

Partnerships for Urban Learning

“Where Students Learn, Create and Excel through
Community Partnerships”

e3 Civic High School

**JAMES D. MACCONNELL
AWARD SUBMITTAL | 2015**

EXECUTIVE SUMMARY

The story of e3 civic high school began with a mission to connect education and community. As a step towards preparing students for the competitive global economy, the San Diego Unified School District developed a focused, long-term plan for student achievement. Vision 2020 is a community based school reform that, among other things, will develop high performing schools as neighborhood learning centers.

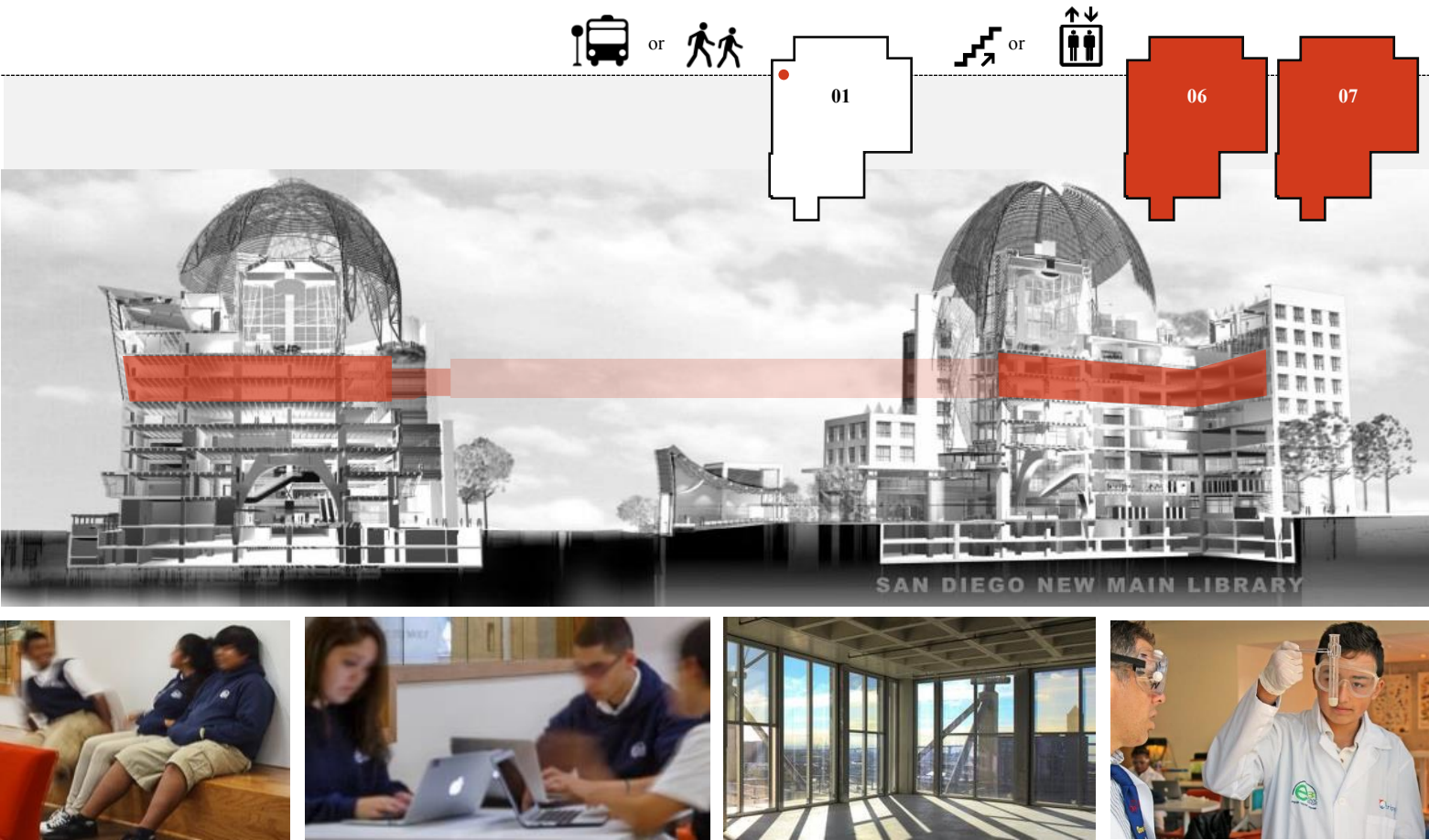
In 2011, more than 50% of high school students in downtown San Diego were commuting to surrounding neighborhoods to attend school. e3 Civic High School responds to this need by providing an innovative educational opportunity in an urban setting. Initially called Downtown Charter High School, the urban school would incorporate place-based learning through strong community partnerships.

Digging deeper for a creative solution to build a new school downtown, collaboration between the City of San Diego,

the San Diego Unified School District, and the San Diego Library Foundation resulted in locating the school in an unconventional site: two upper level floors inside of the San Diego Public Library Downtown. Sharing not just a building, but a passion for curiosity and lifelong literacy, these two functions are a living model for integrating sustainability and influencing the culture of the community. Going beyond co-location, the partnerships support a co-mission as they inspires students to become lifelong digital learners.

The outcome started with the target population: serving the urban student, leading to the development of the pedagogy and eventually influencing the space design. This story takes you through the process of planning, designing and learning in e3 civic high.

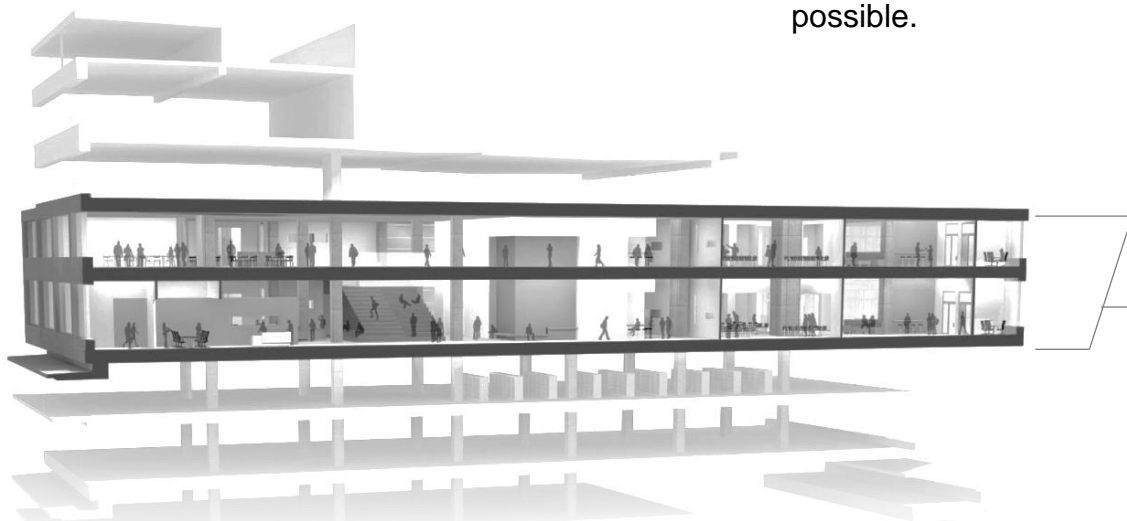
e3 Civic High School
engage • educate • empower



PROJECT DATA

Location	San Diego, CA
Size	64,000 SF
Students	500
Grade Levels	9-12
Date Occupied	August 2013
Budget	\$8.3M
Sustainability	LEED Gold

e3 Civic High School is located on the 6th and 7th floors of the Downtown Public Library in San Diego. Serving 500 students in grades 9-12, the public charter school is a project-based blended learning environment. The existing condition of the site was a cold-shell, meaning the library was under construction during the design phase. With the exception of the core, restrooms and mechanical shafts, the two floors were a blank slate for designing the learning environment within them. Funding from a local bond made e3 Civic High possible.



e3 Civic High //
6th + 7th floor of
the San Diego
Downtown
Public Library



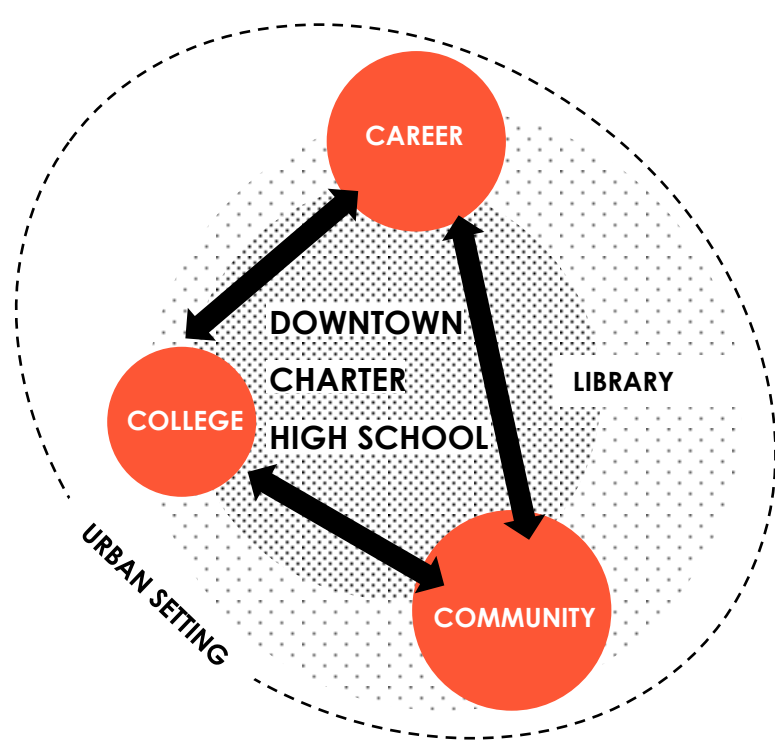
PLANNING AND VISIONING

Engagement of the Urban Community

Once the need was developed by the District for the idea of a neighborhood school in downtown San Diego, the stakeholder engagement process began. With a goal to enhance 21st Century learning opportunities in an urban environment, a series of workshops, curriculum discussions, visual listening, building tours, and qualitative charrettes defined the planning process. The various stakeholders included:

- Innovative Business Leaders
- Parent + Community Representatives
- SD Library Foundation + City of SD
- Bi-cultural Education Leaders
- Students from neighboring schools
- Health + Wellness Experts

The first step in that research was conducting one-on-one interviews with the local business community and educational leaders. The need was presented as illustrated by the district. The team then gathered data from these interviews which centered on the urban student. From that process, 5 tenants of an urban learning environment evolved. The asset was a supportive leadership that encouraged community involvement and outreach.



“The Central Library High School will become a national model because of its innovative approach, stakeholder collaboration, and flexibility to meet student needs.”
-CCSA

URBAN LEARNING TENANTS

Through a series of one on one interviews with community and education leaders, the following 5 tenants of learning emerged. These concepts led to a direction of pedagogy which would centralize around project based blended learning – supporting the concept of student centered education and place based learning in a digital world. These tenants were the lens used for the space design throughout the entire project development. The initial programming phase then began with a series of questions asked to stakeholders to identify program space scenarios.

Cultural & Social Literacy	New Media & Info-Technology	Nutrition & Health / Wellness	Internship & Job Shadowing	Civic Service & Community Engagement
<ul style="list-style-type: none">○ student-led conferences○ urban experience as both an asset and a context for learning	<ul style="list-style-type: none">○ 1:1 blended learning○ 21c library media center○ City TV shared facilities	<ul style="list-style-type: none">○ nutrition lab, urban farming and smart farm internships○ rhythm studio & use of the urban site for physical education	<ul style="list-style-type: none">○ paid internships for 11th + 12th grade students through community partnerships	<ul style="list-style-type: none">○ students engage with civic organizations to serve the community

