### NQUIRY

# Nature is Necessary:

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Fostering a Sense of Place and Belonging for the Youngest Learners

Jefferson Early Learning Center Houston, Texas | Alief ISD

### Executive Summary

#### The Alief Jefferson Early Learning Center

represents a transformative approach to early childhood education, rooted in equity, environmental stewardship, and deep community connection. Serving 558 prekindergarten students-many from historically undeserved and culturally diverse backgrounds-the center is a model for how learning environments can reflect and uplift their communities while fostering a lifelong connection to nature.

Guided by a commitment to educational access and environmental responsibility, the school's architecture and curriculum are intentionally designed to cultivate a sense of belonging and place. Students are immersed in the identity of the Alief community, the vibrancy of Houston's International District, the spirit of Space City, and the ecological richness of the Gulf Coast region. Through strong partnerships with the school district, community organizations, and nonprofits, the campus integrates nature into every aspect of the learning experience.

Central to the school's vision is the restoration of nearly five acres of native Gulf Coast prairie, transforming the campus into a living laboratory where students can interact daily with their environment. This effort not only supports biodiversity and climate resilience but also instills in students a sense of environmental agency and personal well-being. By embedding nature into the everyday rhythm of school life, the Alief Jefferson Early Learning Center redefines what it means to prepare young learners for the future- socially, academically, and ecologically.



This project involved the design and development of a new early childhood education center on a 19-acre site in the heart of the Alief community. The facility was created to serve 558 prekindergarten students and their families, supporting the district's commitment to equitable, high-quality early learning in a culturally diverse neighborhood.

Launched in March 2020 during the height of the COVID-19 pandemic, the project required adaptive planning and innovative design to address evolving needs. Despite the challenges, the center opened on schedule in Fall 2022.

The work included comprehensive site planning, architectural design, integration of outdoor learning environments, restoration of native prairie landscape, and close collaboration with district and community partners—resulting in a nature-connected, inclusive, and future-ready learning environment.



# S STRATEGIC GOAL

#### **Foster Belonging and Identity**

BUDGET

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**OF WORK** 

SCOPE

#### Ensure Equitable Access to Nature

Provide daily, meaningful interactions with the natural world for all students, recognizing nature as a fundamental right that supports mental health, learning outcomes, and environmental consciousness for both students and the wider community.

Location: Alief, Texas **Design Capacity: 558** Building Area: 80,557 Site Area: 19.2 Acres **Construction Cost:** \$22,432,184



#### **Build Strong Educational Foundations**

Support the holistic development of young learners by integrating nature-based and community-connected learning strategies that lay the groundwork for lifelong academic and personal success.

#### CONTEXT: STUDENTS & COMMUNITY

### School & Community Research and Engagement

The Alief community is defined by its remarkable cultural richness, resilience, and potential. Nestled within Houston's International District, the area is home to one of the most diverse student populations in the country, where families from around the world bring their languages, traditions, and aspirations into the classroom. Many students are the first in their families to attend school in the United States, navigating the challenges of a new culture while embracing the promise of education. In the face of socioeconomic adversity, Alief students show unwavering determination, supported by a district that prioritizes equity, belonging, and opportunity.



Alief Serves 40,642 Students



84.4% of Students are at risk of dropping out of school



**83.2% of the district** are economically disadvantaged



With over 80 different languages, Alief is one of the most diverse school districts in the nation



