

Other amenities include wellness rooms that allow educators to take a mental break from student time or offer privacy and space to meet the daily needs of nursing mothers.

Flexible furniture responds to the physical and mental needs of young students, giving them an opportunity to move around or modify their environment in a time of need.

Sensory overload can happen at all ages, especially for young learners. The design incorporates reading nooks that allow students to disappear into their learning, or grassy covered seats where kids can sit and rub their hands over the green blades for a calming effect.



“ *It’s an incredible building that is completely different from what so many people are used to thinking of when it comes to education.* ”

- Jeff Tollefson
District Chief Operating Officer