



University of Southern California Los Angeles, California, US



An old art school gets the newest of tools and a maker space that speeds the creative process.

Facilities Director Ian McCully had done what he could to spruce up the students' workroom at the University of Southern California's Roski School of Art and Design in Los Angeles. And while the newly refinished floors, a fresh coat of paint, and the addition of wired molding were definitely an improvement, McCully knew there were lots of ways to make it better at supporting experimentation in the visual arts, which is one of Roski's goals. There just wasn't the money. Not long after, however, the school added a 3-D minor to the program and received a donation specifically for a "maker space"—a community space where people can build things together using shared tools and materials. Suddenly, McCully and Haven Lin-Kirk, the vice dean of Design at Roski, had the chance and inspiration to create a space that would truly reflect the culture at Roski.

Case Study

Tinkering with Learning

USC is among a growing number of universities eager to embrace the benefits of experiential learning, such as deeper understanding and better retention, and it's easy to understand why. Herman Miller research shows that when students have the supplies and tools they need to tinker, design, build, and rapidly prototype, they tend to be more curious, resilient, and self-directed. These are all essential qualities for future success, especially in an economy where companies that can generate the best ideas the fastest find the most success.

To create a space where students could cultivate the creativity that would help them succeed later in life, Roski enlisted Herman Miller's help. The company and Roski worked together to plan and outfit a highly functional space that would support 3-D printing and rapid prototyping. The space also had to be versatile enough to adapt for use as a studio or traditional classroom since, like many other schools, Roski is pressed for space. Roski requested several design considerations that would help their students and faculty work more effectively.

Lin-Kirk asked for work surfaces that are counter height—the ideal height, she feels, for working on 3-D projects. “When creating things, you’re typically standing and then standing back and reflecting on whatever you’re working on,” she says.

That height would require stools, which was fine with McCully, as long as the stools stacked. “The space isn’t huge and we were worried about people pinballing around,” he says. “With stackable stools, we could create open floor space when we needed it.” Lin-Kirk understood the benefits of stackable stools, but “I was sure we were going to end up with something ugly,” she says. The resulting space—and stools—far exceeded Roski’s expectations. Their maker space is furnished with custom counter-height work surfaces, bar-height work surfaces, and lots of matching storage.

Because of their work-appropriate height and the amount of time that students spend at them, those work surfaces are the most important feature of the room. The bright red Stool_One stools, however, pack the most visual punch. They also remind the students that good design is all about function and beauty.



One of the criteria for the maker space was counter-height work surfaces—the ideal height for working on 3-D projects.

Case Study

“The room was meant to be neutral, except for the stools, which make the room pop,” says McCully. “The rest of the space can be filled up with projects and materials, and that’s what activates the space.”

Tools for Sharing

Every element of the space is designed to encourage students to share ideas—another element that’s essential to an effective maker space. Sharing “helps to avoid the inefficiencies of reinventing the wheel, while leveraging a larger collective brain to (hopefully) accelerate the innovation process,” writes Herman Miller’s Susan Whitmer and GreenWay Partner’s David Narum in their paper “Learning Spaces for Innovation.” Sharing can happen seamlessly in Roski’s maker space. As an example, students might use the chalkboard to brainstorm ideas for a lampshade design and then create it using a 3-D printer. Materials available for student use include cardboard, craft knives, glue guns, popsicle sticks, clay, and markers, alongside their computers and 3-D printers.

The students also have access to a laser cutter and a sewing machine, which is less familiar to students than the latest technology. (“We’re conducting workshops on how to thread it,” Lin-Kirk says). Retractable power cords hang from the ceiling for handheld power tools. Rounding out the offering of tools that enable idea sharing are analog throwbacks, including a corkboard wall and a chalkboard that’s “ancient and striking because everything else is so new and contemporary,” says Trujillo.

“This is an exciting time [in art education] because we’re moving toward these maker spaces that are much more about recombining the traditional handmade processes with processes that involve technology,” says Trujillo.

Overall, the new space has been “transformative,” Lin-Kirk says, breathing new life into an old space and making it easy for students to transition from design to creation and back again. “The room lends itself to the dynamic nimbleness that designers today must have.”



“Maker spaces are much more about recombining the traditional handmade processes with processes that involve technology,” says professor of design Oswald Trujillo.



The space supports two- and three-dimensional work, and helps students move easily between each.

Case Study

Industry
Education

Topics
Innovation
Creativity
Experiential Learning

Applications
Maker Spaces

Project Scope
1,725 sq. ft.

Herman Miller Products
Everywhere™ Tables
Canvas® Office Landscape
Ethospace® System
Tu® Storage
Stool_One (in two heights)

Year Completed
2014

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