**Goal:** Creating a sense of belonging and place to students with diverse back grounds!





Many of Alief's students are **1st Generation Americans** 



District houses Houston's International District

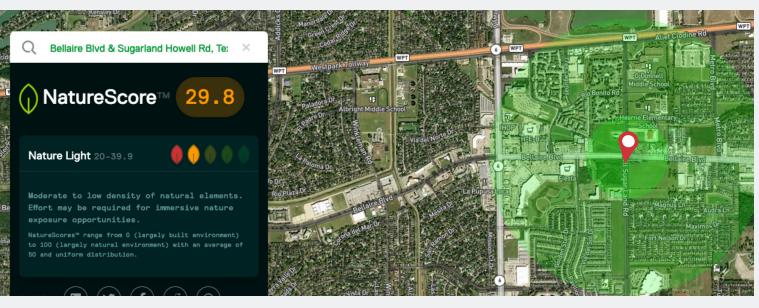


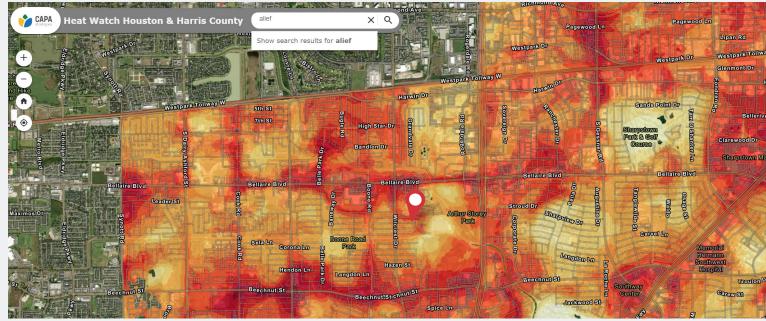


#### CONTEXT: PLACE & ENVIRONMENT

### School & Community Research and Engagement

Once a mosaic of farmland, wetlands, and native prairie, the Alief area was historically rich in biodiversity and deeply connected to the natural rhythms of the Gulf Coast. Over time, rapid urbanization has transformed Alitef into one of Houston's most densely developed and nature- deprived neighborhoods. Comprised largely of multifamily housing, many residents—especially children—live without access to nearby green spaces such as backyards, playgrounds, or parks. Alief has become a park desert, offering limited public access to nature, and it ranks among the hottest areas in the city, compounding the impacts of urban heat and environmental stress. Reconnecting students and families to nature in this context is not just beneficial—it is essential.







**Goal:** Providing access to nature to foster wellbeing for both students, community and environment.





Alief covers 36.6 square miles.

Alief is also one of **hottest areas in Houston.** 



Comprised of mostly multifamily housing, more than 60% of the district's students live without access to green space – backyards, playgrounds and parks within a 10-minute walk (according to park score).



Greenlink Analytics assigned Alief the highest Urban Heat Intensity score of 10, compared to Houston's average of 5.9, indicating a significant heat burden tree canopy coverage of just 11%, markedly lower than the city's average of 33%



A 2024 study by the Houston Harris Heat Action Team (H3AT), Alief was found to be up to 14°F hotter than cooler neighborhoods during the same time period.



Alief is a park desert, with **limited access to public green space.** 

#### SCHOOL & COMMUNITY - RESEARCH & ENGAGEMENT

### Diversity of Engagement for a Diverse District

To authentically serve Alief's richly diverse community, it was essential to engage voices that reflected the full range of cultural, linguistic, and lived experiences in the neighborhood. Launching in March 2020 at the height of the pandemic, the project faced immediate challenges in how to meaningfully connect with stakeholders. Traditional in- person outreach was no longer possible, prompting the use of creative virtual strategies— Online meetings, surveys, and digital design tools—to ensure broad, inclusive participation. By creating space for students, families, educators, and partners to contribute, the process ensured that solutions were both equitable and rooted in community identity.









TEXAS A&M FOREST SERVICE







Healthy Tweaks





#### **District Engagement**

Transforming Learning from Within

Alief ISD staff and administrators led efforts to re-imagine classrooms as immersive, nature-connected environments. Through virtual research and collaboration, they explored how redesigned learning spaces could spark curiosity, enhance engagement, and improve early outcomes like reading readiness—making education more inspiring and relevant to students' lives.

#### **Community Engagement**

Supporting Families, Strengthening Neighborhood Ties

Community input revealed a strong need for wraparound services, such as digital access and computer literacy for parents. Virtual forums enabled families to shape a shared vision for schools as centers of support, belonging, and opportunity—expanding the school's role beyond education to community resilience.

#### **Partnership Engagement**

Bringing Nature Back to Schoolyards

Leaders from across the region—including non-profits, governmental agencies, and environmental advocates as well as from across the country, offered expertise, funding, and hands-on support to integrate nature into the heart of campus life. Inspired by a shared belief that every child deserves access to awe-inspiring, nature-rich environments, these partners contributed vision, resources, and volunteer hours—helping redefine schoolyards as vibrant, restorative spaces that promote health, learning, and environmental justice.

### Key Challenges

#### 1. Cultural Disconnection and the Need for Belonging

Alief's extraordinary cultural diversity is both a strength and a challenge. With students representing communities from across the globe, many are navigating a new language, unfamiliar customs, and complex social dynamics as first-generation Americans. Without intentional support, this can result in feelings of isolation or cultural invisibility within the educational environment. Fostering belonging and identity in Alief requires schools to embrace and reflect this cultural richness, affirming each child's heritage while anchoring them in the local and regional identity of the Gulf Coast.

#### 2. Inadequate Access to Nature and Green Space

Alief has become a "park desert," where the majority of students lack access to safe, nearby green spaces such as parks, playgrounds, or even backyards. The neighborhood is also among Houston's hottest, with limited tree canopy and significant urban heat island effects. These conditions disproportionately impact children in high-density housing, limiting their physical activity, social engagement, and exposure to the restorative benefits of nature. Addressing this challenge is essential to ensuring equitable access to natural environments that nurture physical, emotional, and cognitive well-being.

#### 3. Socioeconomic Barriers to Early Learning Success

Many families in Alief face systemic barriers such as economic hardship, limited early childhood resources, and language access challenges. These factors can hinder school readiness and long-term academic success. Additionally, traditional learning environments often fail to reflect the lived experiences or cultural assets of the students they serve. To build strong educational foundations, schools must implement inclusive, nature-integrated, and communityconnected learning models that engage young learners in meaningful ways-academically, emotionally, and socially.