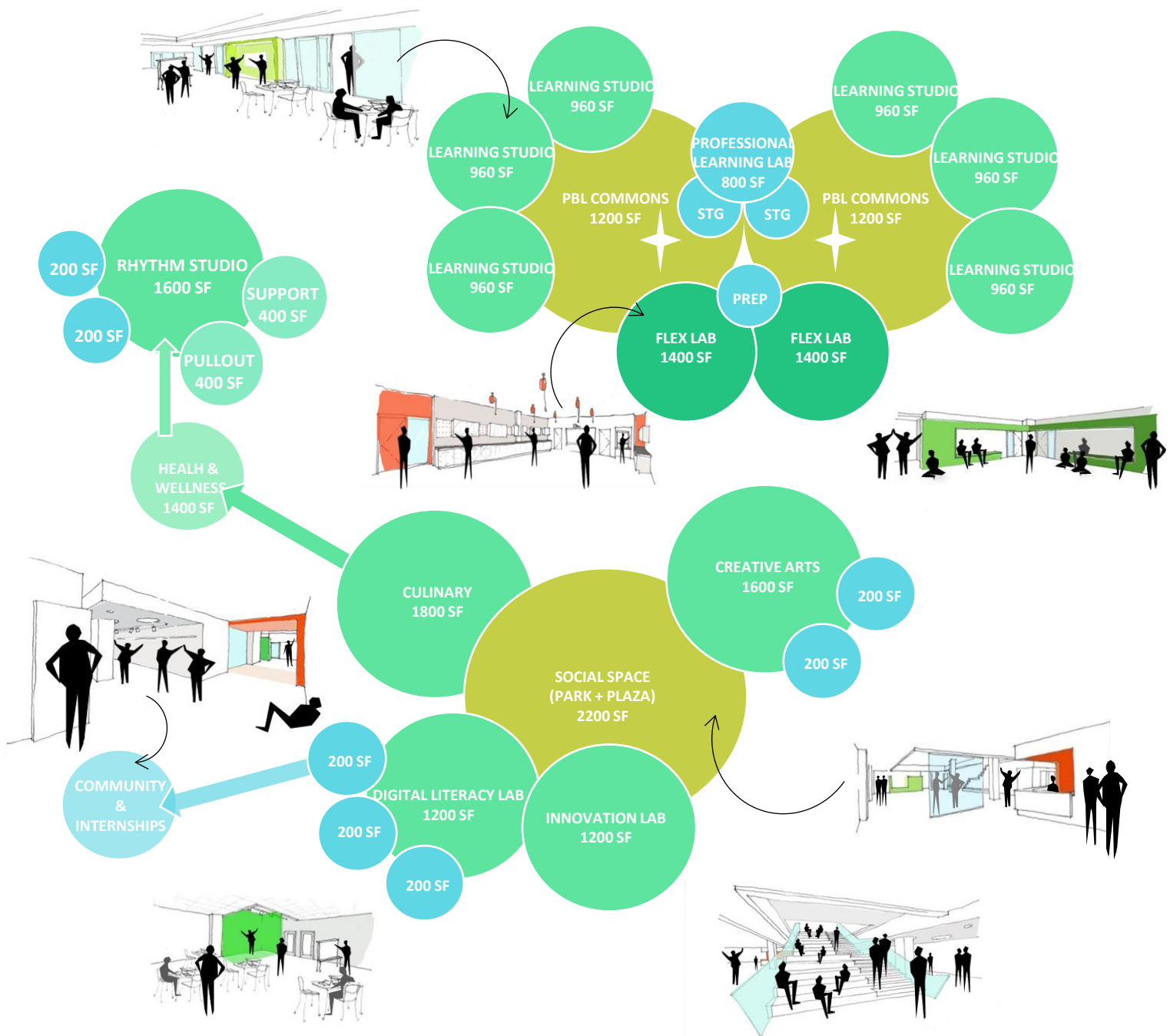
Project Based Blended Learning Environment

“Students are able to explore the community around e3 and, through hands-on learning opportunities, they become civic leaders.”

-e3 Civic High School Teacher

Expanding on the 5 tenants, exercises with the stakeholders led the team to the development of the space program and the project scope description. For every space, in addition to size requirements, the goals, activities, adjacencies and key components were outlined in the Project Scope Description document.

The concept of learning villages was important to create a learning cohort within the campus and give these students the access to various program components such as the culinary lab, the digital literacy lab, the innovation center and the social spaces.



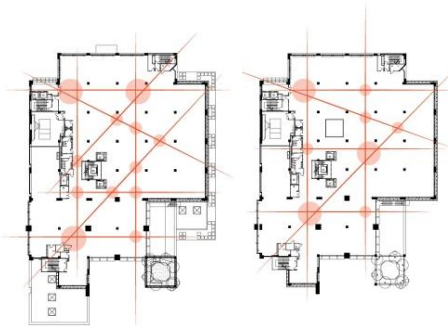
PLANNING + VISIOING

Research Based Design Methods

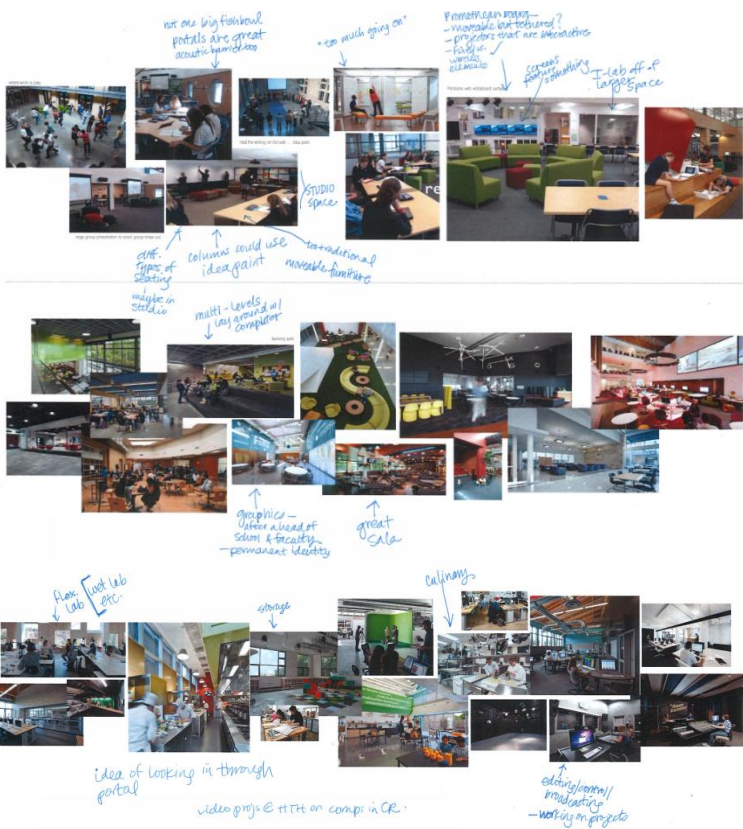
The team believed that the space would create and encourage a culture for lifelong learning. However, the challenge in designing a new school concept is that during that process, the school leadership, faculty and students are not yet in place. This led the planning and design team down a path using research-based methods for decision making. Using students from neighboring schools and teachers throughout the district, e3 is the result of an exploration in planning to define the spatial needs for a project-based blended curriculum. The design team facilitated experience mapping strategies, persona development exercises, and considerations in programming for sociological groupings and spatial characteristics to influence the design.

