Creating a new design-build program is an exceptionally challenging, but highly rewarding process. As one might imagine, there are numerous questions that must be answered before starting the process, and many more that appear as the program takes shape.

The University informed the Design+Build Studio coordinator that its insurance would cover students working on design-build projects for work done on campus. This meant that the program would need to utilize offsite construction for outside clients. This determination impacted the projects that have followed, as well as the regulatory structure necessary to complete the projects.

The Design+Build Studio determined that the first project should be something highly public, as this would assist in generating support for the program; the U.S. Department of Energy’s Solar Decathlon appeared to be an ideal opportunity. The Decathlon requires university-based student teams to design and build solar-powered housing prototypes, which must be transported to a competition site for testing. Off-site construction offers opportunities for students outside the Studio to engage the construction process, as well. By seeing these systems firsthand, students who are not enrolled in the Studio have an unparalleled opportunity to enrich their education with real-world exposure to systems explored in their course materials.

Establishing a new design-build program requires dedication, determination, and a good measure of patience. Navigating the complexities of regulatory processes and university bureaucracy can at times seem to be overwhelming, but a careful understanding of the constraints and opportunities is essential to a successful outcome. Developing reliable funding and project streams are also critical to the long-term viability of any design-build program. While every circumstance is unique, a careful review of the lessons learned by other design-build educators can assist in avoiding making the same mistakes, while capitalizing on the sometimes-unexpected lessons that can be learned. One of the more surprising lessons for the Design+Build Studio’s coordinator was the need to teach students soft skills like constructing clear, concise e-mails to suppliers. Proper phone etiquette, following up on communications to ensure consultants deliver on commitments, and the importance of being early for meetings are a few of the many skills employers expect graduates to know that have become integral parts of the Studio’s teaching. Professionals who have hired graduates from the Studio have commented that these new hires have much better communication and interpersonal skills than their peers, an unexpected but positive development.

The success of UNLV’s Solar Decathlon house led to interest from other parties, most notably the Nevada Division of State Parks, which commissioned the Design+Build Studio to design a box office for the Lake Tahoe Shakespeare Festival.
The lessons from this project were outlined in detail elsewhere, but perhaps the most important lesson was that the Studio was capable of completing a project on its own, without assistance from other units on campus. The success of the box office project ultimately led to finalizing an agreement to assist a nonprofit organization in creating an artist’s retreat center in Springdale, Utah, outside Zion National Park. Its unique location at the junction of the Mojave Desert, the Great Basin Desert, and the Colorado Plateau provides an opportunity to focus in a powerful, inspiring landscape. It is a compelling context for a design that foregrounds these experiences, while also challenging residents’ expectations.

The building site comprises six acres atop a mesa-like geological formation, with panoramic vistas for the retreat residents, providing a unique opportunity for those who inhabit The Mesa to gain deeper insights into the distant landscapes of the American West. Each residential unit will be approximately 400 square feet, with two residential spaces per module. There will be two modules constructed in the first phase of the project, with future phases including artists’ studios and common spaces with opportunities for social interaction.

Each dwelling unit begins as a journey into a narrow canyon, which then opens to the sky, a reference to “The Narrows,” an iconic location in Zion National Park. Passing through the entry, the space directs the visitor to primary views of the adjacent mountains, with secondary views northward to Zion Canyon and other prominent landmarks.

The building was conceived to be an analog for the way in which life on the hilltop tended to be most diverse in the cracks between the rock formations; creativity and biodiversity are connected in the design conception. The corrugated metal walls become the strata between which the project’s life occurs.

Notes
Right - David G. Howryla Design+Build Studio field trip to “The Narrows;” led by Eric Weber.
This piece was adapted from two excerpts: