Explorative Pathways for Innovative Careers (EPIC) Campus

Littleton, Colorado

Executive Summary

EPIC Campus transforms an existing auto dealership into a state-of-the-art, non-traditional high school that combines professional learning and working environments with innovative educational pathways. The primary goals of the project were to:

Foster Professional Development and Real-World Experiences. Through the school's dedicated partnership center, EPIC Campus facilitates direct interactions between students and industry leaders, offering opportunities for professional work development and experiential learning.

Enhance Educational Flexibility and Adaptability. The school's flexible spaces support various learning pathways, such as aerospace, business, computer science, construction, health sciences, natural resources, and future educator programs. These spaces are adaptable to evolving educational needs and can accommodate virtual or hybrid classes.

Support Community Engagement and Collaboration. Public gathering spaces, including the Great Hall and a secured central plaza, host a wide range of functions and promote community involvement. The project encourages interdisciplinary activities and collaboration among students, educators, and community members.

Promote Inclusivity and Diversity. The planning and design process actively engaged a diverse range of stakeholders to ensure the campus meets the needs of all learners. The environment supports inclusivity through flexible and movable furniture, numerous outlets, and overhead drops, catering to various activities and future changes in pathway needs with flexible space for access to diverse learning pathways..

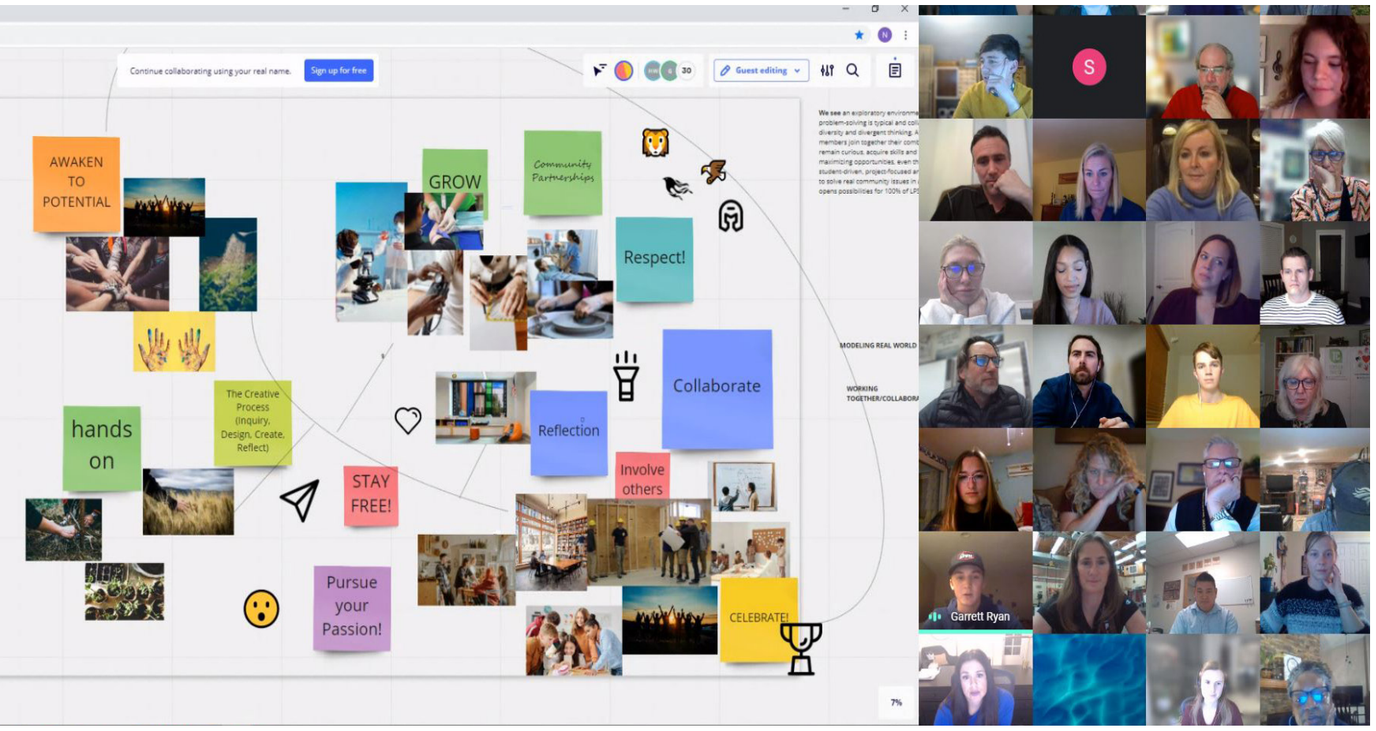
Emphasize Sustainability and Wellness. The project prioritizes sustainable practices, including locally sourced and recycled materials, climate-sensitive plant species, permeable surfaces, and innovative stormwater management techniques. These features not only support environmental stewardship but also serve as educational tools for students.

Scope of Work and Budget

Architecture, Interior Design, Landscape Architecture, Regenerative Design

EPIC Campus' scope of work included extensive renovations and the addition of new structures to support specialized educational pathways, professional learning environments, and community engagement spaces.

Total Project Budget: $45.3 Million



School & Community Research and Engagement

CONTEXT

Community. Littleton, Colorado is a diverse suburban community with a rich mix of socioeconomic backgrounds, cultural traditions, and a strong emphasis on education and community involvement. The community values progressive education and actively seeks to enhance learning opportunities for its youth.

Stakeholders. The key stakeholders involved in the project included students, parents, educators, industry partners, local businesses, community leaders, and Authorities Having Jurisdiction (AHJs). The LPS Advisory Team, consisting of the Superintendent, COO, CEO, innovation leaders, and District principals, played a pivotal role in guiding the project.

Challenges. The project faced several challenges, including updating outdated infrastructure, meeting the diverse learning needs of students, securing community buy-in, and ensuring financial feasibility. The need to create a flexible, future-proof environment that could adapt to changing educational demands was paramount and drove solutions towards these challenges.

Assets & Resources. The project leveraged the strong community support for education, existing partnerships with local organizations, and a wealth of industry expertise. The collaborative spirit within the community and the availability of modern technology and sustainable building practices were significant assets.

PROCESS

Visioning Process. The comprehensive visioning process involved extensive engagement through listening sessions, steering committee meetings, industry research, space planning workbooks, small group meetings, and Design Advisory Group (DAG) workshops. These workshops established a shared vision and guiding principles, with input from the district's Administrative and Learning Services.

Value to Community. EPIC Campus provides community value by allowing industry leaders to engage with students, offering real-world professional development opportunities. Public gathering spaces like the Great Hall and a secured central plaza support flexible classrooms and various large functions, fostering a sense of community and collaboration.

Fostering Diversity, Equity, and Inclusion. The engagement process centered diverse voices and perspectives. The DAG consisted of representatives from varied backgrounds and expertise, including students, parents, and industry partners. Efforts were made to address potential roadblocks to achievement, focusing on creating an environment that embraces diversity and supports equitable educational opportunities.

