NEW COMPREHENSIVE HIGH SCHOOL #19
KERN HIGH SCHOOL DISTRICT

LEsolutions Planning and Design Awards/A4LE

ACHIEVING SUCCESS THROUGH AN IMMERSIVE DESIGN PROCESS

August 30, 2019
EXECUTIVE SUMMARY

Using an Immersive Design Process to Fast-Track Design and Achieve Successful Outcomes

Identifying Overall Project Goals

At the beginning of project, before we put pencil to paper, we met with the Kern High School District (District) and the community to listen. We needed to understand their goals for the project and identify the project’s priorities regarding the must-have program needs, wants, and nice-to-haves, so that the design of the campus speaks to the needs of the students, the school district, and the community.

We identified the following goals for Kern High School District’s New High School #19:

/  The new high school will open for school year 2022-23
/  The new high school will meet the project budget of $120,000,000
/  School pride:
  • The campus’ quad and campus center will be the heartbeat of the campus.
  • The campus will offer the students a sense of place and pride.
  • The campus will create safe and supportive school environments for the students and staff.
  • The campus will offer programs that better prepare and connect students for work, career training, and/or college.
/  Community identity:
  • The school will offer the students and community a sense of place and pride.
  • The campus is zoned to allow for community use after hours. The campus can be used by the community, yet be kept safe and secure for the students.
  • The campus will support and offer connectivity for parents and the community.
/  NextGen learning instruction and learning environments:
  • Spaces are to be designed to allow for flexibility in educational delivery, size of student groups, collaborative student activities, and increasingly intensive use of technology
  • Flexible interior and exterior spaces will create a variety of flexible and supportive collaboration areas adjacent to the learning environment
  • Spaces are to be designed and constructed to consider current and future collaborative learning environments
  • The educational environment will support multiple learning styles, programs, student populations, and instructional delivery methods

District Mission:
Provide programs and services to allow all students to graduate from high school prepared to succeed in the workplace and at the post-secondary level.
Ensuring Successful Outcomes
We started the project by undergoing an educational specifications verification process before starting design. This allowed our team to vet the District’s priorities, and prioritize elements of the program. We then partnered with the District and our engineering teams to kick off a design approach that truly encouraged and created a collaborative design experience. Understanding that the District’s budget and schedule were top priorities, we recommended an immersive design process that accelerated the project schedule and engaged the District, their user groups, and their community so that they became active participants in design process.

This process allowed the District and the A/E team to see the following benefits:

- Helped to assure the project will be delivered on time and on budget
- Achieved a collaborative design in a shorter period of time than a traditional path
- Everyone was involved in the design process and feedback was implemented immediately
- Cultivated trust and deepened the relationship between the District and A/E team
- The District and all stakeholders understood why every decision was made
- The design process was much quicker, while building consensus

Due to the accelerated process, individuals involved didn’t need to recall decisions made in meetings weeks or months prior

Innovation comes quickly through a series of short feedback loops and compressed meeting schedule

The community, District leadership, administration, teachers, parents, and students became transformed in the way they worked together to solve challenges
Kern High School District’s New Comprehensive High School #19 will be located at the northeast corner of Panama Lane and Cottonwood Road in Bakersfield, California. The high school is being designed for 2,500 students at the core support spaces and 2,100 students for number of teaching spaces on the 77 acres of land.

The estimated total area of the project is approximately 200,000 SF of building space to house a combination of innovative student instruction spaces and services, including administration/counseling, food service and dining for 2,100, performing arts center (including auditorium for 600), gymnasium for 2,500 with locker rooms for physical education and athletic programs, and a media center.

Overall site master planning (77 acres) and intended campus site planning (approximately 60 acres) included student, staff, and visitor parking; bus loading and unloading; physical education fields (basketball/volleyball courts and tennis courts) and athletic fields (including football/soccer/track and seating for 4,000, varsity baseball and softball, and a practice field); and ancillary storage and campus support buildings (subject to confirmation during initial planning phase).
Community
The new 2,100 student high school campus is located on the rural east side of Bakersfield, CA. This campus will help relieve overcrowding at several of the District's surrounding high schools and will be their 19th high school in the district.