Layers of meetings were conducted involving a representative from several stakeholder groups: the district, the community, the industry, the curriculum leaders, and the student. Having this team intentionally involved throughout the process created a more authentic environment that supports the need of all users, from student to community.

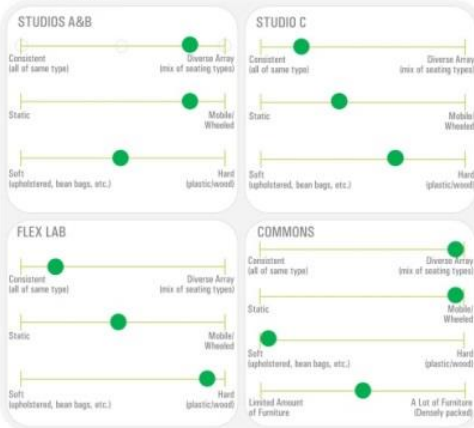
In addition to the visual listening and adjacency exercises, one of the most influential process was the experience & intersection mapping. During tours of the empty 6th and 7th floors, the design team mapped where people traveled, gathered, clustered and paused...these patterns became the framework for the design.



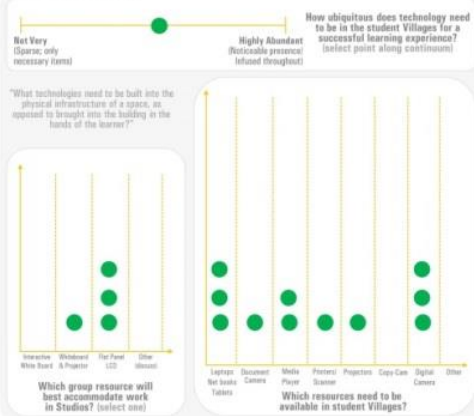
experience + intersection mapping



Furniture



Technology



ENVIRONMENT

Formal / Informal
Simple / Chaotic
Clean / Coordinated

OWNERSHIP

Student / Teacher Owned
Community Involvement
Personalization

ACOUSTICS + LIGHT

Loud / Quiet
Collaborative / Focused
Quiet / Contained

FURNITURE

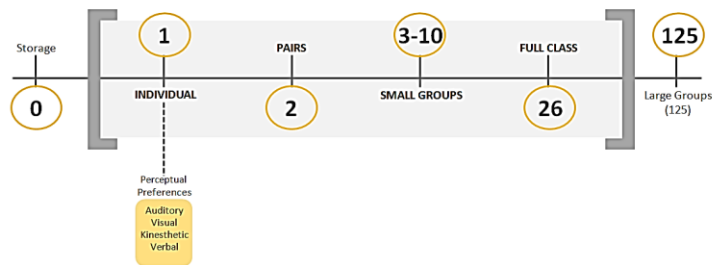
Static / Mobile
Consistent / Diverse Array
Soft / Hard

TECHNOLOGY

Tethered / Untethered
Individual Access / Group
Distance Learning

At the micro-level of learning space design are the decisions that relate to the human scale of the learner. The exploration for the design of e3 Civic High School included a session talking about the activity first and then defining what the spatial characteristic response should look like. To facilitate this, the design team pulled together teachers from the school district and from a local charter, High Tech High, which was used as a model for project based learning. Using the 5 learning tenants, the teachers were asked what particulars were important to support the learning styles.

sociological GROUPINGS



spatial CHARACTERISTICS

General Look & Feel

Formal / Informal
Simple / Chaotic
Clean / Coordinated
Tempo: Slow or Fast Paced

Acoustics & Lighting

Loud / Quiet
Collaborative / Focused
Quiet / Contained
Private / Shared
Task Lighting, Day Light, etc.

Technology

Hi vs. Low Tech
Individual Access or Group
Presentation
Distance Learning

Ownership

Student / Teacher Owned
Community Involvement
Personalization

Flexibility

Over Arching Theme
Are there spaces that need to be more rigid?



visual listening+ space characteristic prototyping

EDUCATIONAL ENVIRONMENT

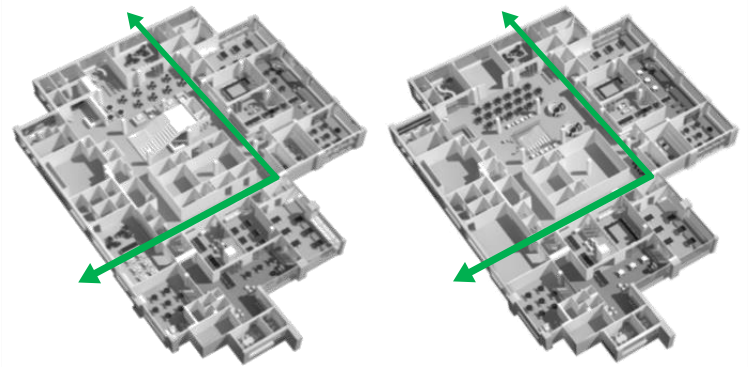
Personalization

At e3 Civic High, learning best occurs in an environment of personalization, authentic curriculum and high standards for all.

Personalization

Education is personalized by supporting the development of meaningful, sustained relationships between faculty, students and the student's family. These relationships allow the educational environment to nurture student's individual strengths and interests and encourage each student to invest in his or her own education. Advisory groups meet throughout the week and throughout the year in small scale settings. Personalization is also supported by a small class size of 26:1 and projects and activities to respond to student interests. During the 11th and 12th grade years, students participate in internships as courses in the fabric of the urban community.