EPIC Campus Program

West Building

Description	TSE	spaces	sf each	total sf	level
Flexible Learning					
Flex Space	1.0	1	600	600	1
Flex Learn	2.0	2	950	1,900	1
Design Studio	1.0	1	1,280	1,280	1
Prototype Garage	1.0	1	1,400	1,400	1
Flex Studio - Low Bay	1.0	1	1,280	1,280	2
Flex Studio - Low Bay	1.0	1	950	950	2
Dedicated Space with Equipment					
Natural Resources Lab - High Bay	1.0	1	1,500	1,500	1
Healthcare/Natural Resources Biology Lab - Mid Bay	1.0	1	1,100	1,100	1
Healthcare CNA Skills	1.0	1	1,600	1,600	2
Commons/Support Space					
Mid-Bay Free-Range Design-Build	1.0	1	8,200	8,200	1
Partnership Center		1	600	600	1
Conference Room		1	280	280	1
Pitch Room		1	800	800	1
Coffee Shop		1	300	300	1
Café Commons		1	2,700	2,700	1
Small Group		2	200	400	2
Commons		1	735	735	2
Administration/Adult Space					
Administration		1	1,200	1,200	1
Staff Collaboration Space		1	425	425	1
Staff Collaboration Space		1	460	460	2
Additional Building Support					
Receiving/Support				680	1
Building Receiving/Support Space				680	
West Building Totals					
Sum TS Equivalents & Net SF	11.0			28,390	
Net to Gross factor (30%)				11,965	
Total Gross SF				**40,355**	

East Building

Description	TSE	spaces	sf each	total sf	level
Flexible Learning					
Tech Tinker	1.0	1	900	900	1
Electronics/Robotics	1.0	1	1,420	1,420	1
Flex Learn - Low Bay	1.0	2	950	1,900	2
Flex Learn - Low Bay	1.0	1	800	800	2
Ideate - Low Bay	1.0	1	1,350	1,350	2
Computer Science	1.0	1	1,300	1,300	2
Dedicated Space with Equipment					
Construction Trades High Bay 1	1.0	1	5,150	5,150	1
Aerospace High Bay 2	1.0	1	5,150	5,150	1
Welding		1	900	900	1
Command Center and Server		1	840	840	2
Commons/Support Space					
Commons/Display		1	1,200	1,200	1
Administration/Adult Space					
Staff Collaboration Space		1	700	700	2
East Building Totals					
Sum TS Equivalents & Net SF	8.0			21,610	
Net to Gross factor (15%)				3,823	
Total Gross SF				**25,433**	

Project Totals	Amount
Total Net SF	**50,000**
Teaching Station Equivalent	19.0
Gross SF	65,788
Circulation, walls, toilets, M/E (SF)	15,788
Percentage Gross	24.00%

SHARED VISION STATEMENT FOR THE LITTLETON EPIC CAMPUS:

"We see an exploratory environment where curiosity and risk-taking is encouraged, problem-solving is typical and collaboration is essential. We see a place that embraces diversity and divergent thinking. A place where learners, educators, and community members join their combined resources and talents; empowering students to remain curious, acquire skills and knowledge, and take risks in learning all while maximizing opportunities, even through failure. We see augmented learning that is student-driven, project-focused, and skills-based that promotes authentic engagement to solve real community issues in an inspiring, flexible, and transformational space that opens possibilities for 100% of LPS students."


Pathways Plaza

Physical Environment

CONTEXT

Physical Attributes. The EPIC Campus transformation utilizes the core and shell of an existing auto dealership, recladding the 12” CMU Block walls with insulation and corrugated metal skin. A distinctive shadow box effect, featuring orange angle steel, playfully highlights both new and existing windows, creating a seamless visual transition between the old and new structures. The design emphasizes indoor/outdoor flexibility, cross-pathway communication, and visual connections, enhanced by tubular daylighting devices that illuminate the core of the large high-bay spaces.

Community Integration. The EPIC Campus is strategically situated to foster connections with the surrounding community. The facility includes public gathering spaces like the Great Hall and an outdoor central plaza, which serve as hubs for community events, industry interactions, and student showcases. These spaces, alongside the professional learning environments, reinforce the campus’s role as a community cornerstone, promoting engagement and collaboration.