#### STRATEGIC GOALS



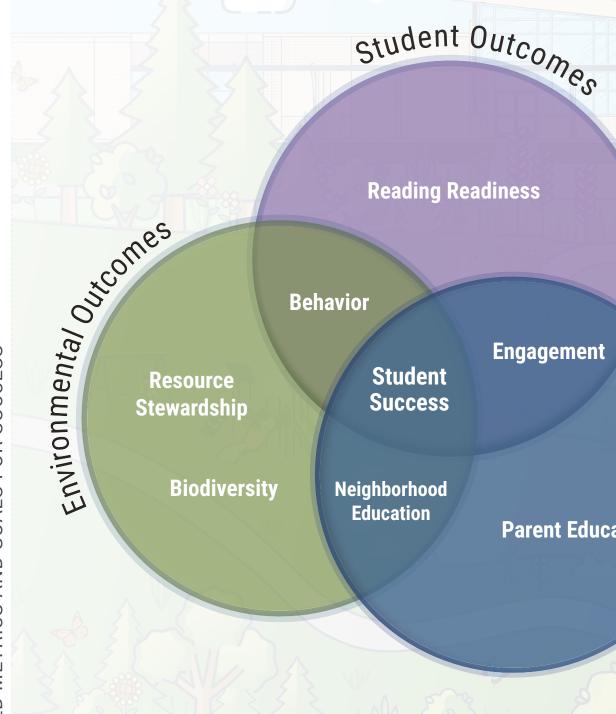
**Foster Belonging** and Identity



Ensure Equitable Access to Nature



**Build Strong Educational Foundations** 

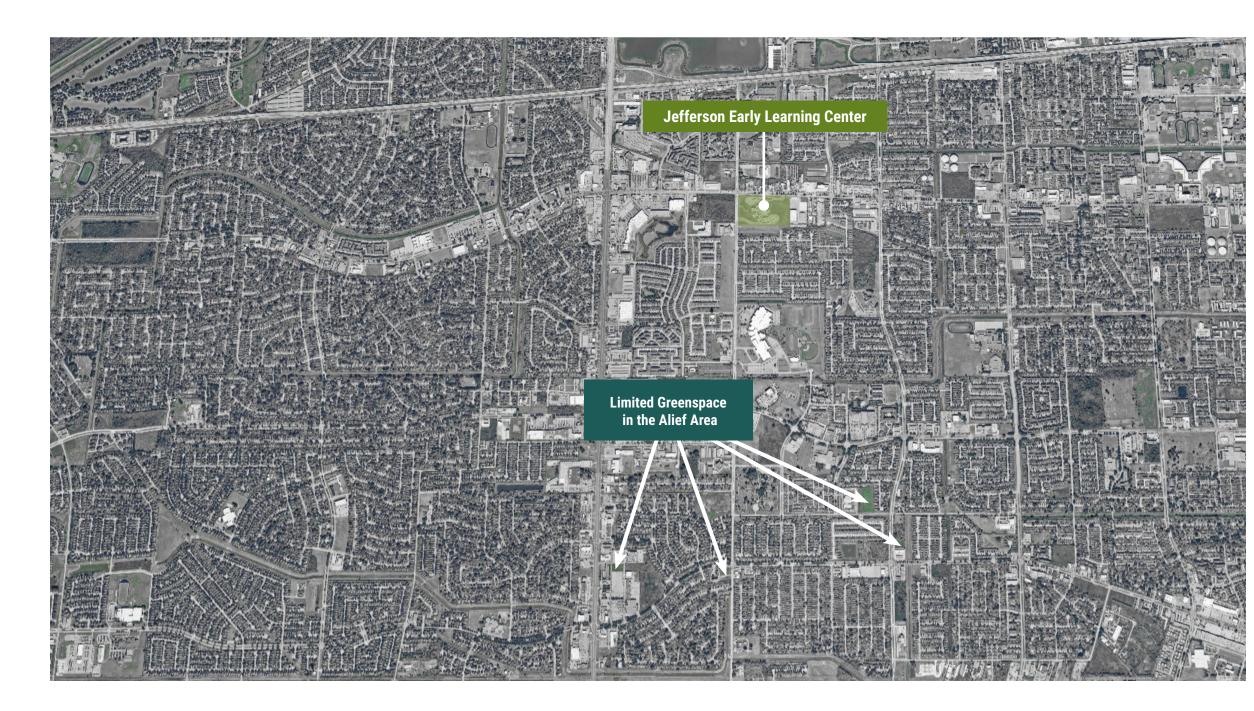


Engagement

Community Oux **Parent Education** 

### Context of the Site

Alief and the area around the Jefferson Learning Center have become a park desert.



