



# CAPPS MIDDLE SCHOOL

PUTNAM CITY SCHOOLS | WARR ACRES, OKLAHOMA

# Capps Middle School

Inspired by Henry David Thoreau's words, "I took a walk in the woods and came out taller than the trees" Capps Middle School re-envisioned a neighborhood park into a new, 170,000 SF future ready middle school serving 900 students in grades 6, 7 and 8.

An existing campus on another site in the district, Capps Middle School formerly occupied a 1950s-era building, originally intended as a high school and later converted to the middle school.

The construction of this new facility was more than just a new building, it was an opportunity to position a "catalyst for change in Putnam City Schools". Everything from the facility itself, to the systems and furniture within was poised to change.

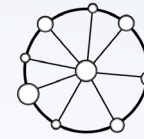
At the forefront of this change - a shift in the teaching and learning. What once was a facility of traditional teaching and learning became a new campus, driven by an inquiry-based teaching and learning model.

Each neighborhood embodies a departure from traditional teaching methods, encouraging a new inquiry-based model that cultivates curiosity, inspires hands-on learning, and supports the environment as a tool for teaching. Whether the learners are experiencing the launch of a project, actively researching and investigating new material, innovating and creating prototypes, or presenting findings and solutions, the space adapts to meet the needs of these learning activities. Educators facilitate while learners engage in the material in their own way providing a student-centric environment for exploration and learning.

The same spaces, furniture, and shifts in teaching and learning have begun to trickle into the other existing middle school campuses across the district, bringing true meaning to Capps being a "catalyst for change."

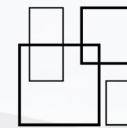
What began as the rebuild of an existing middle school, turned into an opportunity to impact the community at large in Putnam City Schools.

## Guiding Principles



### **INQUIRY BASED**

A shift from traditional teaching and learning to a learner-driven inquiry-based model



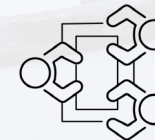
### **SCALABLE**

Flexible, adaptable learning environments to foster cross pollination and casual collisions



### **DESTINATION**

School is more than just a place to go every day, but a place learners want to go

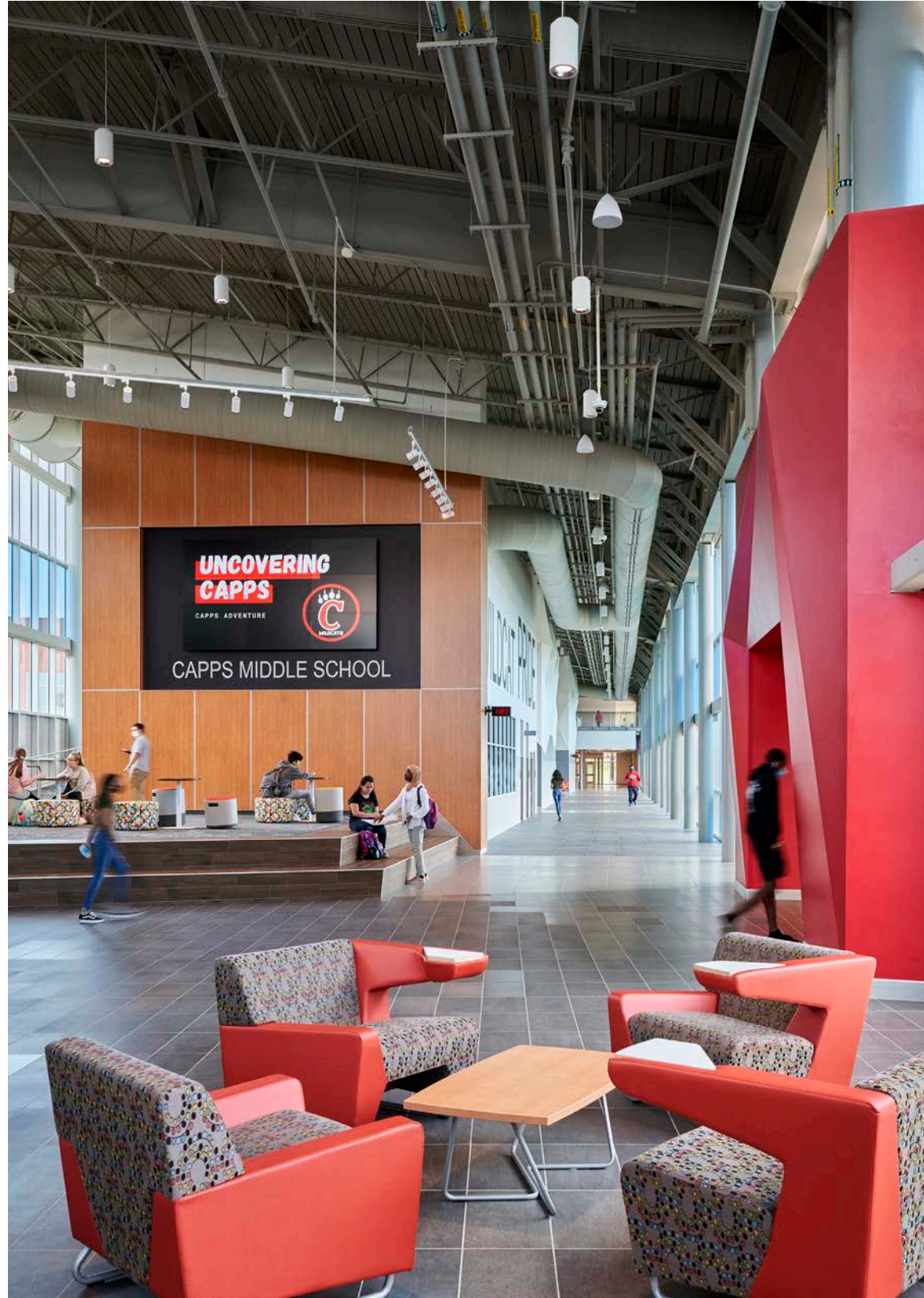


### **COLLABORATIVE**

Environment aligned to collaborative teaching and learning

## SCOPE OF WORK

<b>OWNER</b>	PUTNAM CITY SCHOOLS
<b>LOCATION</b>	WARR ACRES, OK
<b>PROJECT TYPE</b>	MIDDLE SCHOOL
<b>GRADE LEVELS</b>	6-8
<b>PROJECT SIZE</b>	170,000 SF
<b>STUDENT CAPACITY</b>	1,200
<b>CONSTRUCTION COST</b>	\$48,024,944
<b>CONSTRUCTION DELIVERY METHOD</b>	CONSTRUCTION MANAGER AT RISK



# Understanding the Community



*What does a day in the life of a Putnam City Middle School learner look like in 2030?*

## THE COMMUNITY

In an area just outside of Oklahoma City and Bethany's corporate limits, Warr Acres was originally developed as a residential suburb to both urban areas. In 1909 Isreal M. Putnam, a real estate developer and member of the legislature had unsuccessfully attempted to engineer the relocation of the state Capital from Guthrie to Warr Acres, prompting the slogan "Almost Capital of Oklahoma."

Truly a "bedroom" community, the city has largely maintained the small town feel as a suburb in the larger Oklahoma City metro.

Capps Middle School, set within an established 1960s residential community, serves a large

percentage of low income families (83% of students qualifying for free and reduced lunch).

