The mission of the Monarch School is to educate students impacted by homelessness and help them develop hope for a future with necessary skills and experiences for personal success. The Launch Pointe engages students in hands-on, project-based learning that ignites passion to explore creative ideas, discover new strengths and visualize future success in college and careers. The Launch Pointe is designed to support a design thinking process where students learn to collaborate, learn to prototype and learn to design and re-design. It supports the four key areas that the Monarch School has identified as critical to their students’ success:
institutions | monarch school
location | San Diego, CA
type | Public
population | 350 students
project | $1.4 million
construction | $1.1 million
center | 6,600sf
community |
The Monarch School is located in the Barrio Logan neighborhood of downtown San Diego. “Currently there are over 23,000 homeless students in San Diego County. Monarch School is dedicated to helping homeless students break the cycle of poverty through education.” – Monarch School website

stakeholders |
• high school students
• college and career exploration center
• career technology educators

what’s in a name |
The original concept suggested by Monarch faculty and staff was the “Launch Pad.” The high school students felt that “pad” sounded too elementary for the type of space they envisioned for themselves. After much brainstorming, all stakeholders agreed upon “Launch Pointe.” It exemplifies the idea that the Monarch School is the launch point for the students' education and careers. It is the support they need for the growth trajectory of their lives.
the value of support

generous project donations came from the following:

- Nat & Flora Bosa
- Walter J. & Betty C. Zable Foundation
- David C. Copley Foundation
- Price Philanthropies
- Padres Family Association
- Major League Baseball

donor signage shown in photo was designed to wrap wall edge in “the lab.” It features a classic industrial “treadplate” rigidized metal juxtaposed with the clean brushed stainless steel. MLB logo has been laser cut to create the graphic.
Even before construction was complete, the Launch Pointe drew in the surrounding community. Now that it’s constructed, the internship program is flourishing. Monarch students experience real-life working environments and develop a sense of self and professionalism. They bring bright new ideas and energy to the companies for which they work.
the vision |

Preparing students for life after Monarch includes understanding skills that will be learned while experiencing the Launch Pointe; innovative exploration, critical thinking, problem solving, hands on learning experiences, and team collaboration. The space will support three “academies” at the high school level, serving multiple classes of 24-36 students at a time:

1. **Information Technology**
   coding, software + hardware, networking

2. **Building + Construction**
   design, drawing, + construction

3. **Social Services**
   project teach, career center
The Launch Pointe is zoned to support design thinking in any number of hands-on, tinkering or digital pathways. Students move between zones as they work through the creative process. From digital and tactile exploration, to decompressing/ regrouping, to building physical models and giving presentations; the creative process is supported in the educational environment. Students gain confidence as they have the opportunity to learn and explore their individual learning preferences.

The Launch Pointe is designed to accommodate future changes in curriculum use. The space is a raw environment with flexible furniture to support an agile and reconfigurable learning space. The diagram to the left shows how collaborate and focus zones become a large gathering space.

**educational environment: the plan**
research + deep dive = “mission control”

Mission Control is an area with computers, resource materials, and faculty. It has developed into the College and Career Exploration center that supports students in finding internship, employment, and higher education opportunities. The space is visible, but sectioned off for more intimate conversations. It also serves as a meeting area for industry partner interviews.
focus + collaborate =
“control panels” and “the pods”

Four Control Panels line the walls and allow students to connect devices to screens and share project ideas with the group. The research can continue in this space as they focus on project goals. The entire wall is a writeable surface to explore ideas.

Flexible furniture forms the Pods. This area is a free-for-all that allows for quick touch-down collaboration throughout the design process.