Over 50 industry partners are part of educating the students at e3 through these internships. The nature of the educational environment led to discussion about space responding to the process of learning; with collaborative and social spaces as well as space for focus and reflection. The center circulation element is an interactive wall for students to display in, gather at, share stories on or collaborate. This reveals agency for the students at e3 Civic High School.



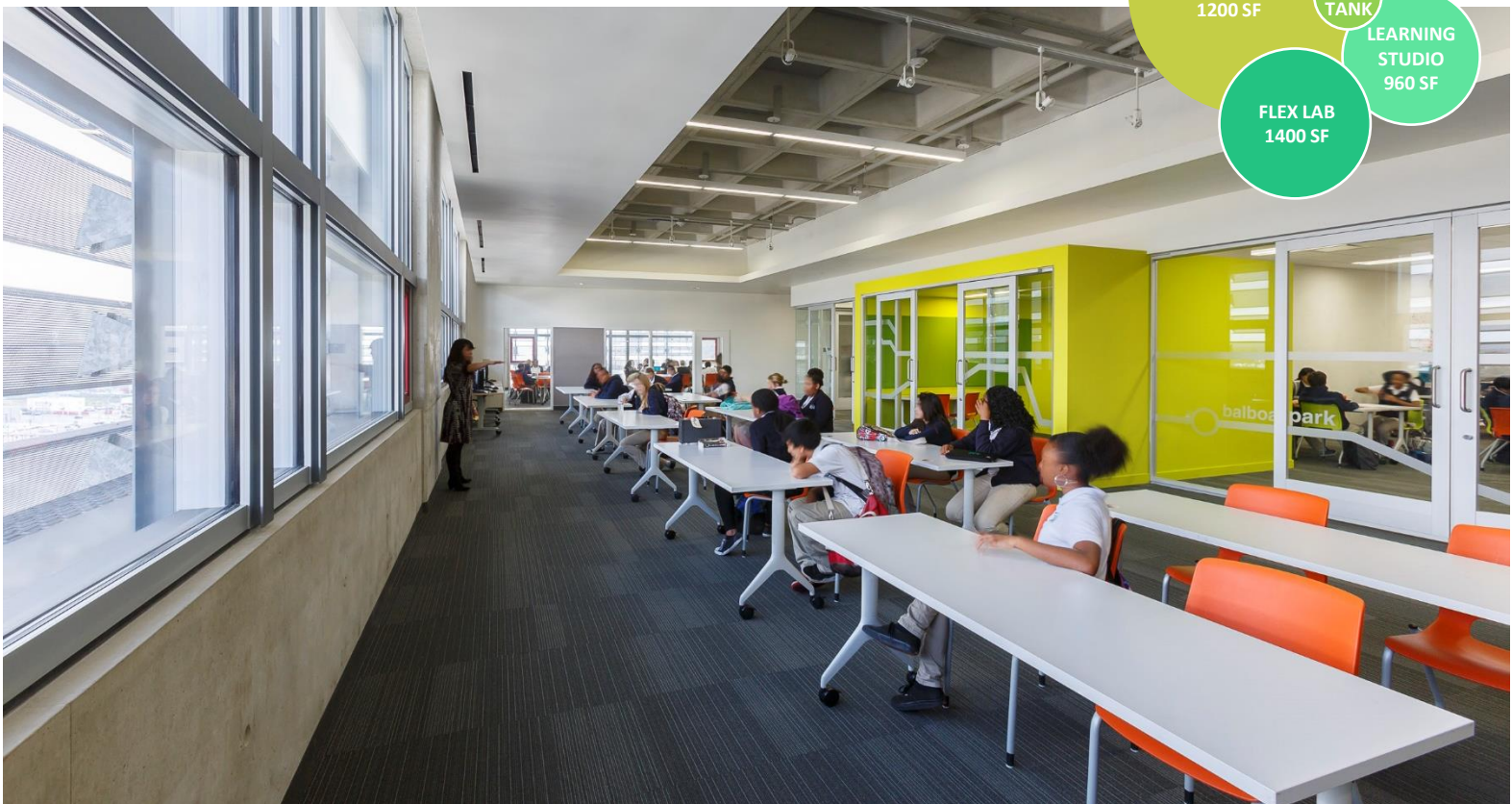
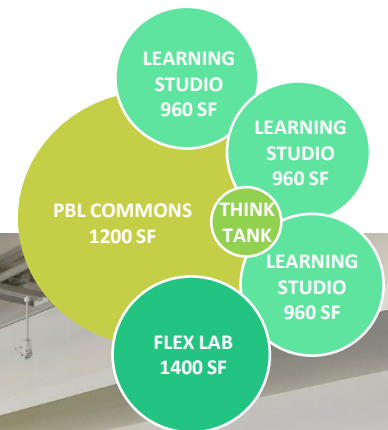
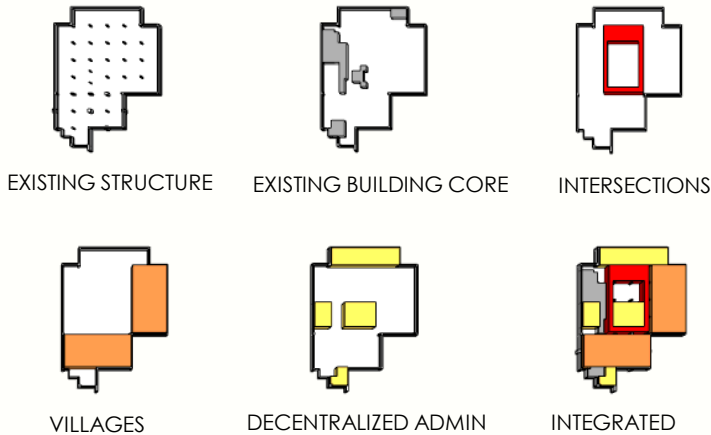
Authentic Curriculum

Students are intellectually challenged on understanding core concepts, creativity, active learning and real world application. Extended class periods, interdisciplinary teaching and connections with community resources support project-based learning and inquiry-driven instruction in all content areas. Students regularly demonstrate their learning through public presentations to industry centered audiences – this happens in the Park and Plaza, and throughout the circulation gallery spaces.