District Stakeholders
The District's stakeholders were comprised of five primary groups:

1. Key members from the District’s board of education
2. The District’s executive steering committee
3. A large design committee composed of key staff, community members, teachers, and students
4. Community group presentations
5. Multiple user groups, including top-level staff from several local high school sites

Immersive Design Process
We set aside the traditional approach usually taken in the planning and schematic design phases, and instead held a series of four-day intensive workshops once a month to maintain momentum and achieve our project schedule. This immersive design process reduced the normal project lag that happens on long durations between meetings, and offered a more streamlined approach. When you are designing with all the key people in the room who will be running the school, it makes a big difference and reduces revisions to space layouts. This continuous flow of information, design, feedback, and approvals helped us build consensus and a strong educational campus plan in short order.

First meetings: The primary goal for these first meetings with each group was to listen and understand each group's project challenges and opportunities. We did a deep dive on their educational specifications to vet that document and make any adjustments that would be particular to this site and project constraints.

Second meetings: These meetings offered the design team an opportunity to illustrate how they listened and translated all the comments into design ideas while continuing to seek input.

Third meetings: Offered the team an opportunity to tailor the design to the district's needs by refining details.

Fourth meetings: These meetings enabled the team to finalize the schematic design to get approval from the board. The school district leadership group met three to four times on each trip to guide the process and to provide direction on questions.
Project Challenges
This campus will serve some of the most economically-challenged families in the region and will serve as a beacon of hope in the community, offering several before- and after-school services to keep the students engaged and away from local gangs. The campus plan needed to speak to these concerns and allow for appropriate levels of supervision as well as be places for innovation.

Our team needed to design a process to streamline decision making by the District that allows for leadership decisions to include the flexibility needed to launch NextGen learning opportunities with staff and students.

And, at the same time, we needed to manage a large scope, tight schedule, and limited budget.

Value of the Process
Designing together as a group is a very open process with the District’s meaningful involvement in the design. On many occasions we had meetings in the morning of one day, continued with several user group meetings in the afternoon, incorporated and updated plans during the evening, and presented our revised plans the next morning to the District.

By using this engagement process, we were able to collectively develop a school design that made the community and the development of their students the focus of the school’s design. We worked with principals and teachers to understand how they operate, and challenged different processes, when appropriate, so that we could develop a campus that functionally works better than anything they have experienced before.

“The process was intense and required a lot of meeting coordination but in the end, it was very valuable and gratifying.”

– Scott Cole, Ed.D., Deputy Superintendent of Business
Vision and Goals
The immersive engagement process yielded a wealth of information. To create a NextGen learning environment on this campus we needed to be mindful of existing facility paradigms in the District.

Supporting the Curriculum
We studied various ways to create blended learning environments within each classroom building on campus. A range of traditional (single subject) to fully-blended (various subjects) learning models were presented and discussed at length with teachers, department heads, and District leadership.

Supporting Various Learning and Teaching Styles
The resulting layouts allow for long-term flexibility for the District to transition over time from a more traditional, to a more blended model of teaching. This solution spoke directly to the need to achieve parody in the district, while allowing for future changes to the space to occur with ease.
Adaptable and Flexible Spaces
To ensure that spaces in the new school are flexible to truly allow for learning to happen everywhere, we created a campus plan that allows for various activities for groups of different sizes and noise levels.

Learning spaces are flexible and provide collaboration areas, allowing students to work in various-sized groups where teamwork and accountability lessons are learned. These spaces also provide opportunities for students to leverage technology to bolster their awareness of subject matter and offer various ways to collaborate and share knowledge.

As a result of our immersive design workshops:

/ Classrooms are designed with flexible furniture and strategically-placed marker boards and trackable surfacing that allow the room to adapt quickly and easily to address different teaching modalities.