#### NEARBY POINTS OF INTEREST:





Shree Swaminarayan Hindu

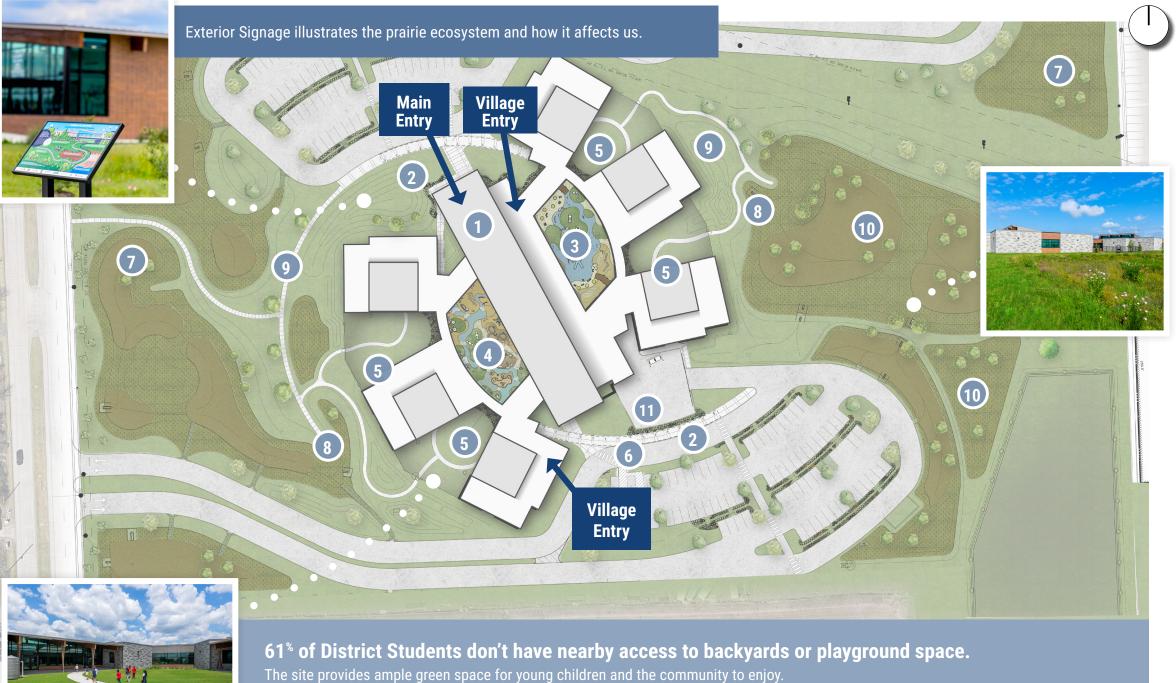


### Creating a Nature Park for Students and Community

Once home to a golf driving range and used car lot, the 19.2-acre site has been dramatically transformed into a local national park, thoughtfully restoring the native prairies and wetlands that once flourished there centuries ago. Today, the site features three distinct outdoor environmental experiences: secure central courtyards that reflect the varied topography of Texas highlands and lowlands, "Backyard" learning spaces designed for exploration and play, and a natural park area that invites community connection with the restored landscape.

#### SITE PLAN

Main Entry 1 Parent Drop-Off Lowlands of Texas Courtyard 3 Highlands of Texas Courtyard 5 **Back Yard Bus Drop-Off Texas Prairie Outdoor Classroom** Prairie Trails **Texas Wetlands** Service Yard



To encourage outdoor learning and access to nature in the urban area, Texas prairie and wetland ecosystems are open to the public and designed to service the building through water retention, site cooling, and much more.

The site includes five acres of native prairies and wetlands, over 180 native trees, and will invite over 200 plant and wildlife species over its lifetime.



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### The Golden Spiral

The building program is thoughtfully organized around two distinct learning villages situated on either side of the school, unified by a central spine of shared resources and amenities. Within each village are three neighborhoods where students engage in daily learning experiences. Each neighborhood features four immersive, experiential classrooms, dedicated support spaces, and a generous collaboration area that opens onto a back porch and backyardseamlessly blending indoor and outdoor learning while fostering meaningful connections with nature.

#### **NEIGHBORHOODS**

Learning Experience Neighborhood Collab Circulation **Teacher Support** 

#### **ENRICHMENT & SUPPORT**

**Reception & Conference** Welcome Center Art & Music Early Childhood **Teacher Work Room Play Experience** Kitchen **Building Service** 

To reduce the scale of the experience, the design is divided into East and West "villages" with separate entries. Each village is divided into three "neighborhoods" that share backyards and a central play courtyard.



By providing several layers of outdoor space, the design softens the edges between the indoor and outdoor experiences.



The Golden Ratio inspired all facets of design. Its Natural simplicity connects students with a **strong** sense of place and familiarity.



INQUIRY

VOYAGES

WEST VILLAGE

DISCOVERY

DISCOVERY



VOYAGES

INQUIRY

The Golden Spiral is one of the oldest known natural forms; it connects us to ourselves, nature, our planet, and everything in between.