Furthermore, the community of learners is quite diverse, 39% of learners are of Hispanic decent, 28% White, 20% Black and 14% identifying as other.

With such diverse backgrounds came critical conversations of equity and inclusivity, something that extended well beyond the walls of Capps Middle School.

## STAKEHOLDER ENGAGEMENT "Learner-Driven Process"

The design team met with numerous stakeholder groups throughout the

development of the design, but the unique quality of this project is the stakeholder group that came first. The learners.

Before pen was ever put to paper, and before any administrative presence was engaged in the design, Putnam City Schools empowered new freshman at the high schools to envision what a day in the life of a middle school learner would look like in 20 years. The outcome, a collaborative, learn-by-teaching, scalable, cross-pollinated, fun educational experience, entirely originated by the learners.

As a result, the administration added one key statement. That Capps Middle School would be a "catalyst for change in Putnam City Schools."

# Overcoming Obstacles

## CHALLENGES

Aside from the obvious constraints of the piece of property on which the school was sited, this was the biggest shift of teaching and learning in the district to date. Not only was the environment drastically changing from the former campus, but an existing cohort of educators had to shift their campus culture to adapt to an inquiry-based teaching and learning model.

Capps Middle School quickly became the benchmark that Putnam City Schools would measure the quality of future-ready learning environments across the district, and pushed to align space and curriculum in a way the district had never done.



## ASSETS

While shifting an existing culture was one of the largest challenges, it was also one of the greatest assets. The community at Capps had a vibrant existing culture that we were able to leverage as we shifted teaching and learning.

From the perspective of the new facility, the site was the biggest asset. As an existing park with a creek bisecting through, the campus offered outdoor learning opportunities that most middle school campuses in the country cannot. In the words of a 7th grade science teacher at Capps, "we can't build a better science classroom than the creek."

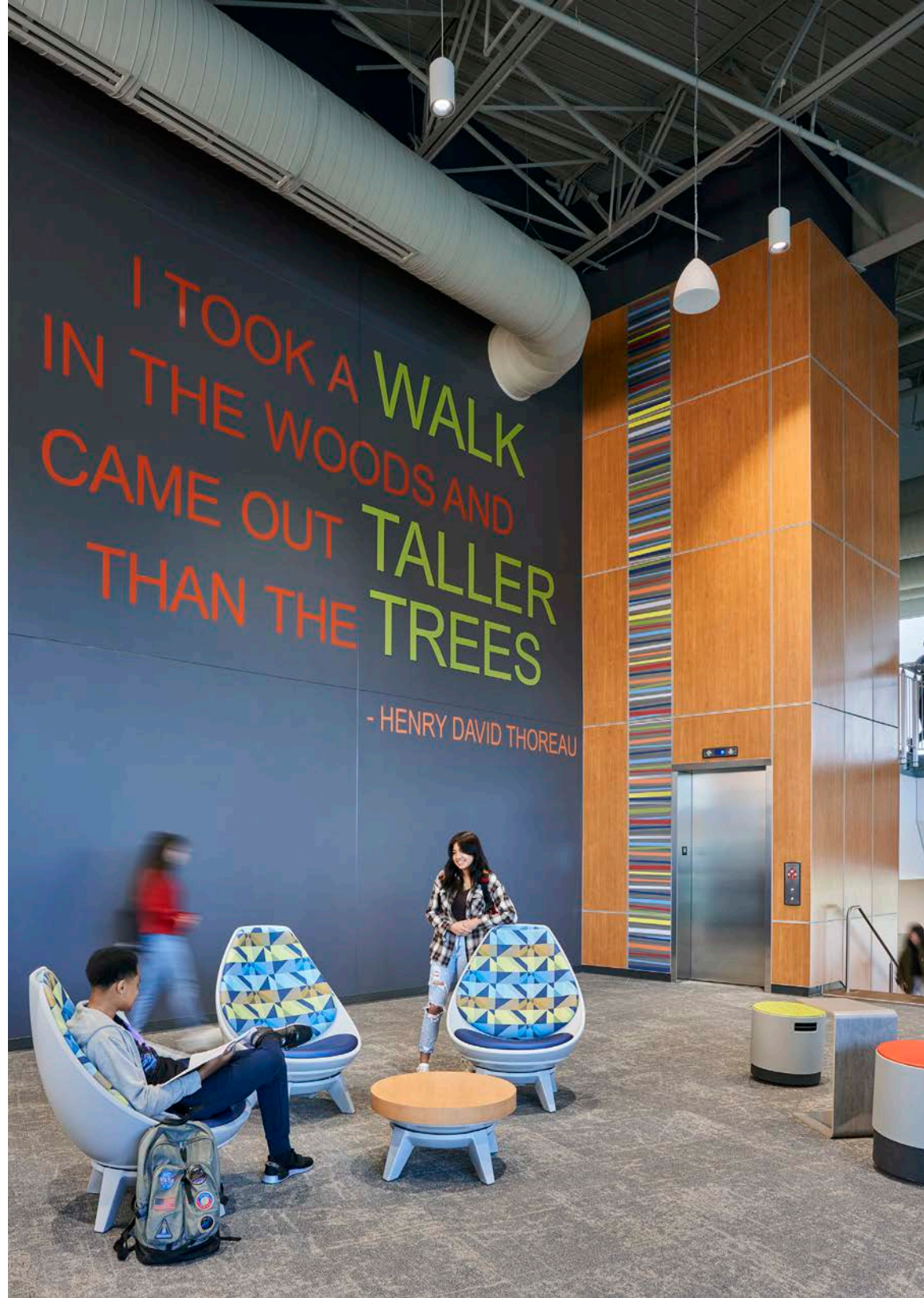
## Creating Value

### VALUE OF PROJECT TO THE COMMUNITY

Education plays a major role in the growth and progress of a society. An inspiring and effective school provides value to the community by producing good citizens equipped to lead meaningful and fulfilling lives. This is Capps Middle School. The focus on developing real-life skills, in an environment that optimizes learning, the educators and learners are a benefit to the community around them.

Capps Middle School supports progress. With the inquiry-based learning model, the learners engage in skills in research, problem solving, and critical thinking. Learners actively make connections and discover new opportunities, often linking this work to supporting community topics. With the learning spaces designed to promote collaboration, visible learning, and demonstration of understanding, learners not only develop the skills necessary to for academic achievement but also to embrace culture, value the beliefs of others, and understand personal interests and learning styles. This learning environment and the evidence-based practices are coordinated to enhance all learner's social, emotional, and academic success, school involvement, civic engagement, and fulfilling careers.

Good schools become an economic driver. Educators and school staff want to work at a well-organized, inspiring school that can impact educational opportunities for learners. Being part of the school community provides stability, financial resources, and support from members of the group. Providing community identity, Capps MS exudes a positive culture and values that has influence beyond the school walls. As the school and community continue to partner, the preparation has begun for the next generation of college participants and the workforce.



# EDUCATIONAL ENVIRONMENT



# Setting the Vision

### EDUCATIONAL VISION & GOALS

The Putnam City Public School District superintendent, Fred Rhodes, stated that the new Capps Middle School would be a catalyst for change. Not only was Superintendent Rhodes willing to invest time and energy into transforming one school, but he also created the pathway for all campuses to learn from lessons learned with the new school. To begin the process of change, the BOLD services were obtained to support the road to transformation.