/ Technology is integrated into the buildings and site to allow for learning to truly happen everywhere. Some of these amenities include short-throw projectors, high-speed wi-fi throughout campus, and digital presentation areas in all learning spaces—including the library, cafeteria, and gymnasium.
Providing a Welcoming, Safe, and Secure Learning Environment

The site and buildings are designed to feel open and inviting, while being secure to keep the students and staff safe. This was accomplished on the site by setting fencing back between buildings, thereby allowing the buildings to be the primary visual element. Large roof overhangs leading to entries and wayfinding signage are strategically located allowing the first-time visitor to navigate the site with ease. Once classes are in session, the campus has a single point of entry where visitor screening occurs prior to campus entry. This campus entry point offers views to each of the sites sub-quads allowing for security and easy wayfinding.
Providing Before- and After-School Activities in a Safe Environment

To help students feel safe and keep them focused on positive activities outside of school, the campus center building serves as a community building before and after school. It is strategically placed on the campus’ main public edge for off-hour use. This building houses the library and the cafeteria, where many students eat breakfast, lunch, and dinner during the week. These spaces are connected by a large sliding glass wall that allow for various activities to occur and are designed to adapt to different uses and needs over the course of the day.

The campus center building serves as a community building and is strategically placed on the campus’ main public edge for off-hour use.
The Big Idea: Context
The team was inspired by the site, and surrounding context, especially at a much greater scale (zooming out). When flying over the area, it’s such a beautiful experience to see the patchwork of different farms in the area. This quilted landscape inspired our thinking about the project and its impact at different scales.

Each farm, on its own, is singular: one grows romaine, another cultivates tomatoes, and yet another produces radishes. By themselves, they provide a level of value, but when combined they can create a meal. We see parallels to education: Each subject provides a level of value (science, engineering, art, and mathematics), but when these disciplines are combined, we can accomplish amazing things like creating the space shuttle.

Physical Attributes
The next step was to study how this quilted landscape can influence the site design, building planning, and architecture.

We were able to pinpoint several needs for the physical environment through the workshop engagement process:

/ Need: The District wanted the buildings on this campus to last 50 years or more and be a low maintenance facility. This helps to stretch limited maintenance and operations budgets.

/ Solution: We designed the buildings to have a concrete masonry shell with flexible non-load bearing partitions on the inside. This solution offers long-term ease of maintenance as the exterior walls never need to be painted, and the interiors of the building can change over time to meet the District’s long-term needs.
The District wanted to have a large central quad and different zones for various activities in that central space for congregation and outdoor learning opportunities. They also wanted us to include a ninth grade sub-quad to provide students with a transitional space of their own.

• **Solution:** Our team created a quad design that is inspired by the quilted landscape idea and offers various activities within a quad that has great supervision for security.

A ninth grade sub-quad provides them with a transitional space of their own.
Need: Flexible learning opportunities are needed for various-sized groups throughout campus and in each classroom building to inspire and motivate students to work together to solve problems.

Solution: Flexibility and collaboration is part of the DNA of this campus plan. We designed spaces to provide opportunities for collaboration in every building and various locations in the quad and sub-quads.

Traditional and non-traditional spaces offer areas throughout the campus where students can collaborate, inspire, and be motivated by each other.
The end result of this dynamic planning and design process is a campus plan that speaks to the needs of the students, the school district, and the community. Born from this collaborative process, with a focus on community access and engagement, this campus establishes the new district standard for high school planning and design.

Our design committee meetings engaged everyone, from district executives to current high school students, and every stakeholder in between. The immersive design process required meeting three to four consecutive days every few weeks, engaging different groups separately at the beginning of the week and collectively at the end of the week.

The discussions started with the educational specification verification process and continued through planning, ending with a final schematic design. Every idea was captured, discussed, and vetted. The most salient ideas were brought to the top, and a feedback loop was used to communicate outcomes.

One idea that affected the design of the school, illustrated above, was a result of feedback from district students. The majority of the students are on free/reduced lunches. They pointed out that they currently do not have enough time to get through long lunch lines to purchase their lunch and then eat their lunch in the allotted lunch period at their schools. The campus plan was modified to house multiple areas to handle large lunch lines in all corners of the campus quad, spreading out the student population and shortening lines.

Once the process was completed, the final schematic campus plan was fully embraced by all parties and the resulting campus design is one that the community will be proud of for generations.