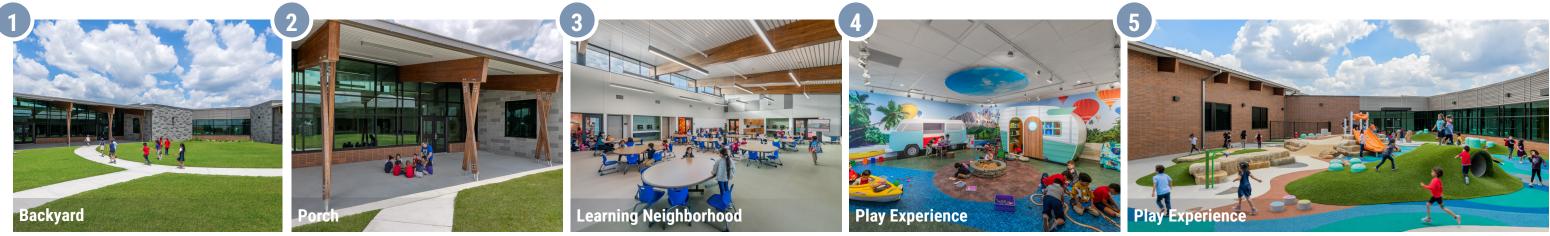
The curved layout for the building was inspired by nature and designed to maximize natural light, views and **connection** with the outdoors.

#### PHYSICAL ENVIRONMENT - **STUDENT**

### A Neighborhood For Play

The campus was intentionally designed to nurture the developmental needs of early childhood learners, specifically serving all 4- and 5-year-old students in the district. Grounded in research on early childhood development and learning environments, every elementfrom the scale of the architecture and the height of the windows to the pacing of transitions between activitieswas carefully considered to support how young children perceive and move through space. Even the language used throughout the design reinforces familiarity and emotional safety, with terms like "neighborhood," "porch," and "backyard" helping children form intuitive connections to their surroundings and feel a sense of belonging in their learning environment. This approach supports Building Strong Educational Foundations by creating developmentally appropriate, nurturing spaces that lay the groundwork for early literacy, emotional well-being, and lifelong learning success.





### Connecting With Nature

The learning neighborhoods are designed to connect young students with their community and nature. Large overhangs provide porches that blend indoor and outdoor experiences. Backyards also connect with their adjacent neighbors.





### Equitable Access to Nature For All

Through innovative design and community engagement, the center endeavors to bridge this gap, recognizing nature's multifaceted benefits for early childhood learners. A growing body of research shows that regular interaction with nature supports cognitive development, fosters creativity, and improves focus and self-regulation in young children (Chawla, 2015; McCurdy et al., 2010). Exposure to natural environments has also been linked to reduced stress, enhanced physical activity, and stronger socialemotional skills—factors essential to school readiness and long-term well-being (Louv, 2005; Wells & Evans, 2003). By weaving nature into daily learning, the center not only enriches academic outcomes but also nurtures healthier, happier, and more resilient learners.

According to the park score, **less than 50% of the** school's population is within 10 walking minutes to the nearest park. The center provides great value in the variety of scaled outdoor spaces for kids and the community to enjoy.



#### Small - Neighborhood Backyard

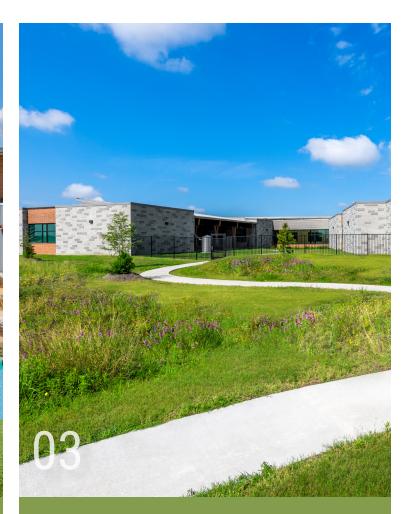
Nearby breakout play areas and small garden spaces foster intimate learning experiences and provide seamless opportunities to extend the classroom beyond its walls into the outdoors.



#### Medium - Play Courtyard

Immersive play environments encourage large group play and gross motor development.





#### Large - Prairie Environment

"Small National Park" connects young students and their community to a growing native ecosystem with nature paths.

#### PHYSICAL ENVIRONMENT

# Connecting to Our City

To support the goal of **Fostering Belonging and Identity**—creating a welcoming, inclusive environment that honors students' diverse cultural backgrounds and strengthens their connection to place—each classroom is intentionally designed to root learners in their local context. At the most personal scale, this begins in their own backyard of Alief, where familiar icons like the International District and the Alief water tower serve as visual anchors. These local references not only reflect the rich cultural landscape of the community but also help young students feel seen, valued, and connected to the world around them. Through thoughtful design, the learning environment becomes a daily affirmation of identity and belonging.

With over **80 different languages**, the surrounding city is one of the **most culturally diverse school districts in the nation**. To address this diversity, the "play experiences" provide a variety of themes that showcase important local identities.







**Play Experience - International District** 

To overcome potential language barriers, the center's design caters heavily to the sensory spectrum through realistic visuals, exciting textures, and vibrant colors.



#### PHYSICAL ENVIRONMENT

### Connecting with Our Region

The project celebrates regional identity by immersing students in the diverse landscapes and cultural narratives of the Gulf Coast. Both indoor and outdoor environments highlight the unique geography of Texas from the highlands to the coastal lowlands—while subtle design elements reference Houston's role as Space City.