BOLD is an acronym for Bridging the Organization Learning and Design and is a robust change process that support campus staff in successfully implementing a new vision and empowers educators to fully leverage their new facilities. The BOLD process is developed as a series of activities to build capacity and structures for the campus' new vision. Since the selection and sequence of exercises is customized, the campus leadership team provided the input for the new educational vision and goals at Capps Middle School.

As the vision was to transform from a traditional method of teaching to the facilitator-led format that promotes engagement, curiosity, and experimentation, the learning model of Inquiry Based was selected. As part of

the BOLD training, the educators participated in professional development to learn the inquiry cycle and develop new curriculum. As this learning model was launched, the learners engaged in a cycle of learning that includes the following:

- Experiences that begin with a sense of wonder
- Collaborates with others on research and investigation
- Creates, experiments and prototypes
- Demonstrates understanding and performance evaluations
- Allows for group and individual reflections

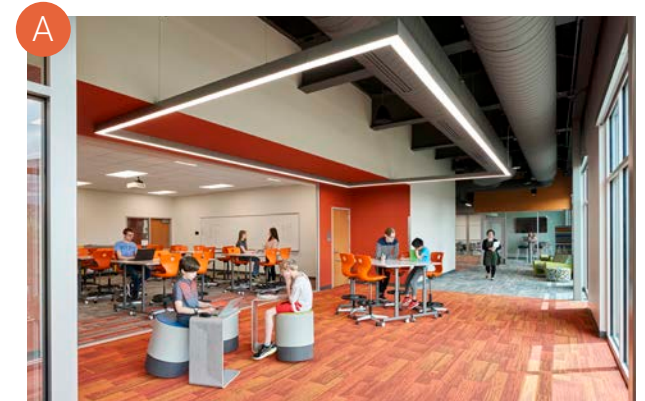
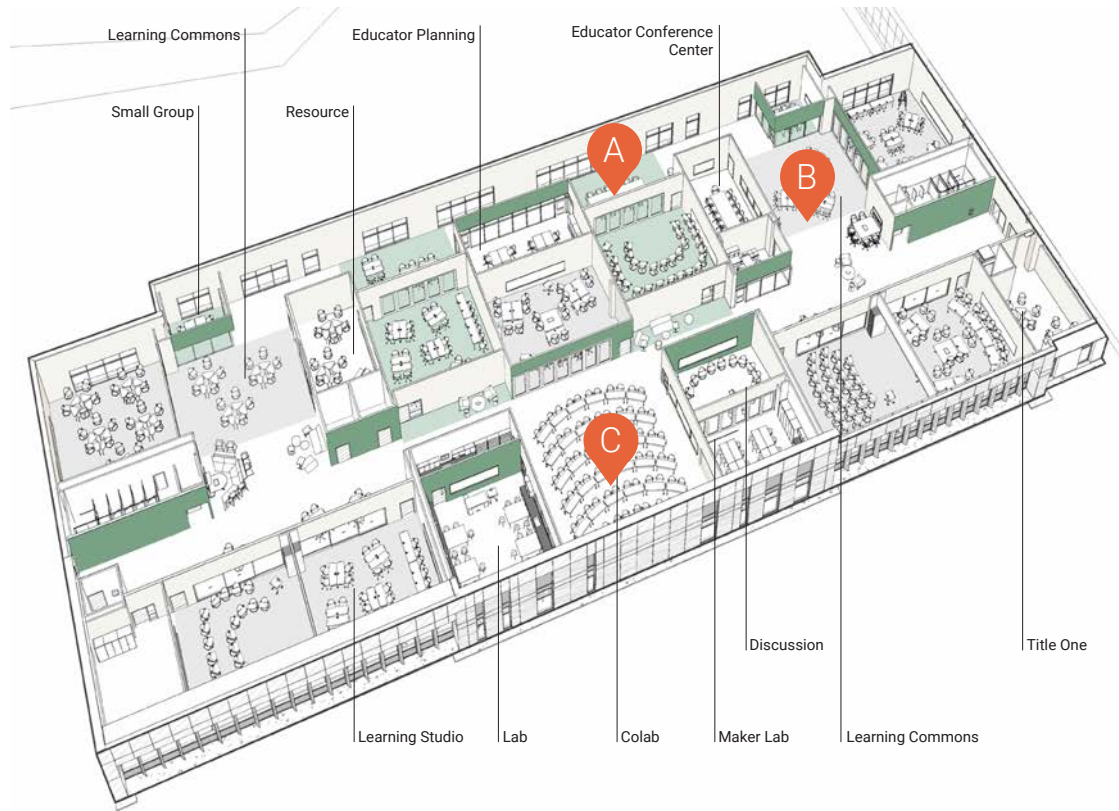
With inquiry-based training a resounding success, learners are "owners" of their learning, motivated, engaged, and self-directed. Every space is a learning space encouraging formal and informal learning and adapting to the activity as needed. As desired, Capps MS became an incubator of ideas for other campuses in the district with inquiry-based learning and flexible furniture taking off across the district.

### Inquiry-Based Learning

- Learning is a personalized and individualized experience.
- It is human nature to question and be able to understand.
- Wonder inspires learning.
- Knowledge is not an entity to be transmitted from the educator to the learner.
- Knowledge is the constructed result of the interaction between the learner's mental model (experiences, beliefs, emotions, and prejudices) and the new learning experiences.