RESPONSE

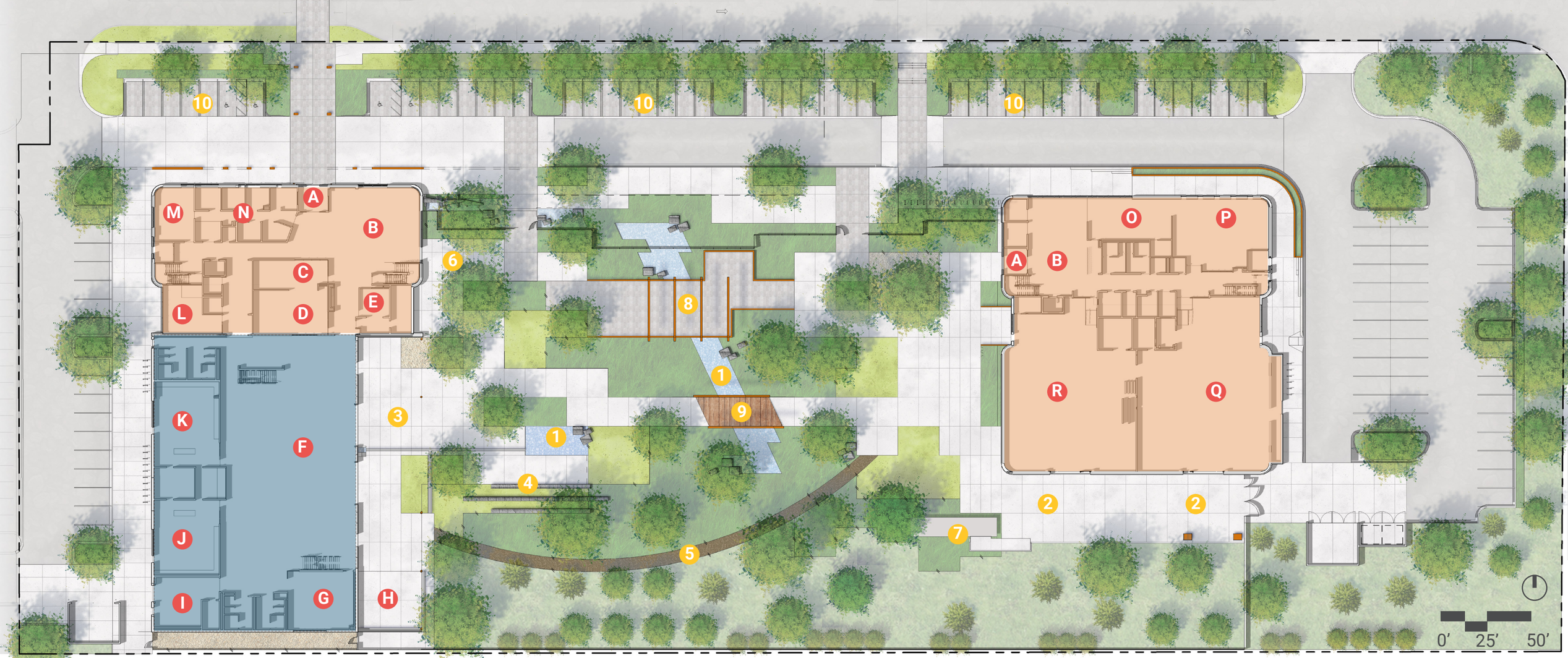
Inspiration and Motivation. The EPIC Campus inspires and motivates through its innovative design and flexible learning environments. The integration of professional workspaces and industry-standard labs encourages students to engage deeply with their chosen pathways, fostering a culture of curiosity, exploration, and risk-taking. The campus design, which includes adaptable furniture, interactive digital displays, and writable walls, supports a variety of learning styles and teaching methods, making it an inclusive and inspiring environment.

Innovative Aspects. The adaptive reuse of the existing building, combined with sustainable design practices, sets a precedent for eco-friendly educational facilities. The incorporation of climate-sensitive plant species, permeable surfaces, solar-ready structures, and advanced stormwater management systems showcases the project’s commitment to sustainability and thoughtful site design. Additionally, specialized labs and flexible spaces ensure that the campus can evolve alongside educational and industry advancements.