Importantly, the campus brings these regional experiences to life for students who may not have had the opportunity to explore them firsthand, creating spaces that introduce the wonder of the natural world and cultural landmarks directly into their daily learning. In doing so, the school becomes a gateway to the broader region, nurturing pride, curiosity, and a deeper sense of place.





The interior courtyards connect students to the nearby gulf lowlands of Texas with reeds, water and coast as well as the highlands of texas with rock formations with rock formations.



Growing outward, the new center also connects students with their region of Texas. The center celebrates regional industries and ecosystems that the region is known for.





#### PHYSICAL ENVIRONMENT

### Connecting with Nature

The diverse outdoor environments across the campus are integral to advancing the district's core goals: Fostering Belonging and Identity, Ensuring Equitable Access to Nature, and Building Strong Educational Foundations. In Houston, many families-when able-make an annual journey to the Texas Hill Country to witness the vibrant seasonal transformation and iconic wildflower bloom. These landscapes, once central to shaping the state's open prairie and cowboy heritage, evoke a deep sense of place and cultural identity. By bringing expansive wildflower meadows and native prairie restoration to Alief, the project not only supports environmental health and biodiversity but also sparks awe, curiosity, and connection for the 558 young learners and their broader community-bringing the wonder of Texas's natural heritage directly to their schoolyard.

To complement the themed interior designs, the exterior site implements prairie and wetland ecosystems for students to connect with their environment. This provides a multitude of ecological benefits to the school and its community.





Celebrating diversity and belonging, the district's mascot-the Jay-not only honors the cultural richness of the community but also reflects a deep connection to place; Jays are vital members of all Texas ecosystems, with six distinct species representing the beauty and variety found across the region.









With the majority of students not having access to backyards, the center provides easy access to a spectrum of outdoor play spaces. Students now have a backyard, play courtyard, and nature preserve within their school.

#### EDUCATIONAL ENVIRONMENT

### Vision & Goals

#### STRATEGIC GOALS

#### **Foster Belonging and Identity**

Create a welcoming, inclusive environment that affirms the diverse cultural backgrounds of students and nurtures a strong sense of place and identity rooted in the local and regional context.

#### **Ensure Equitable Access to Nature**

Provide daily, meaningful interactions with the natural world for all students, recognizing nature as a fundamental right that supports mental health, learning outcomes, and environmental consciousness for both students and the wider community.

#### **Build Strong Educational Foundations**

Support the holistic development of young learners by integrating nature-based and community-connected learning strategies that lay the groundwork for lifelong academic and personal success.







#### **Student Outcomes**

- » Engagement
- » Behavior
- » Reading Readiness

#### **Community Outcomes**

- » Engagement
- » Safety
- » Parent Education

#### **Environmental Outcomes**

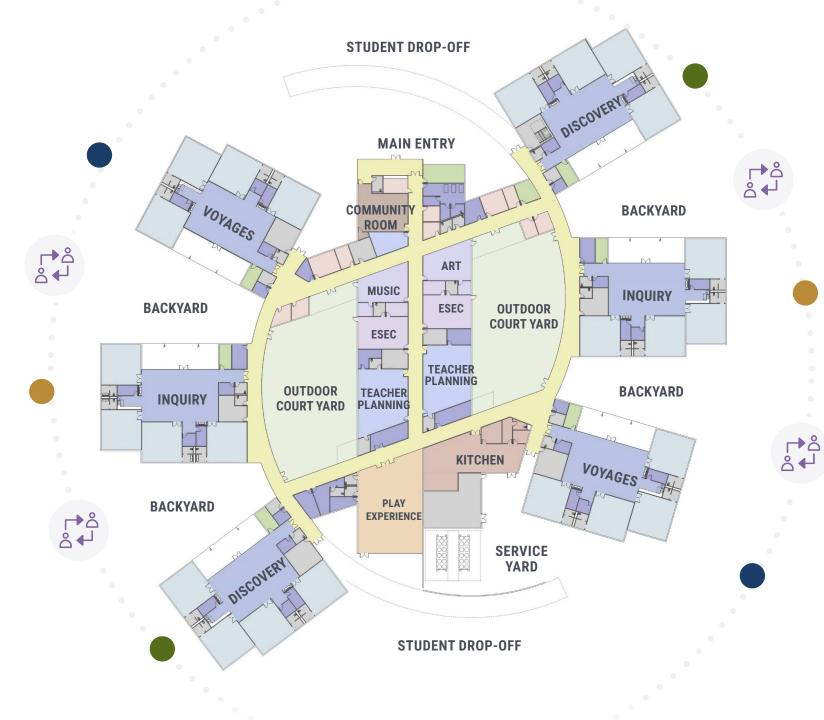
- » Resource stewardship
- » Biodiversity
- » Neighborhood Utilization

#### EDUCATIONAL ENVIRONMENT

### Flexibility of Opportunity

Designing spaces that ignite wonder and curiosity was central to fostering meaningful student engagement and developing foundational skills. In partnership with the district, twelve immersive learning environments were thoughtfully created throughout the campus, each inspired by the themes of discovery, inquiry, and voyages. Students remain with their core teacher and classmates for the full academic year, rotating to a new environment every three weeks. This structured movement allows students to explore all twelve settings, each with custom-designed content and hands-on learning opportunities that cultivate excitement, creativity, and deeper understanding across subjects.

This approach directly supports the district's mission of equitable success for all students and adults, while realizing its vision of expanding beyond the classroom to nurture the whole child for kindergarten success and beyond. The design and instructional model are rooted in the district's core values—creating joyful, equitable, collaborative, and engaging learning experiences for every child.



Students remain with their core teacher and classmates for the full academic year, rotating to a new environment every three weeks.



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#### EDUCATIONAL ENVIRONMENT -

#### SUPPORTING CURRICULUM

### Immersive experiences both in the classroom and outside

At the Jefferson Early Learning Center, the classroom is more than a space-it's a carefully crafted environment where purposeful play meets academic foundations. Designed in alignment with Alief ISD's belief that young children learn best through planned and intentional play, the Center delivers immersive, hands-on experiences that spark curiosity and foster growth. Every corner of the learning environment-from dramatic play areas to outdoor discovery zones-is built to support meaningful engagement, cultivate vocabulary, and create real-world connections that form the building blocks of literacy, math, and social-emotional development.

By integrating guided play with district curriculum goals, Jefferson Early Learning Center ensures that children not only enter kindergarten ready to learn but are also equipped with the cognitive and interpersonal skills to thrive long after. In these nurturing, imaginative spaces, learning is active, developmentally appropriate, and deeply connected to a child's natural desire to explore.

#### **A Community-Centered Learning Experience**

All of the classrooms are designed around themes that tie into the city and its diverse culture. Students begin making real connections to their city, region, and nature through play.





#### **Purposeful Play-Driven Design:**

Classrooms and outdoor environments are intentionally planned to foster language, literacy, and math through hands-on exploration.



#### Whole Child Focus:

Social-emotional learning is embedded in every aspect of play, helping students build empathy, selfregulation, and collaboration skills.

#### **Engaging Learning Environments:**

Classrooms are rich with materials and provocations that invite imagination and cognitive development.

#### EDUCATIONAL ENVIRONMENT - **INSIDE**

### Supporting variety of learning and teaching styles

Empowering children with choices fosters autonomy, confidence, and a love for learning. By offering opportunities for decision-making, the environments help young learners develop critical thinking skills and a sense of responsibility for their actions.

"One of the most noticeable differences is the growth in children's self-regulation and confidence," said Principal Kim Hammer.

"Traditional pre-K settings tend to be more teacher-led and directed, but here, learning is teacher-facilitated. As a result, children take greater initiative, demonstrate more autonomy, and benefit from increased opportunities to make their own choices."



Each learning neighborhood is within proximity of a toolbox of learning spaces to reduce travel time for young kids. Each child gets an individualized experience.





#### EDUCATIONAL ENVIRONMENT - **OUTSIDE**

### Supporting variety of learning and teaching styles

The word "kindergarten" comes from German and literally means "children's garden." It was coined by Friedrich Fröbel in 1837, who believed that young children, like plants, thrive when nurtured in a thoughtful, engaging environment. His vision for early childhood education centered on play, exploration, music, storytelling, and hands-on activities as essential tools for growth.

The design and philosophy of Jefferson Early Learning Center draw from this foundational belief. The learning environment prioritizes experiences that foster strong connections to the natural world and the surrounding community. Early exposure to these elements—through purposeful play, outdoor learning, and real-world experiences—supports the development of vocabulary, curiosity, health, positive behavior, and social-emotional skills.

Just as Fröbel envisioned, children thrive in environments that allow them to explore, imagine, and grow in meaningful connection with the world around them.

#### **Prioritizing Time Spent Outside**

Curated outdoor play environments cultivate a spectrum of skills that are crucial for a child's physical and emotional development.

While being reflected in the new early childhood curriculum, the outdoor experience can be represented through discovery, inquiry, and voyages.





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**RESULTS – ACHIEVING COMMUNITY GOALS** 

### Student Success & Belonging

#### ENGAGEMENT Nearly 95% attendance (one of the highest in the district)

BEHAVIOR Decrease in behavioral challenges

**READING READINES** 

Improvement in vocabulary scores In first year alone, over 16% increase inreading readiness. Children love coming to the building, said teacher Cathy Delamore. "They feel like they own it."



**RESULTS – ACHIEVING COMMUNITY GOALS** 

### Community Engagement & Education

#### **Community Outcomes**

- » Parent Education
- » Engagement





- » Dads in Action

#### **Community Teaching**

- » Houston Audubon
- » Texas A&M Forestry



Houston Audubon celebrated National Bird Day by leading engaging bird education programs at Alief Jefferson Early Learning Center, where students explored feathers, nests, bird calls, and movement activities-bringing nature to those with limited access to the outdoors.







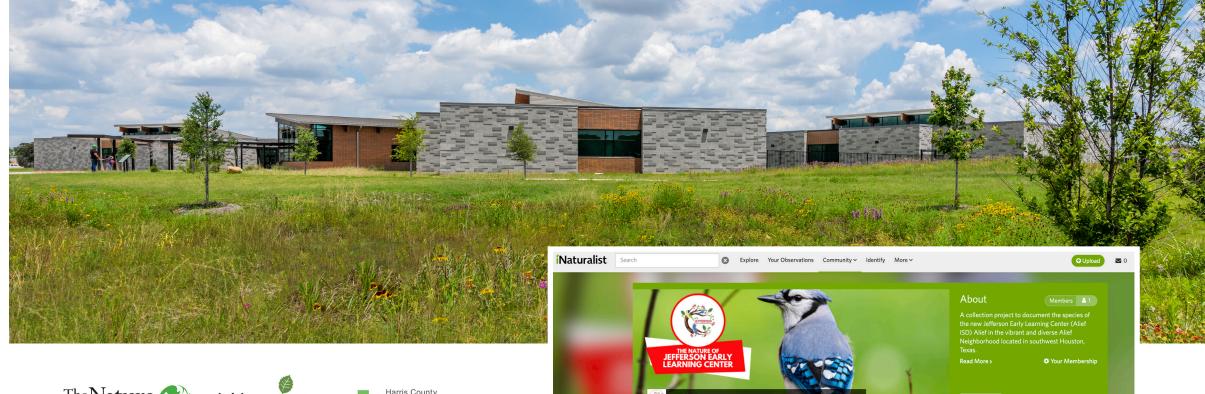
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#### Campus has become a neighborhood and district hub for community engagement.

- » Computer literacy classes
- » Parent workshops
- » Record parent involvement
- » The Nature Conservancy

#### **RESULTS – PARTNERSHIPS**

## Restoring Nature Through New Partnerships



Partnering with local groups brought a variety of resources into the project:

- » Donated 180 native trees
- » Donated prairie wildflower seeds
- » Donated graphic site signage
- » Educating on benefits of outdoor learning
- » Educating on benefits of prairie environments





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#### RESULTS - ENVIRONMENTAL OUTCOMES

### Value & Stewardship

#### ENVIRONMENTAL OUTCOMES

- » Resource stewardship
- » Biodiversity
- » Neighborhood Education

Resource Stewardship & Environmental Impact at Jefferson Early Learning Center

#### Water Management

Restoring the site to native prairies and wetlands significantly reduces the need for irrigation and enhances stormwater control. These natural systems **absorb up to 10 times more water** than traditional turf and can retain as much as **8 inches of rainfall**, helping to mitigate local flooding. Native grasses also act as biofilters, naturally cleaning water before it reaches local watersheds.

#### **Carbon Capture & Air Quality**

Healthy soil, prairie grasses, and native trees function as natural carbon sinks—capturing and storing carbon while purifying the air. This helps reduce pollution levels and contributes to lower asthma rates among children and families in the area.

#### **Energy Efficiency**

The planting of over 180 native trees and conversion to native landscapes has resulted in a **cooling effect of nearly 8 degrees** on hot days. This natural temperature regulation lowers energy usage at the Jefferson site and provides benefits to the surrounding neighborhood.



#### Time & Labor Savings

Transitioning to native landscapes reduces ongoing maintenance demands. The district saves over **8 hours per week**—or more than **400 hours annually**—in mowing and landscape upkeep.

#### **Biodiversity Enhancement**

- » 180+ native trees planted, representing diverse regional species
- » 5 acres of restored native prairie and wetland ecosystems
- Certified wildlife habitat supporting migratory birds, pollinators, and other native species
- » Promotes ecological resilience and enriches the school's natural learning environment

#### **Community Education & Engagement**

Multilingual graphic signage educates visitors on the ecological benefits of native landscapes Public walking trails invite students, families, and neighbors to explore and connect with nature Community planting events foster stewardship, belonging, and environmental awareness among residents



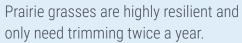
Multilingual graphic signage is thoughtfully integrated along the prairie trails to engage the school's diverse community. These signs illustrate the vital role native prairies and landscapes play in supporting the school environment, enriching the broader community, and sustaining local ecosystems—promoting both education and environmental advocacy.

NATURE CENTERED LEARNING

affer

Native Texas Prairie Ecosystems are planted throughout the site and add value to the new center and its environment in a variety of ways:

#### Low Maintenance



#### Self-Maintaining

Grasses attract wildlife and pollinators that keep the ecosystem thriving.

Prairie grasses absorb 10 times as much water as manicured sod and absorb 8 inches of water.



#### **Carbon Reducer**

Prairie grass and soil stores carbon and makes our air cleaner.



#### **Pollution-Filtering**

Grass roots filter floodwater and help improve the local water quality.



#### **Flood Mitigation**

Grasses retain floodwater and slowly release it to nearby water systems.

