Case Study: Paul B. Sogg
Architecture Building
Landscape Studio

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Goals of Firm:
- Great Architecture
- Dedication to Sustainable Architecture
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Paul B. Sogg School of Architecture was completed by Swisher Hall Architects first in 1997 and then expanded again in 2004 by Dekker Perish & Sabitini Architecture. The school contains two floors with an overall gross feet² totaling 76,000 along with a full sized Architecture Studies Library.

SOA’s building design is considered to be a desert-sensitive building with loft-type design studios, multiple computer labs, a modeling shop, and several offices for staff members.

The School of Architecture provides professional education in the fields of Architecture, Landscape Architecture, Interior Architecture and Design, and Urban Regional Planning.
The landscape studio is located on the 2nd floor of the School of Architecture. Since it is the smallest educational profession in the building, the studio space is only composed of three rooms totaling just around 2,405 ft².

The three studios combined have a few types of lighting that illuminate the overall space. Lighting techniques include, commercial fluorescent fixtures, accent fixtures, and natural day-lighting.
Commercial Fluorescent Fixtures

Studio with Fluorescent Fixtures Illuminated

Row of Fluorescent Fixtures
Accent Lighting

Accent Lights in Cove #1

Accent Track Lights

Accent Lights in Cove #2
Day-lighting

Single Vertical Window

Interior Fire Window

Exterior View of Vertical Window
The Fluorescent Lighting that is suspended from the ceiling is incomplete. There are three rows of fluorescent lights that are supposed to run to both ends of the room but since the expansion, do not. This is the main reason why the landscape students particularly choose not to study in this studio because of the lack of even light distribution. The two photos above show the areas of the studio where the lighting is cut off and causes lighting to fade out and create darker corners so students have a poor form of lighting to work with.
Lighting Problems

Some fluorescent fixtures have missing diffusers causing direct lighting to reflect onto the students desks, therefore causing uncomfortable lighting to the human eye. There are multiple fluorescent lights that are missing diffusers, so the room overall has uneven lighting throughout. The appearance of intensified direct lighting creates the distraction of too much lighting within the studio space.

Daylighting is extremely important to involve within a classroom or any educational space because it has been proven to improve learning. There is only one vertical window in the space that allows minimal daylight to shine in along. The window is covered by a tree on the exterior of the building allowing even less daylighting in.
Lighting Problems

The accent track lighting is rarely used within the coves that they are in. The accent lighting within these two spaces are meant to accent students work that is pinned up or to be on display. Instead, students use these cove spaces more as resting spaces than working areas due to the darker lighting created by lack of lighting.
The current type of fluorescent lighting within the studio is not accommodating to the landscape students, so I chose a Pendant Direct/Indirect Parabolic fluorescent lighting to replace the current lights. I also would paint all the interior walls, ceiling and structural beams a light paint color such as white. That way, the parabolic will reflect light directly and indirectly throughout the space evenly to provide sufficient and comfortable lighting for the students to design and render in. The lighter painted surfaces not only will reflect light more but will also use less energy verses darker surfaces of walls.
Since daylighting is very minimal within the landscape studio, the space again is even more uninviting to the students comfort eye level of lighting let alone atmosphere the rooms holds without any type of electrical lighting. I want to bring daylighting into the space by installing light shelves on the exterior wall of the fire windows. In the exterior hallway, a vertical top monitor allows sunlight to illuminate the entire hallway and with the help of the lighting shelves, sunlight will be reflected deeply into the studio allowing natural day-lighting. I would trim the tree so as to still allow landscaping outside the building but allow more sunlight into the room.
The track accent lighting located in both coves in the studio are now being used as lounge areas instead of work surface areas because student rarely use the track lighting for project displays or pin-ups. These areas could work as both work surfaces and display areas once I remove the track lighting and install recessed adjustable lighting. Recessed accent lights appear as downlight but internally permit rotation and elevation of the light beam making each cove a multifunctional space. The type of recessed adjustable lighting will be a CLA Round Gimble Low Voltage Series that has an easy twist lock face, 30 degree gimble, Powder coat finish with a lifetime of 8,000 hours. Students will now be able to enjoy the cove spaces as a lounge or work area with the newest accent lighting.
Conclusion

The current lighting techniques within the landscape studio of the Paul B. Sogg Architecture building are adequate enough for the students to work with during typical class hours. However, with the suggested redesigned lighting techniques of different fluorescent lighting fixtures, daylighting, and recessed accent lighting, students will be able to function more comfortably within their work areas along with the comfort of lighting levels produced!

Um, yah Shavawn...

Travis, I can finally work in here!