The core learning and project development process occurs within the learning villages, where cohorts of students have a sense of place and identity within the campus. There are four villages, two on each floor. Branded after areas of San Diego (Balboa Park, East Village, Gaslamp District, and Point Loma) each village consists of these similar components:

- Learning Studio
- Quiet Studio
- Flex Lab
- Think Tank
- Shared PBL Commons

The Village has elements of transparency with large sliding doors for flexibility and access for students to the Commons or Lab Spaces. In addition to areas for active engagement, the small ‘think-tank’ space is dedicated for more focused or group work.



EDUCATIONAL ENVIRONMENT

High Standards for All

High Standards for All

e3 Civic High school engages students in a rigorous curriculum that is designed to prepare intellectually curious problem solvers. e3 also supports a shared understanding that learning best occurs when a student experiences physical and psychological wellbeing. To support the health and wellness of students and staff, e3 has relationships with local community partners for physical education, nutrition education, community outreach and personnel and psychological wellness – with a campus climate of respect for cultural, linguistic and personal differences. The concept of learning happens everywhere and with everyone is woven throughout the design with multiple scaled environments and settings to meet the various needs of learners.

The intentions for the educational environment of the curriculum, culture and space design strive to connect with both extremes – students who are academically low achieving and those who are high achieving.

By designing with this lens, the school environment addresses the needs of all types of learners at all levels.

e3 Civic High School uses the city as a classroom. Therefore, the interaction that occurs inside of the walls at e3 is dedicated to project based learning and interdisciplinary concept development. Even the entry ‘Park’ can often be found inhabited by community members ‘borrowing’ the space for meetings and events. This shared partnership gives students a greater understanding for the context of their community...truly a space for co-learning.



"My students feel ownership of the room and have their 'spots' that they go to when they need to focus..."

-e3 Civic High School Teacher



EDUCATIONAL ENVIRONMENT

Student Experience

The physical spaces were intentionally designed to support the learning experience. This attention to empathy is a continuing conversation with the learners in the space through educational space orientations. These ideas are shared with the new users as they enter their educational career at e3, centered on the theme of adaptability:

Flexibility

Flexibility of space is achieved in multiple ways using furniture and technology. The 1:1 blended learning environment has wireless access for students throughout the space with plug-and-play stations of many scales. The furniture is lightweight, mobile and can be organized in various configurations and learning settings with ease. The separation between the studios and the commons is a demountable glass partition, allowing for future flexibility if the design should be changed.

Choice

Students are encouraged to learn how they learn best. These preferences vary for students and therefore, the team designed spaces for different scales of learning. Rather than just one 'set' of classroom furniture, each Studio has a 'landscape' of furniture selections for students: low ottomans, high bar tables, and movable tables for pairs. This variety gives the instructor and the learner the ability to select how they learn best and what the environment should look like to accommodate the learning. The evolution of the spaces is great to see as they reconfigure spaces and swap furniture between villages.

Control

Students have the ability to control the lighting and acoustics at e3 Civic High. There is even a studio referred to the 'Quiet Lab' that is completely acoustically separated from the other learning studios which gives the ability to use this room for extremely quiet or loud activities without disrupting other students in the learning commons.

PHYSICAL ENVIRONMENT

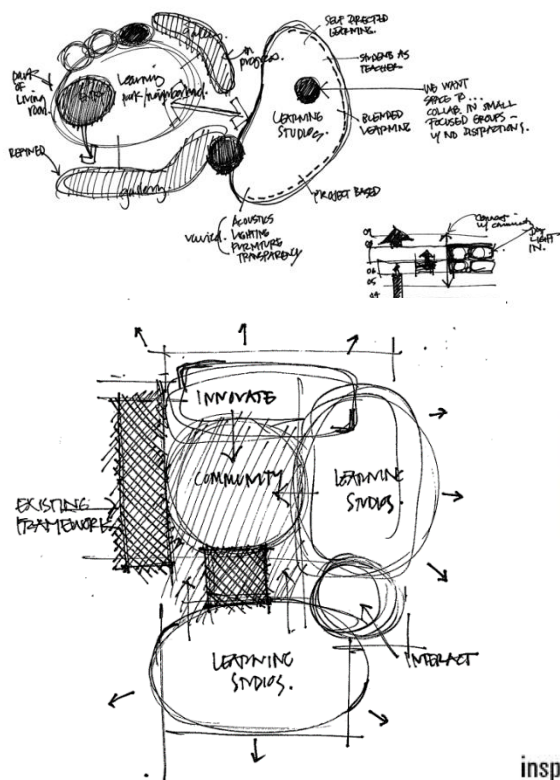
Design Principles

The principles of design for e3 Civic High School centralized around the three ideas of personalization, student connections and flexibility. The combination of these themes, the co-location of the Library and the context of the Urban Setting give e3 the ability to engage, educate and empower life-long learning.

Just as in a real-world setting, innovation can occur at any moment. At e3 the 'in between spaces' mattered just as much as the program components. Based on the experience mapping exercise, the idea that inspiration can occur at intersections of these programs meant that movement mattered. To encourage movement throughout e3, every space has multiple functions to give purpose and attract multiple users.

From the Entry Park the central circulation provides students with more than just a path of travel. The transparent connection between education and community is emphasized with the central steps and gallery space

connecting the two floors. The way in which students actively access information today is very different from the way they were given information in the past, the Central Steps are surrounded with opportunities for display of student work, student pride and student digital activity. Every gathering space has a pull out or quiet area and every learning cluster or village has a small team room in addition to the larger social space. These informal environments support 21st century learning skills with areas for critical thinking, collaboration, and communication.



inspire innovation.

learner-centered spaces
support spaces

PHYSICAL ENVIRONMENT

Life-Long Learning Environment

The space design intentionally looks for ways to create a collision-rich school, where conversations and shared knowledge create a sense of community and allow for mentorship in the new educational learning environment.

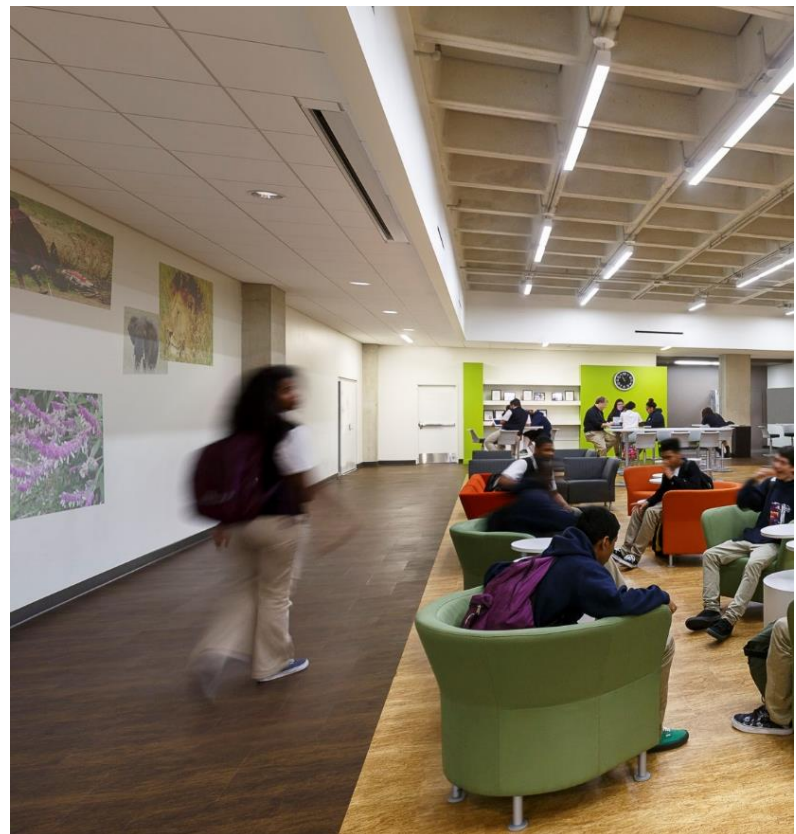
The co-location aspect of the project encourages shared use of the school facility by the surrounding community – industry partners, parents and education leaders. A life-long learning environment is one where others are encouraged by the inspiring elements surrounding them and a sense of curiosity emerges.

“...we constantly move our furniture to cultivate pair-work, independent work, group work, and whole class discussions. We try to create spaces where students can personalize the space, taking advantage of the mobile furniture and the open space we have for group discussion.”

-e3 Civic High Teacher

The entrance to the school is not a lobby, but a shared “Park” with collaborative spaces to engage community, parents and students alike. The Entry Park for the charter school communicates to students and visitors the open and collaborative educational focus of the school. The Entry Park is a symbolic feature of the e3 brand, having this space as the entry also encouraged a decentralized admin – with offices throughout the campus rather than consolidated: the faculty are learners as well.

Creating a student-owned space increases the social connections, conversations and inherently the shared knowledge in the learning environment: displays can be found that are both ‘in-progress’ and ‘presentation’ quality. The transparency and writable wall surfaces create an environment that will celebrate student activity and create connections between villages for students to learn from and be inspired by throughout their day.



PHYSICAL ENVIRONMENT

Design for All Types of Learners

The space of e3 civic high school is an educational incubator and a home base for students who are engaging in internships throughout the community.

The needs of all learners are addressed in many aspects. Students with special needs are fully immersed in the learning environment. With the transparency between the Studios and the Commons or Think Tanks, instructors or student groups can easily transition between spaces and still feel engaged in their larger context of the learning village.

Within the Learning Studios, there is no front 'teaching wall,' but rather multiple presentation surfaces and writable surfaces throughout the room: on the walls, the casework and the glass. Students have opportunities to pair and share or present to the class from around the room.



“A question I often entertain from visitors is, ‘Do they get distracted by the view?’ and I say emphatically, ‘Yes!’ We embrace the distractions for a limited time because their natural curiosity is important.”

-e3 Civic High School Teacher



PHYSICAL ENVIRONMENT

An Exploration in Learning

In this Project-Based Blended Learning Environment, students are digitally connected at a global level and physically connected to their local community. Part of the engagement occurs through exploration of student ideas in the labs outside of the Learning Studios and in flex labs that have been specialized to the current curriculum.

The specialty labs include:

- Biomedical Engineering Studio
- Multi-media studio
- Innovation Lab (now a maker studio)
- Nutrition Lab
- Rhythm Studio

These spaces are designed in a way that allows for mobility as well as meaningful exploration for the students while providing agility in the space. With the exception of the Nutrition Lab and the Innovation Lab which are centrally located allowing access to the building's exhaust shafts, the rest of the labs surround the perimeter of the building with visual connections to downtown San Diego. These labs are spread throughout the campus, some even within the learning villages themselves. With durable resilient flooring finishes, ceiling suspended power access, flexible furniture, and perimeter utilities the Labs accommodate multiple learning modalities.

The circulation spaces around the Labs were intentionally designed as clean white walls, with spot lighting above creating an environment that celebrates student activity and inspires innovation; students are the curators of their environment.



RESULTS OF PROCESS AND PROJECT

Achieving Community Goals and District Vision

This new school provides an environment where students learn, create and excel through local community partnerships and through social relationships. The school creates an engaging and personalized learning experience for each student, both at school level and in the community. The local resources influenced the program; there is no gymnasium space – the students use the park across the street, there is no dedicated library – as they have access to the community library through dedicated entrances and there is no performance space - giving students opportunities to use the East Village Auditorium. The result of the process and project is a neighborhood school that keeps students local and influences the community around them, this was the primary goal for the San Diego Unified School District.

This process is now influencing the way the entire school district programs their schools for next generation learning environments as they embark on updating the District's Educational Vision Guideline.

The project serves the students it was intended to serve and the local community understands the school is for them. There is a sense of belonging when you are inside e3 civic high school, belonging to what is beyond and what is broader than you as a learner, as a parent, or as a community member. The urban student is seen as an asset to downtown San Diego, with over 85% of students walking or using public transportation, the community embraces the learner.

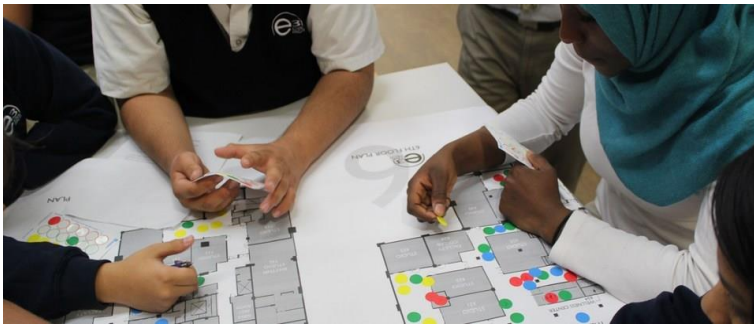
The educational goals are evident in the projects that the students are creating, in the internships they are participating in and the relationships with industry partners that are being established.



The effectiveness of the learning environment for project-based learning in a blended educational environment is something that the design team along with a collaboration of University Research Associates have been studying further since the opening of e3 Civic High School. The purpose was to first relay the intentional design decisions to the various users and then explore the occupant experience within the space. The result of this engagement has led to an Immersion Guide for current and future users, an interactive 'how-to' for the possibilities of the space design.

The research process included observational surveys, walking interviews, student workshops and focus group meetings looking at:

- what ways occupants leverage various design features on behalf of 21c teaching and learning
- To what extent specific design features relate to the occupants' individual and collective identities as learners and urban citizens
- How various design elements foster a constructive relationship between school occupants and the community
- How the process of educational orientation contribute to or hinder the pedagogy-environment fit



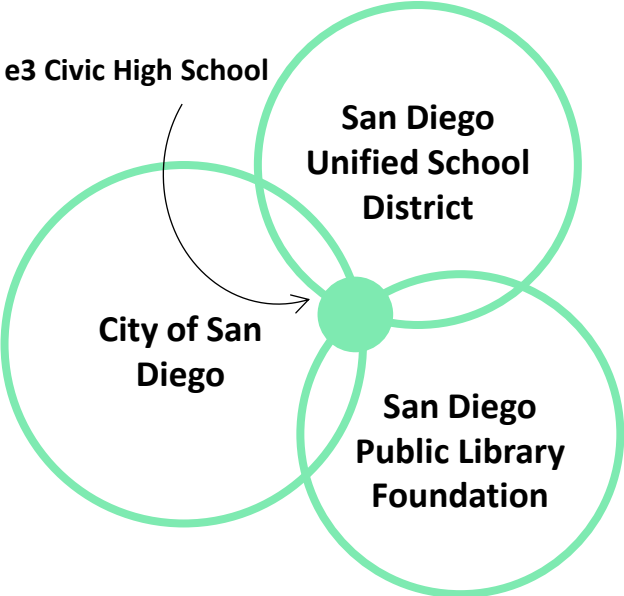
RESULTS OF THE PROCESS AND PROJECT

Revealing Agency

The school is a student-centered, and digitally transparent learning environment where the physical space is directly connected to students learning preferences and curriculum. The design is flexible and allows the user to re-configure spaces for an authentic personalization. Learning Studios, Labs and Circulation spaces have multiple opportunities using flexible furniture, writable wall surfaces, untethered technology instruction and student scaled settings.

The initial results of the Immersion Guide and research workshops has led to revealing agency for both the learner and the instructor at e3 Civic High School. Understanding the planning process, the intentional design decisions and the environment finish selections has allowed the user to begin to transition from using the space to owning the space. The evidence of this is seen throughout the campus; niches are re-branded as ‘genius bars,’ the Innovation Lab has become the ‘Maker Lab,’ the Professional Development Space is become a resource for not only faculty but for students as well.

There is such a strong partnership for the students and the community. The main relationship is with the Library as students use the building for performances, after school work and social events – the first Prom was held on the top floor of the library! This is a true testament to co-location and co-mission for lifelong digital literacy and community relationships in Downtown San Diego.



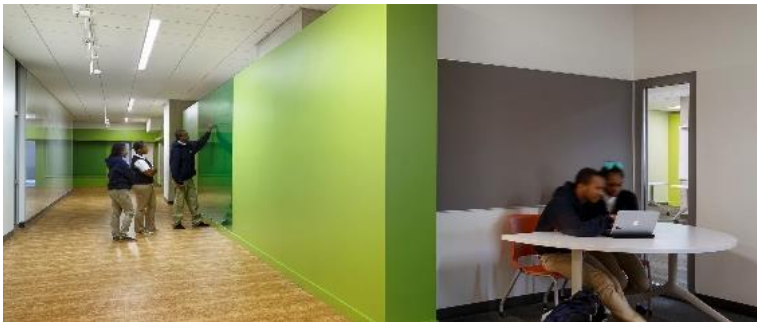
SUSTAINABILITY FACT SHEET

RESULTS OF THE PROCESS AND PROJECT A LEED Gold Learning Environment

The context of the school within an existing LEED Silver building set a high bar for e3 Civic High. The integration of facilities established a sustainable expectation for the school, recently certified as LEED Gold. The design that supports a transparent curriculum also supports a sustainable learning environment with the classrooms along the perimeter of the building to bring in natural daylight and views. Sustainable strategies are illustrated throughout with signage, allowing students to participate in and understand the story. The physical space is transparent, inviting and engaging. A model for urban development, shared resources for play and wellness reduce the school's footprint and operational costs & increase community integration.

Additional Sustainable Features:

- Light Pollution Reduction with levels lower than IESNA standards.
- Water Use Reduction of 30% with low flow fixtures.
- Construction Waste Diversion of 75%
- All furniture was specified with high performance finishes which also includes recycled content and strategies for waste stream diversion of the products in the life cycle analysis.
- Building materials that contain recycled content include acoustical ceiling tile, carpet tile, casework and linoleum flooring.
- Construction and Post Construction IAQ plans meeting LEED standards.
- Exceeds State of California's T-24 Energy code by 25%.
- Over 20% of the building materials used were manufactured and extracted within 500 miles of the project site, helping mitigate environmental impacts from transportation of materials.





Partnerships for Urban Learning

A SCHOOL IN A LIBRARY

A downtown school inserts youth and energy into a lifelong learning community resource