# The Grade-Based Learning Suite

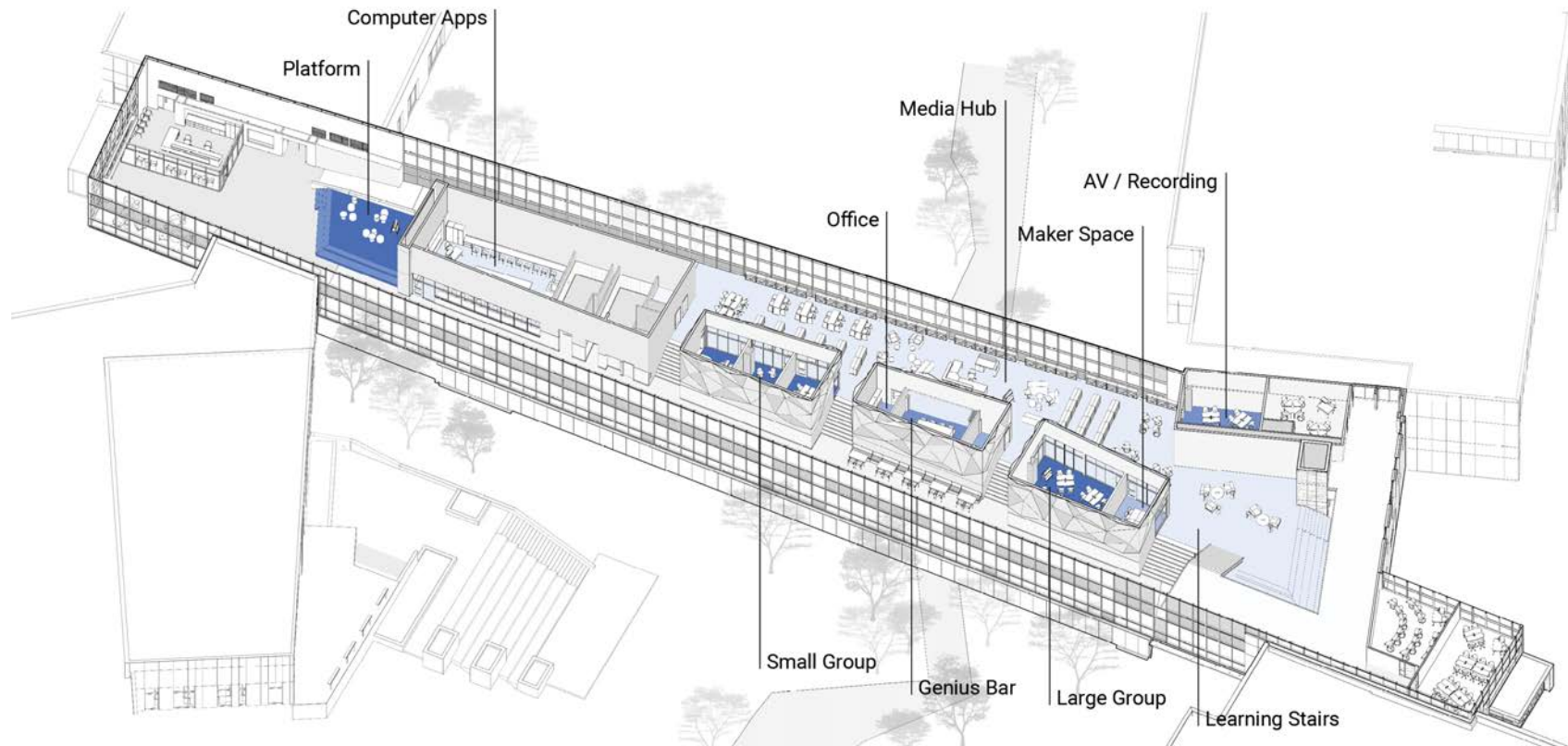


## SUPPORTING CURRICULUM THROUGH DESIGN

As a result of the shift to inquiry-based teaching and learning, spatial diversity was at the forefront of decision making to offer maximum adaptability and flexibility for the various activities the learning communities needed to facilitate.

Learning studios have a variety of operable partitions, some opening to collaborative learning environments, others opening studios to one another for team teaching. A variety of scaled collaborative areas from small group rooms, front porches, and whole class collaboration facilitate different types and sizes for learning.

# The Bridge



## SUPPORTING CURRICULUM THROUGH DESIGN (CONT.)

Diverse science and maker spaces occupy the heart of each learning community, with a large CoLab for 75 students, maker lab, and formal science lab.

These types of spaces are further emulated in the media hub - or bridge of the school. With additional maker labs, AV/Recording,

and genius bar spaces, the hub of the school becomes an active zone of hands on learning (a significant component of inquiry-based learning).

Transparency throughout allows these spaces to be on display for learners and educators to see learning happening.

EDUCATIONAL ENVIRONMENT

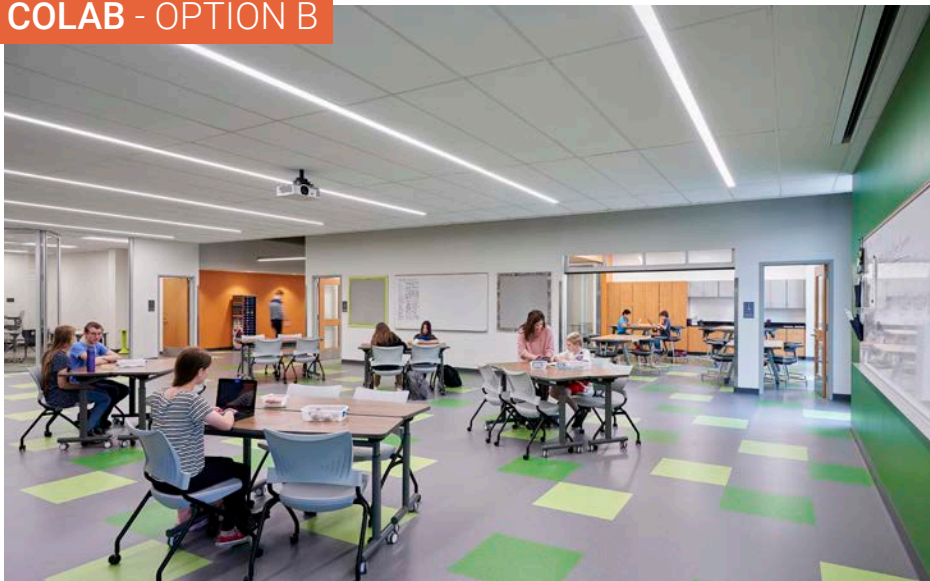


# Learner-Centered Design

COLAB - OPTION A



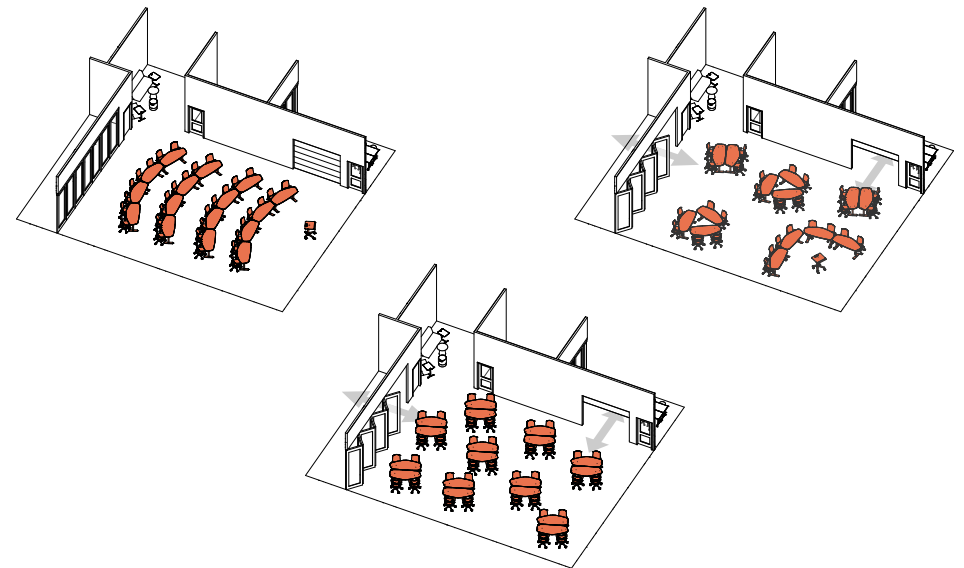
COLAB - OPTION B



## ADAPTABILITY & FLEXIBILITY

At all core learning communities, educators do not own their spaces. This allows for spaces to be specifically chosen to facilitate certain activities well, rather than try to make a space do everything “okay”. Adaptability of spaces allows them to ebb and flow in size with operable partitions, and the flexibility of furniture within yields opportunity for creating multi-modal learning spaces.

Diversity of furniture not only supports flexible teaching and learning by giving choice to how and when collaboration happens, but also accommodates a wide range of body types, making every learner and educator comfortable. Different studios have different types of furniture, prompting learners and educators to pick spaces based on the activities it needs to facilitate.



**Spatial Agility** - Reconfiguring the CoLab

# Learner-Centered Design

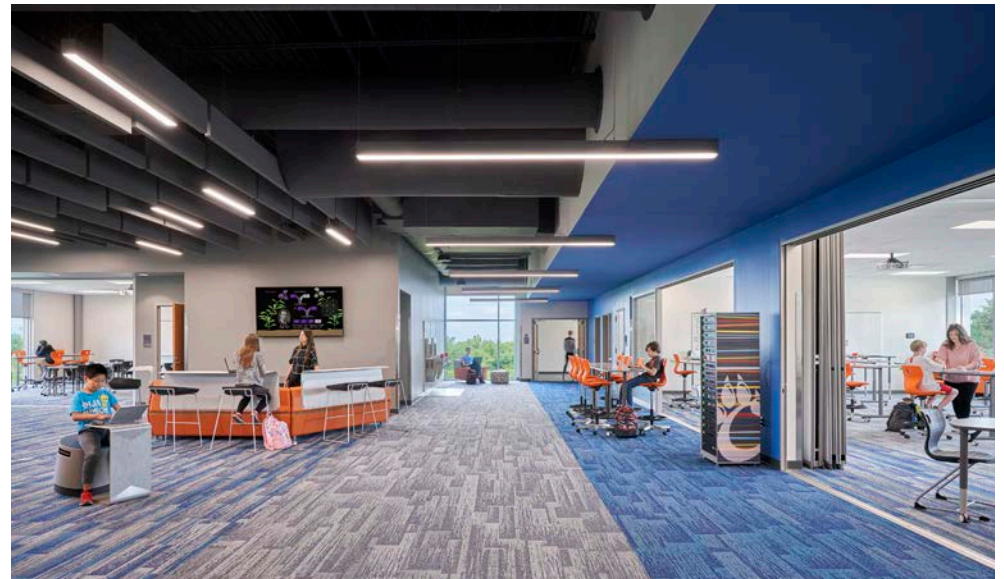
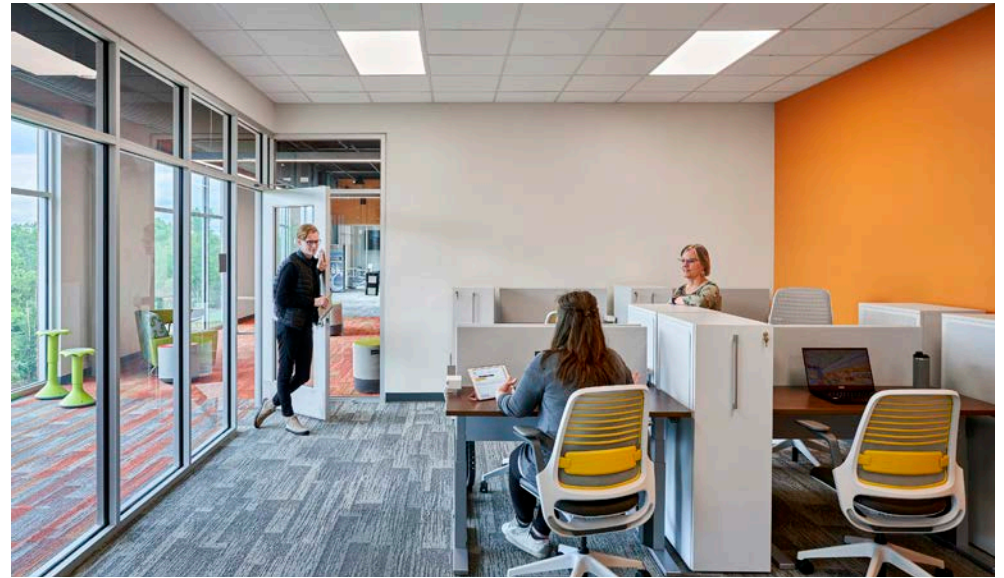
## LEARNER & EDUCATOR SUPPORT

Each learning community is outfitted with an educator planning center - or essentially office space for the grade level team of educators.

Just as learners are expected to collaborate as part of their learning, so too are the educators. Spaces like the educator planning center, as well as an educator conference center allow impromptu and planned collaboration within the realm of the learning community. With transparency into these spaces, learners are able to see their educators leading by example.

Educator collaboration doesn't stop at these spaces, as the campus expectations and practices encourages everyone, educator or learner, to use a number of shared spaces like small group or open collaborative areas. This in turn blurs the line and creates a sense of ownership for all.

Administrative presence exists in each learning community to give students access to campus assistant principals, and foster critical relationships between the two.



PHYSICAL ENVIRONMENT



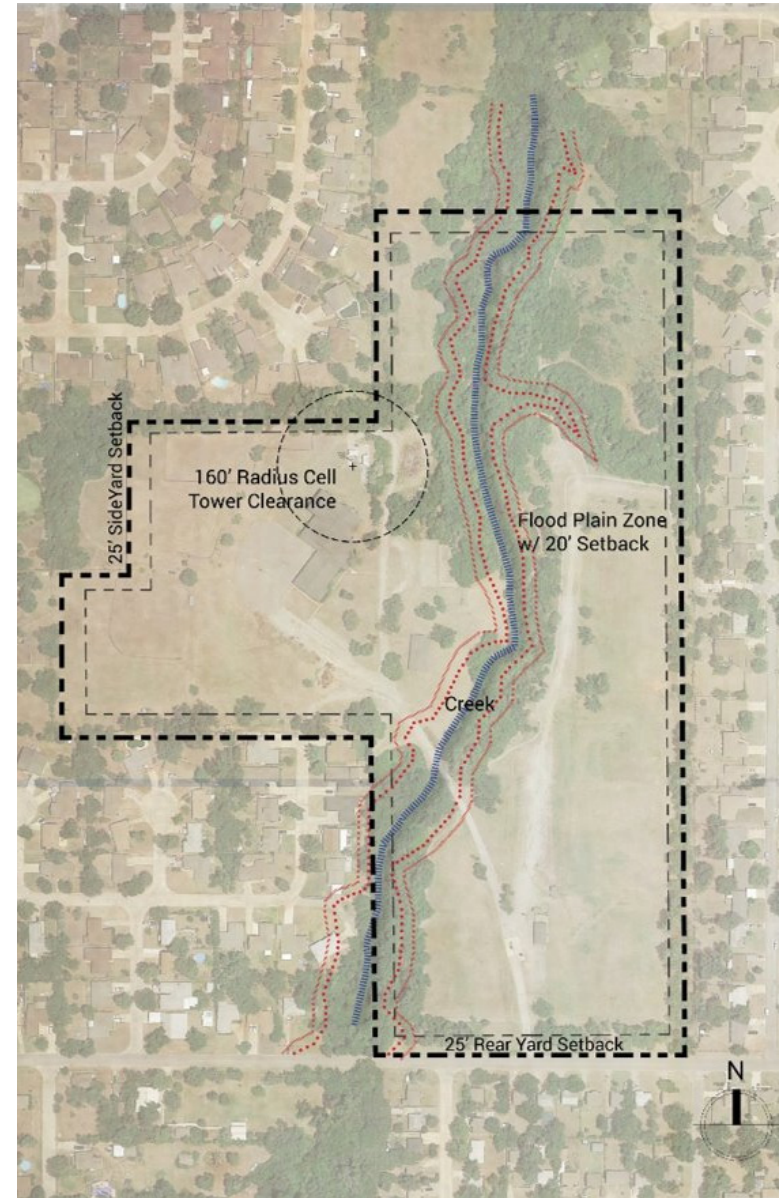
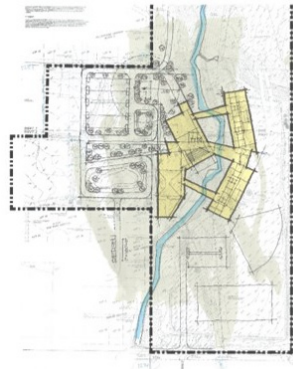
# Understanding the Environment

## PHYSICAL ATTRIBUTES

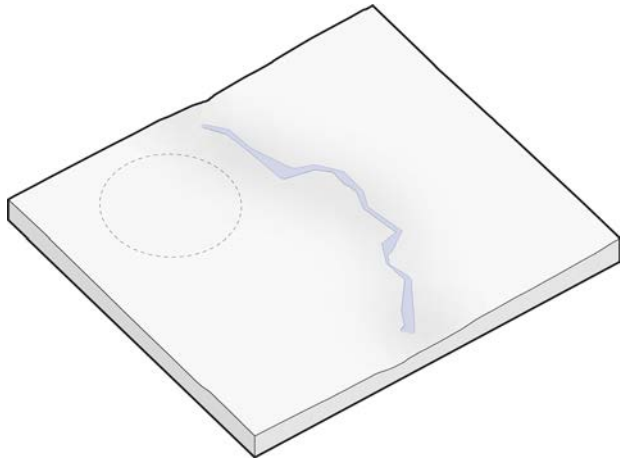
The building proper, heavily influenced by its natural setting, sits on the east and west side of a bisecting creek. Connecting the two structures is an innovation hub in the form of a 250-foot bridge positioned over the creek, with media resources, computer applications, maker labs, and broadcasting studios.

Along the creek's east bank are three core learning neighborhoods – all of which architecturally respond to the creek's natural dips and bends. Each neighborhood is identifiably different and draws from the site strata - a lush green top layer, the red clay soil, and the blue from the creek itself, meant to metaphorically carry 8th grade learners onto high school and beyond. Learning studios open with glass operable walls up to collaborative hubs dubbed "front porches," many of which promote visual connections to nature.

Outdoor learning is at the forefront of this campus design. Garage doors open to the outdoor environments such as an art patio, learning stairs cascade down from the Commons, and large boulders create "campfire" areas underneath the bridge. During the planning of the building, it was realized that no better science classroom could be created than the creek itself, lending opportunity to be able to engage the creek itself throughout the outdoor learning environments.

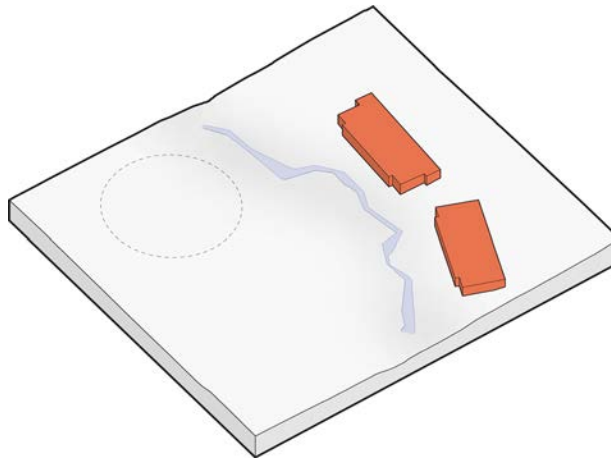


# Nestling Into The Site



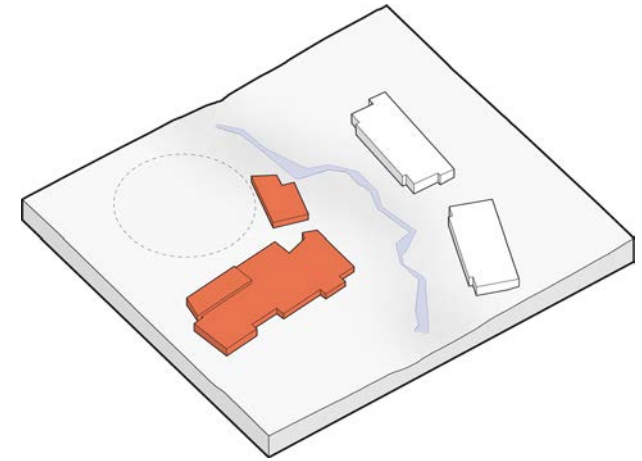
## EXISTING

*Bisecting the middle of the site is a natural creek surrounded by dense vegetation. Adjacent to it, an existing cell tower with a 160' fall radius.*



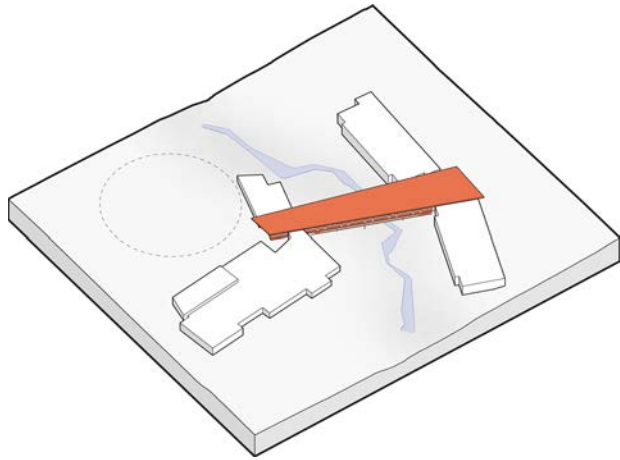
## BEND

*Learning communities (introspective realm) placed on the east portion of the site respond to the bends of the creek, positioned on the east bank with access to views and natural light.*



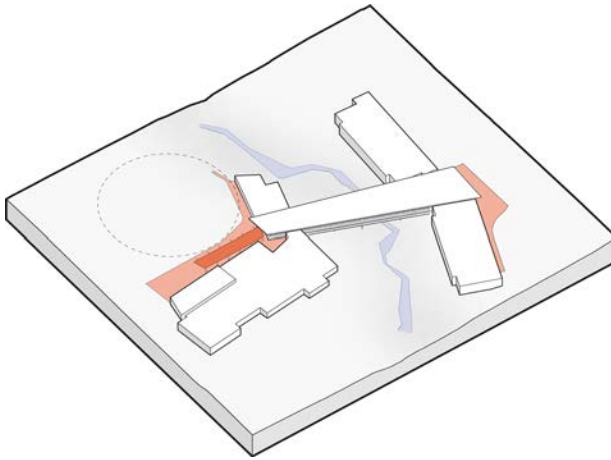
## APPROACH

*Administration, athletics, electives and commons (active realm) placed on the west portion of the site engages drop-off and public entry spaces.*



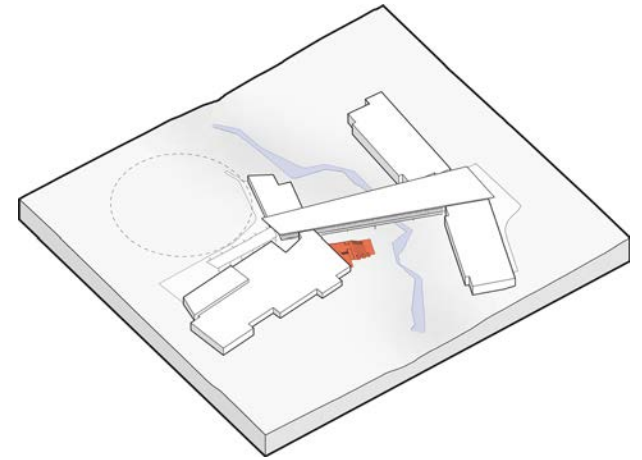
## BRIDGE

*The connector, or bridge, comprised of all media hub resources, maker labs, AV/recording, genius bar, etc.*



## SEPARATE

*Locating car and bus drop on the west and east sides of the creek, respectively. Clear and separate site circulation.*



## ENGAGE

*Outdoor learning environments spill out and down from the building to connect learners with the creek environment.*



# Nestling Into The Site



## FITTING WITHIN CONTEXT

The park in which Capps Middle School is sited had been a community amenity for the surrounding neighborhood for years. In order to preserve as much as possible, the building was sited in portions of the park with the least amount of existing foliage, and at a point in the creek where a limited number of trees would be impacted. In turn, the building and site look like they have been there for years.

Putnam City Schools operates the campus as a community asset, allowing neighbors to come and use outdoor amenities throughout the day as the park it once was, and largely still is.

With the building sited so centrally, the design allows for future addition of a community center or pool facility at the north end of the site as a partnership with the city Parks and Recreation department.

### SITE PLAN KEY

- A. MAIN ENTRY
- B. CAR DROP-OFF
- C. GUEST/STAFF PARKING
- D. PRACTICE FIELD
- E. SOFTBALL FIELD
- F. STUDENT ENTRY
- G. BUS DROP-OFF
- H. OUTDOOR LEARNING STAIR
- I. CREEK DOCK
- J. SERVICE DRIVE

## How does the project inspire and motivate?

As one of the learner-driven guiding principles, Capps Middle School was to be a place that kids wanted to go, not somewhere they had to.

Rooted in nature and naturalness, the new facility both inside and out draws from the natural surrounding that it is set within. By doing so, the building feels sophisticated and inspiring, treating middle school learners more like the “adults” they want to be.

This campus has subsequently inspired other districts not only to re-envision their learning environments, but how that looks with a whole systems shift.

As the Superintendent himself said, it's a testament to the success of this campus when one of your high schools chooses to host senior prom at a middle school facility.





# Inspiration from Environment



## ENERGY-EFFICIENCY

Knowing that the bridge would want to take full advantage of the views to nature through ample glass, the building was sited in a way to elongate the bridge in the E/W direction as to expose the most frequently occupied space (the media hub) to only northern exposure.

Structurally, the bridge roof is equipped to be able to take on the addition of rooftop photovoltaic panels in the future, and is angled to provide maximum southern exposure.

Where the building has predominately eastern and western exposure, exterior window louvers help shade the learning environments from receiving direct sunlight in the morning or afternoon, as well as mitigate the heat gain in said spaces.

The two-story connector of the building, the bridge, became a very tall volume to condition. As a result the media hub is elevated 7' above the finish floor level to break down that volume and decrease the amount of space needing conditioning. Furthermore, it elevates the media center to "come out taller than the trees."

## Durable & Green Materials

The exterior materials of Capps Middle School comprised of brick, fiber cement, and glass storefront/curtain wall, limit the number of finishes to maintain while drawing inspiration for the surrounding site.

Most notably, the terra cotta fiber cement draws from the iron-rich soil in Oklahoma that is an intense orange color. Exposed throughout the site by the creek, glimpses of this vibrant soil are present throughout the campus.

The buff color of the brick harks back to the color of the vegetation in the winter months, making the building feel “of the place” even in seasons when the vegetation is predominately dead.

With such beautiful views out of the building, ample glazing offers opportunities to visually connect, and reflects the colors and textures much of the tree canopies and vegetation on the exterior.



# Draw to Nature

## THOUGHTFUL SUSTAINABLE DESIGN

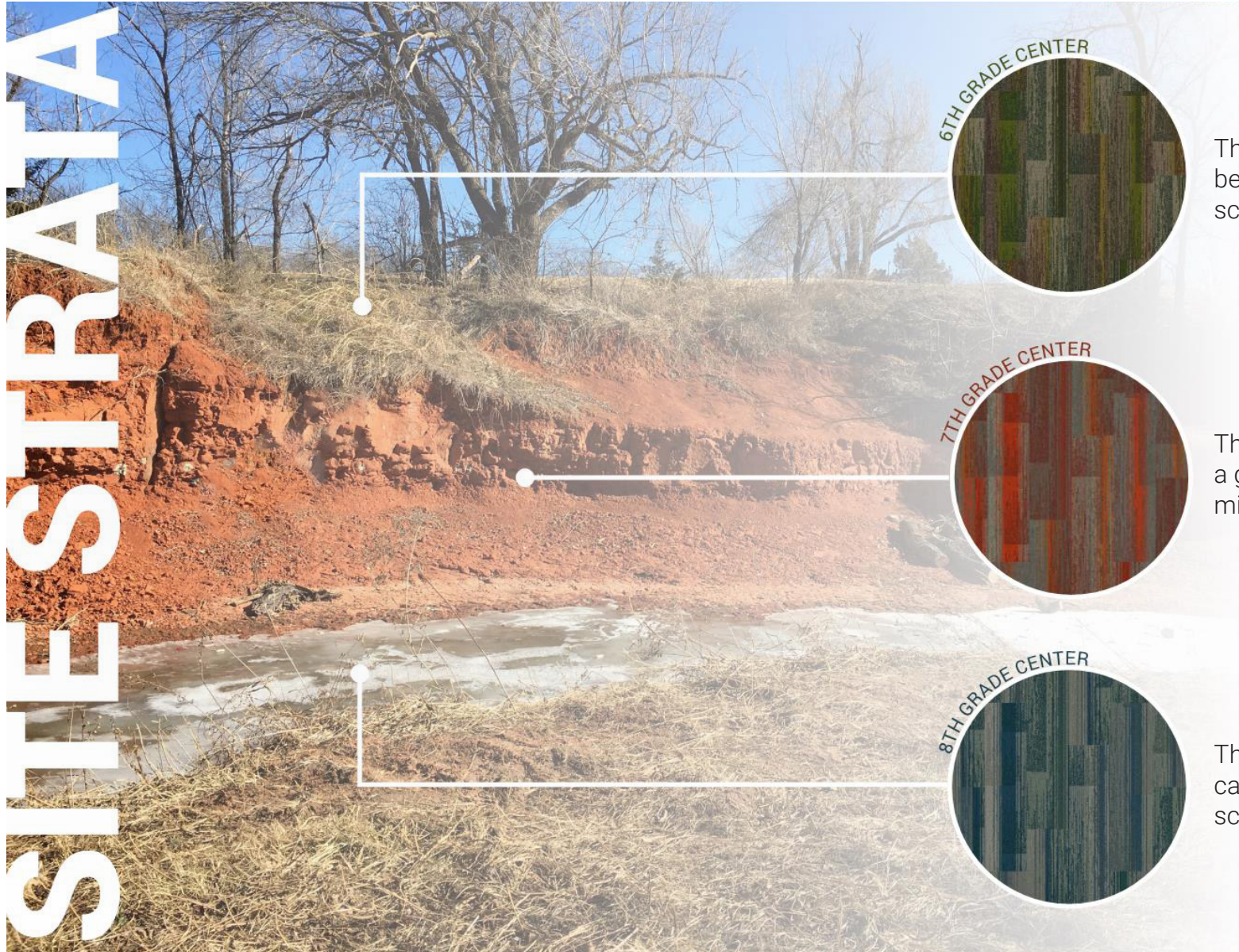
The facility was planned with site in mind first and foremost. The existing creek and forested area not only informed the location of major portions of the building, but also the length of the bridge. It was important that as much of the site trees, foliage, and natural landscape be maintained as a new building was constructed. Furthermore, being a natural use area prior, the campus is meant to be maintained as a park amenity to the surrounding neighborhood.