Fostering Diversity, Equity, and Inclusion. The physical environment of the EPIC Campus is designed to be inclusive and equitable. Collaboration with LPS security staff ensured that safety measures are seamlessly integrated, allowing the spaces to remain open and professional. The campus supports a diverse range of activities and learning styles, with flexible spaces and adaptable furniture catering to the needs of all students.

Sustainability and Education. The campus site is a living laboratory for sustainable practices, featuring locally sourced or recycled materials and climate-sensitive/native plant species. The Natural Resources Pathway utilizes the campus’ water feature to study stormwater management, solar array performance, and landscape ecosystem health. The innovative farm-to-table program with a Hydroponics Container allows students to grow greens for local elementary schools, integrating sustainability into the curriculum.

Outdoor Learning and Community Engagement. Replacing the former car dealership’s large parking lot is the Pathways Plaza, a campus courtyard that features outdoor learning spaces and illustrates the movement of water through the site. Featuring a reused steel beam as a “runnel” that transfers roof drainage to the porous landscape, this area doubles as a teaching tool for students to study water conservation, stormwater management, and flow dynamics. The dedicated outdoor construction yard adjacent to the ‘Trades’ program supports practical, real-world applications like the construction of tiny homes, addressing community needs and enhancing the learning experience.



Addition Renovation

EPIC Campus Site/Floor Plan

BUILDING

- A Entry
- B Commons
- C Partnership Center
- D Pitch Room
- E Coffee Shop
- F Great Hall
- G Prototype Garage
- H Exterior Storage
- I Receiving
- J Chem Lab
- K Bio Lab
- L Staff Collaboration
- M Flex Learning Studio
- N Admin / Staff
- O Tech Tinker Lab
- P Electronics / Robotics
- Q Aerospace Lab
- R Construction Lab

LANDSCAPE

- 1 Stormwater Basin
- 2 The “Back Yard”
- 3 Kinetic Plaza
- 4 Educate / Present
- 5 Nature Trail
- 6 Cafe Patio
- 7 Hydroponics Container
- 8 Future Solar Structure
- 9 Bridge
- 10 Permeable Parking