Furniture in Control Panel and Pod areas is flexible. It can easily be rearranged to house the entire high school for gathering, celebrations, and announcements.
generate ideas + informed decisions = “the platform”

The Platform allows students to brainstorm, hash out ideas on a variety of writing surfaces, and pin-up work on the tack wall. A platform, projection wall, and stage lighting all encourage students to practice presenting ideas in a more formal atmosphere. Additional storage includes multiple bookcases, panel storage, and even shelves tucked under the built-in seating. Suspended ceiling tiles help to isolate this area acoustically. To encourage student ownership and pride, display features that showcase developing and completed projects are student curated.
protoyping cycle: explore and tinker = “sky hooks”

The Sky Hooks feature custom, built-in work tables that allow students space to develop their designs. Slat wall will allow for future tool storage, while mobile carts bring tinkering tools close to where the students are working. Classic “A-frame” table legs support the industrial design of the space and allow for further storage below the table. Students are given the choice of standing/stool height tables or mobile seated-height tables depending on their activity and comfort needs.
The Lab is the workshop of Launch Pointe. Students learn how to use a variety of power tools, design furniture, and even participate in selling those pieces in fundraising events. They learn about shop safety and, most of all, develop confidence in creating with their own hands. Measure twice, cut once.
physical environment
light & daylight
There are (5) punched openings in the exterior walls. They create an intense contrast of light and dark, and additional openings on the exterior walls wasn’t structurally possible. The team explored skylights and solatubes; but both were cost prohibitive. The lighting design in each area was instrumental in the success of the project. Sunshades were added to exterior windows to provide daylight control.

insulation + exposed ceiling
The space previously identified as storage had no roof insulation, compromising the building envelop and energy efficiency. The team weighed many options to apply the insulation on the interior side but were challenged by existing infrastructure, low ceilings and loss of the industrial aesthetic created by the exposed ceiling. The feeling of warmth was a priority for the client, who ultimately opted to add exterior rigid insulation and redo a portion of the roof in order preserve the quality of space.

HVAC system
The HVAC system had to be updated to accommodate the large occupancy of the space. Limited by roof penetration options; the team worked closely together to find the optimal duct route throughout the space.
A refined ceiling grid brings scale to the “sky hooks” and adds a pop of color that contrasts the exposed wood ceiling deck and HVAC ducts. “Construction yellow” is used to highlight exposed columns and the structure framing the exterior windows. Furniture selection further supports the industrial aesthetic of the space.

Acoustical ceiling tiles help insulate the space from adjacent brainstorming activity and offer a level of refinement in comparison to the raw industrial look of the rest of the space. Two wardrobes house professional clothing options for the students’ internship participation.

Glass partitions become impromptu writeable surfaces for students.

LEDs light the student curated display shelves.
Open, mobile student storage units provide easy access to safety garments and materials. Built-in lockable storage provides a safe place for instructors to store strictly supervised tools.

Power is supplied from above on a grid, allowing for increased flexibility and cleanable floors.

Custom plywood storage unit offers safe and convenient access to building materials.

The sturdy butcher block table supports a variety of table-top equipment and can withstand all types of development and construction activities.

Added windows in both The Lab and Sky Hook areas allow for visibility and easy monitoring of both spaces. They promote connection across an interstitial lobby/circulation space.
inspiring leaders

students take control
We had the pleasure of seeing the Launch Pointe in action when bringing a neighboring 5th grade class for a visit April, 2017. Monarch High School students led the tour with ease and confidence. They performed woodshop demonstrations, explained the need for strict safety guidelines, and showed how all of the equipment worked. The 5th grade students were engaged and excited about how to create their own maker space.

physical environment: community + motivation
results of process + project
The Launch Pointe is utilized all day long. It supports the Monarch School’s goals of social growth, emotional support, academic growth, and life skills. The environment supports student-to-student mentorship, a sense of ownership of space. It supports a multitude of learning and teaching styles and is the hub for internship and career building.

Education at Monarch encourages community engagement and the development of global citizens. The Launch Pointe is a space where students can engage with employers, have industry partners lecture or teach a course, and build an identity as a community space.

“While the space was always meant to be adaptable, students have really made it their own. At any one time you may see a math class, improve practice and college counseling happening simultaneously. While we imagined each part of the space would have a designated use, there are 2-3 more uses for each space than expected.”

Rene Barker
Operations Manager, Monarch School