Existing large boulders found on site were leveraged in lieu of new manufactured retaining walls. The result provides the appearance of a naturally-formed landscape through sustainable material use, which in turn, allowed a portion of the budget to be re-focused on educational spaces.



# Inspiration from Environment

SITES TRAIL



6TH GRADE CENTER



The vegetative top layer, beginning of the middle school experience.

7TH GRADE CENTER



The red clay soil, building a good foundation in the middle school experience.

8TH GRADE CENTER



The water of the creek, carrying the learner to high school and beyond.

## OUTSIDE-IN AND INSIDE-OUT

Along the creek's east bank are three core learning neighborhoods – all of which architecturally respond to the creek's natural dips and bends. Each neighborhood is identifiably different and draws from the site strata - a lush green top layer, the red clay soil, and the blue from the creek itself, meant to metaphorically carry 8th grade learners onto high school and beyond. Learning studios open with glass operable walls up to collaborative hubs dubbed "front porches," many of which promote visual connections to nature.



6TH GRADE



7TH GRADE



8TH GRADE



PROJECT RESULTS



# Finding Success

## EDUCATIONAL GOALS ACHIEVED

We identified the school's instructional model of inquiry-based learning and implementation process that united administrators, educators, and learners with shared goals, a clear understanding of how to reach those goals, and a common language for discussing progress. This instructional model helps educators understand how to design effective experiences that engage learners in their ownership of learning.

We created key factors for a positive school and classroom climate where educators and learners feel safe, supported, engaged, and accepted. Within a transparent environment that offers visibility to each other and to nature promotes the sense of belonging which is linked to higher levels of social, emotional, physical and academic performance, an important focus on this campus.

Finally, we developed clear expectations and practices provided for more prepared and confident educators. These expectations improve engagement and performance and it clarifies the path forward.



# Finding Success

## SCHOOL DISTRICT GOALS ACHIEVED

### Sustained community involvement

The environment at Capps Middle School where everyone feels safe, healthy, and ultimately happy. The environment is designed to welcome community engagement that the staff seek to better engage the community to achieve long-term outcomes.

### Safe working and learning environments

Providing a safe learning environment is a key focus at Capps Middle School. With clear procedures that target individual growth, relationships, and learner empowerment, the learning environment is safe physically and emotionally. Learners are engaged, connected, and supported in their learning. With the physical environment that provides visibility to others and to nature, educators and learners have a sense of acceptance, inclusion, and identity that promotes a sense of belonging and community.

### High-performing collaborative teams

The new environment and focus on learning allow the educators to function as high-performing teams. These teams are composed of individuals with specialized expertise and complementary skills who are goal-oriented and hyper-focused on achieving clear, outstanding results. Together they collaborate and innovate to produce work at the highest levels.

### Efficient operations

By aligning the educational systems to the desired outcomes, Capps Middle School processes are efficient and effective. By achieving organizational alignment, educators and learners understand what is expected of them, how to organize action, and how to increase engagement and productivity. Efficient operations allow for greater innovation that Capps has capitalized upon.

### Intense focus on student achievement

Utilizing the evidence-based instructional model of inquiry learning, the students are engaged and involved in their learning process that ultimately improves achievement. The inquiry cycles help students to develop intellectually disciplined and thinking skills by providing questions that engage them through curiosity. Utilizing this model, students also develop skills in collaboration, communication, and creativity, all of which are attributes for college, career, and life ready.

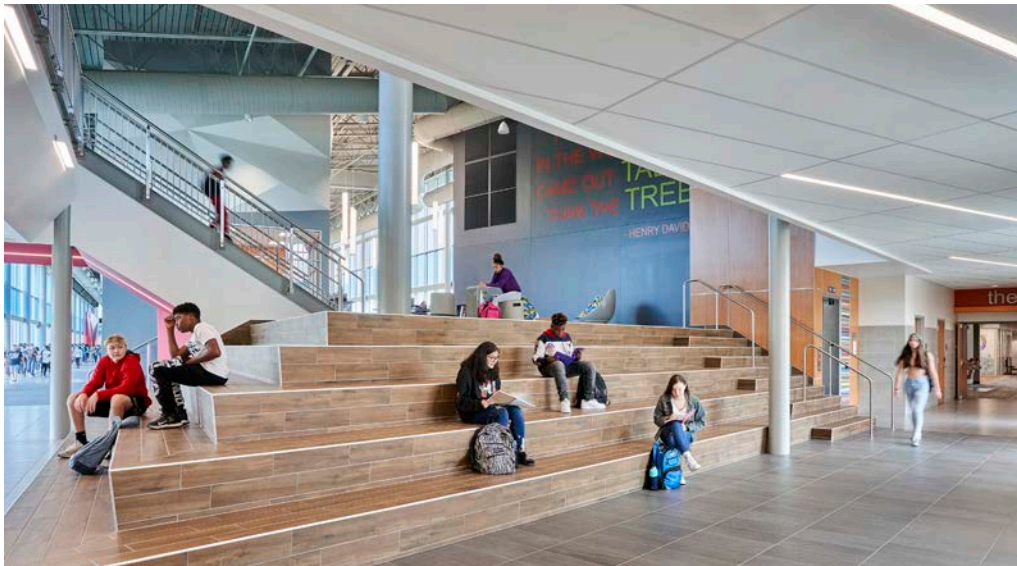


# Finding Success



## COMMUNITY GOALS ACHIEVED

Benefits of education are societal and personal. Education leads to more opportunities and a healthier life. Learning in an environment that supports movement and collaboration prepare individuals for learning, promotes appropriate behaviors, and allows for the development of social skills, all augmenting brain function. Capps Middle School is designed to promote learners that are more productive, have better communication, increase critical thinking skills, and have a great sense of discipline. This environment prepares learners with the skills needed for college, career, and life.



# Finding Success

## UNINTENDED RESULTS

Over the course of the COVID-19 pandemic, education took a hit. Yet, the focus on inquiry-based learning in a collaborative environment allowed Capps MS to maintain student growth in a hybrid world. The training on inquiry-based learning with the staff and BOLD educators was a just-in-time experience. Educators took the academic expectations and translated them to a virtual setting to keep learning a focus.

Once the learners were back at their school environment, the learning was seamlessly translated back to an in-person experience. The establishment of clear expectations, practices, and procedures that allowed for smooth transitions between virtual and in-person was an unintended achievement for Capps Middle School.