LEVEL TWO

LEVEL ONE

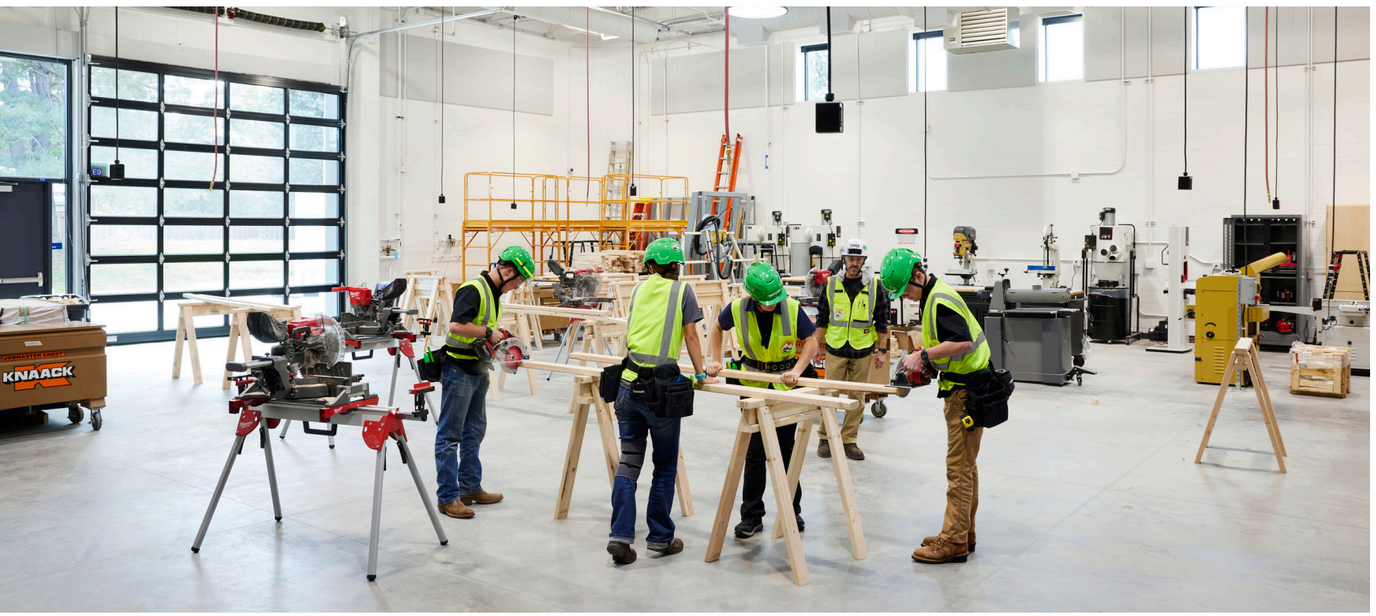
WEST BUILDING

EAST BUILDING

Addition

Renovation

1. Main Entry
2. Admin
3. Partnership Center
4. Pitch Room
5. North Commons
6. Cafe
7. Great Hall
8. Staff Collaboration
9. Restrooms
10. Flex Classroom
11. Natural Resources
12. Building Support
13. Prototype Garage
14. Outdoor Storage
15. Commons
16. CNA Lab
17. Healthcare Flex Classroom
18. Sports Medicine
19. Small Group Room
20. Office
21. Future Educator
22. Business/Entrepreneurship
23. Real Estate
24. Outdoor Classroom
25. East Entry
26. East Commons
27. Construction Trades
28. Aerospace
29. Storage
30. Spray Room
31. Robotics Lab
32. Tech/Tinker Lab
33. Student Support
34. Ideate Lab
35. Computer Science
36. Construction Design



Educational Environment

CONTEXT

Educational Vision and Goals. EPIC Campus creates an exploratory environment that encourages curiosity, problem-solving, and collaboration. The school embraces diversity and divergent thinking by empowering students to take risks and learn at their own pace. In order to promote authentic community engagement, the curriculum gives students the opportunity to solve real world issues.

RESPONSE

Curriculum Support. Each of EPIC's learning pathways (aerospace, business, computer science, construction, health sciences, natural resources, and future educator) are equipped with specialized labs tailored to the needs of their respective industries. Additionally, flex labs support all pathways and future growth. The inclusion of short throw projectors, writable surfaces, and multiple digital screens ensures further enhances the learning experience. These features support a variety of instructional methods, including traditional, virtual, and hybrid classes, aligning with the evolving demands of modern education.

Variety of Learning and Teaching Styles. Different learning and teaching styles are supported through flexible furniture that allows educators to easily reconfigure spaces to suit different activities and teaching methods. This adaptability ensures that both individual and group learning needs are met, whether through lectures, hands-on projects, or collaborative group work. The outdoor Pathways Plaza is an interdisciplinary hub, fostering informal learning and social interactions among students from different pathways.

Adaptability and Flexibility. Flexibility is a core aspect of the project's design. The ability to reconfigure spaces allows the campus to accommodate changes in pathway requirements or even a complete overhaul of pathways. Numerous outlets and overhead drops ensure that the spaces can support various technological needs and future equipment modifications. This adaptability allows the campus to meet the educational needs of all students, regardless of changes in the curriculum or industry standards.

Innovative Aspects. Specialized labs for each pathway support unique activities, providing students with hands-on experiences that are directly relevant to their future careers. The central Pathways Plaza allows students to study the elements of the local ecosystem thanks to the landscape design's focus on climate sensitive, drought-tolerant, and native plant species. Featuring a reused steel beam as a "runnel" that transfers roof drainage to the porous landscape, this area doubles as a teaching tool for students to learn about water conservation, stormwater management, and flow dynamics.

Inclusivity and Community Engagement. The inclusive approach of Learning Support Services is integrated throughout the campus, ensuring that the diverse needs of all learners are met. The design encourages community engagement through themed social events and gatherings in the Pathways Plaza, involving students, parents, staff, business partners, and community members. This engagement not only supports the educational objectives but also strengthens the connection between the school and the broader community.

The flexibility of the Great Hall allows users to rearrange furniture for career days, science fairs, presentations, study, and dining space.

EXPLORATIVE PATHWAYS
FOR INNOVATIVE CAREERS

Steel beams from the demolished portion of the building were re-purposed into a runnel, which directs roof stormwater to the Pathways Plaza where infiltration begins.

Students will grow leafy greens in the Hydroponics Container and distribute to the local community.

The Pathways Plaza has various areas for outdoor learning and integrated stormwater management.

Results

Achievement of Educational Goals and Objectives. The EPIC Campus successfully achieves its educational goals and objectives by creating a versatile, innovative environment that supports a range of advanced learning pathways. Each pathway, from aerospace to natural resources, is equipped with specialized labs and flexible spaces designed to meet the specific needs of their respective industries. The inclusion of advanced technological infrastructure, such as interactive projectors, digital displays, and specialized equipment, supports various teaching methods and enhances the overall learning experience. The central Pathways Plaza further fosters interdisciplinary collaboration and informal learning opportunities.

Achievement of School District Goals. The project advances the district's goals by fostering an innovative, inclusive, and student-centered learning environment. The collaborative planning process, involving diverse stakeholders, helped realize the district's commitment to fostering educational excellence, equity, and future-ready education.

Achievement of Community Goals. The EPIC is a hub for community engagement and professional development. The partnership center within the campus provides a dedicated space for industry leaders to interact with students, offering professional work development and real-world experiences. The flexible public gathering spaces, such as the Great Hall and Pathways Plaza, support a wide range of community events and functions, strengthening the bond between the school and the local community. The design further encourages community involvement through themed social events and educational programs..

Unintended Results and Achievements. An unintended yet significant achievement of the project is the enhanced sense of ownership and pride among students, educators, and community members. The collaborative planning process and the resulting state-of-the-art facility have fostered a strong sense of belonging and investment in the school. Additionally, the project has spurred increased interest in STEM and vocational pathways, attracting a diverse group of students and expanding educational opportunities beyond traditional academic tracks.

Value and Financial Stewardship. The project exemplifies good stewardship of financial resources by effectively reusing existing building structures and integrating sustainable practices. The recladding of the existing CMU Block walls with insulation and a corrugated metal skin, along with other cost-effective design choices, maximizes the utility of the existing infrastructure while minimizing costs. Collaboration with the contractor during the planning phase ensured that funds were allocated effectively, addressing potential challenges proactively and delivering high value within the budget constraints.

Sustainability and Wellness Outcomes. The project emphasizes sustainability and wellness through several key initiatives. The use of locally sourced/recycled materials and the incorporation of climate-sensitive native plant species support environmental stewardship. The site's design includes permeable surfaces and innovative stormwater management techniques, contributing to water conservation and quality. The Natural Resources Pathway and the Hydroponics Container promote hands-on learning in sustainability practices, such as stormwater management and farm-to-table programs. Additionally, the emphasis on natural daylighting and flexible outdoor learning spaces enhances the overall wellness and productivity of students and staff, creating a healthy and inspiring educational environment.

The EPIC Campus achieves its educational, district, and community goals while providing excellent financial stewardship and promoting sustainability and wellness. The collaborative planning process, innovative design, and strategic use of resources ensure that the project delivers significant value and positive outcomes for all stakeholders involved.

BEFORE: West Building and parking lot

AFTER: West Building looking west at the addition and Pathways Plaza

BEFORE: West Building entry and East Building beyond

AFTER: West Building new entry and East Building beyond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