DIXIE CANYON ELEMENTARY SCHOOL
LOS ANGELES UNIFIED SCHOOL DISTRICT

EXECUTIVE SUMMARY

Dixie Canyon Community Charter Elementary School was originally built in 1947 on a 5-acre parcel of land. The campus consists of single story buildings with east-west orientation, portable classroom buildings, hard court play areas and a kindergarten play area. The school serves K through 5 and pre-school, with some of the classrooms housed in portable structures.

The challenge entailed adding more learning spaces to a tight site with a lot of needs. The existing core structures in the campus are 9 permanent single-story wood frame buildings, and 10 portable buildings. Two of those portable buildings are leased from the Department of Housing, on a lease expiring at the end of 2018. 5 of the 10 portable buildings are not DSA certified. The current permanent buildings have adequate size classrooms, but there are several sub-standard size classrooms in the portable structures. Given the age of the campus (almost 70 years) and increasing student enrollment each year, there is an urgent demand for more learning studios, more outdoor learning spaces and upgrades to infrastructure throughout the campus.

The vision was to build a 2-story Academic building that will be seamlessly integrated in the design of the campus. The challenge was to design a flexible building with all the amenities to support the 21st century learning objectives, but at the same time to make it work in the existing context.
SCOPE OF WORK AND BUDGET

Based on the LAUSD Portable Replacement Project Programming and Planning study dated August 2017, the current enrollment is 735 students (750 per the current principal), with enrollment projected to increase to 782 students.

The 2 story Academic building will have 12 new learning studios for grades 1 to 5. In addition to the Kinder Complex, there will be 2 new learning studios near the existing kindergarten play area.

The Proposed budget for the project is $16,660,000.

CONTEXT

Dixie Canyon Community Charter Elementary School is located in the city of Sherman Oaks, north east of the intersection of Ventura Blvd and Dixie Canyon Ave. Surrounded by high density residential to the east and west, commercial and business to the south, and a parochial elementary school to the north, the 5-acre campus is bordered with alleyways on three sides, and Dixie Canyon Avenue to the west.
The existing site has "finger" buildings with north-south solar orientation, with the administration and multi-purpose building anchored to the south. The Finger Buildings are connected through a covered walkway as a north-south circulation spine. The main covered walkway connects all the buildings and defines the outdoor learning areas that are adjacent to the classrooms.
HISTORY AND CONTEXT

Art and painting is a signature of the campus. Both parents and community members spend time on creating art on the walls of the buildings and making the space fun and welcoming for the students.
Our design process began by working closely with LAUSD and the Principal to identify their vision. During our initial working session we discovered the community was very engaged in the school and the parents actively participate in school activities.

The biggest topic that came up multiple times was the lack of shade in the outdoor play areas. The parents and the community wanted more trees on the campus.

Safety and security was a big topic as well, and the team collaborated with them to come up with strategies to create a safe and secure campus.

We did series of dot-exercises to understand their needs and concerns for each type of space.
SCHOOL AND COMMUNITY ENGAGEMENT

Workshop with the schools principal and the maintenance team to identify the best strategies for the new classroom building.
SCHOOL AND COMMUNITY ENGAGEMENT

Community workshop and presentation of the site strategies.
EDUCATIONAL ENVIRONMENT

The educational vision for this school has two key drivers: 1) real life experience drawing from the environment of the world of work and engaging project-based learning 2) more time spent learning outdoors for the brain benefits to improve student engagement. Studies have shown that teachers can facilitate learning uninterrupted for almost twice as long during a subsequent indoor learning activity. The Outdoor Learning Area is located on the north, west and south side of the new 2-story building and has a direct connection to the playgrounds. The Outdoor Learning Area on the west side of the building is directly connected to the art classroom and is intended to create a flexible learning environment for the students.
EDUCATIONAL ENVIRONMENT

ZONE 1
INTERACTIVE LEARNING

ZONE 2
LEARNING GARDEN

ZONE 3
OUTDOOR CLASSROOM

ZONE 4
STORM WATER GARDEN

ZONE 5
ENTRY PLAZA

Defining The Outdoor Learning Areas
The new 2-story Academic Building is a double-sided corridor building with east west orientation. Most of the classrooms are located on the north side of the building to take advantage of the natural light.

There are great views to the mountains facing south with all the learning commons facing south to take advantage of the views. The support spaces are oriented toward the south, with minimal openings. The building will have deep overhangs on the south side to provide shade for the outdoor learning areas and protect the interior spaces from undesirable heat gain.
The design team did this exercise to see what type of connection from the learning studios to the learning commons will be the best option for the school. The learning commons are an extension of the learning studios. The goal was to show how having a visual connection will help the teachers supervise the learning activities occurring in the commons.
EDUCATIONAL ENVIRONMENT

The new design creates flexible learning space along the main circulation corridor of the building. Opening up the geometry of the building creates opportunities for indoor collaboration and flexible learning spaces. The learning studios have transparency with glazing to the flexible learning spaces to ensure the visual connection and to bring natural light to the corridors.
Introducing A New Angle To The Campus

The original school was planned on a Cartesian grid with the main covered walkway connecting all the classroom buildings. The concept introduces a new angle to the campus for better flow and clear lines of sight for supervision. The new academic building is parallel to the main street and creates a very visible facade from the playground.

The new 2 story academic building is located in the north-east corner of the site and defines the edge of the campus. The goal was to maximize the play area and create a safe backdrop for the outdoor activities. The new academic building is visually connected to the existing campus, with a new covered walkway that connects it to the main circulation spine of the campus.
After finalizing the site plan and the initial furnished space plans, the focus was on working with the massing studies. The design team developed four very different concepts. The four concepts were presented to the staff and community.
Digital fabrication tools for making design decisions and communicating design ideas with the client were used.
PHYSICAL ENVIRONMENT - Site model
Outdoor Learning was a key driver and critical part of the design. The existing campus has outdoor learning areas adjacent to the classrooms and are highly designed and cherished.

Adding more green areas to the site was critical for the parents, and the community. Collaborating with our Landscape architect, we studied the types of plant material and trees appropriate for the site.
**Planting Palette**

- Cupaniopsis anacardioides (carrot wood)
- Ficus microcarpa (Indian laurel)
- Fraxinus uhdie (evergreen ash)
- Quercus sp. (oak sp.)
- Afrocarnus falcatus (African fern pine)
- Encelia farinosa (brittlebrush)
- Platensis racemosa (California sycamore)
- Platanus racemosa (California sycamore)
- Chilopsis linearis (desert willow)
- Fraxinus velutina (arizona ash)
- Yarrow
- Achillea cvs
- Eriogonum giganteum (st. catherine's lace)
- Allee tree
- Small feature tree
- Large tree

**PHYSICAL ENVIRONMENT**
PHYSICAL ENVIRONMENT

The density of the new 2-story building will be very different from the existing one-story campus. The massing has horizontal elements to break down the geometry and create a smaller scale. The existing covered walkway will continue from the existing Building 5 and connect to the west side entrance of the new building, reinforcing the visual and physical connection of the campus with the new classroom building.

The design creates a transparent and welcoming educational environment, while being safe and easy to supervise. The main entry to the building is highlighted with the staircase making wayfinding easier for students and parents.
PHYSICAL ENVIRONMENT

The new 2-story Academic Building will have ten general classrooms, one General Science learning studio, one General Art classroom, and support spaces. The vision behind the design of this building was maximizing the natural daylighting of the classrooms and taking advantage of the north light. The connection to the existing campus was critical. The new design emphasizes the connection both in plan and in massing.
OUTCOME - The new 2-story building has horizontal elements to break down the geometry to create a smaller scale
OUTCOME - The new covered walkway connects the two story academic building to the existing buildings.
OUTCOME - The new 2-story academic building meets the challenge of adding more learning space, yet working with the one story context and neighboring context.