

Teaching Sustainability or Teaching Sustainably?

TFISE Interviews Assistant Professor Helen Turner on Integrating Sustainability into Instruction

by Alicia Landon



Old Material... New Material (pictured), an art installation created by Helen Turner, Katie Wilborn and Karsyn Rohach in 2016, comments on the volume of waste produced during traditional design instruction processes.

Helen Turner, Assistant Professor in the School of Interiors, has been hard at work this year on teaching sustainability- **sustainably**. As a faculty representative on the UK President's Sustainability Advisory Council (PSAC) and the UK Faculty Sustainability Council (FSC), Helen is no stranger to the task of working towards a more sustainable campus. She was awarded a Sustainability Challenge Grant in 2014 with Horticulture Faculty, Dr. Krista Jacobsen, to revitalize gardens near graduate and family housing including the Greg Paige apartments. This year she focused her attention on revising modes of instruction. Helen's unique background in fine art, archaeology, interior design and her specialization in materials has informed her fresh look at sustainability within her field and she has taken some bold new steps to practice what she teaches.



Assistant Professor Helen Turner

Helen's interest in materials started when she got LEED certified and gained new perspective while working with Steven Ellis, Associate Professor in the Department of Classics at the University of Cincinnati, who brought her to Pompeii for an archaeological dig. She had the idea to study interior

design in societies before the profession had been formalized, and what she found in Pompeii was thoughtful attention to the placement of buildings and treatments of surfaces.



Triclinium in the House of the Ceii, photographed by Helen Turner

“ They thought about how wind was going to move through the space, they thought about how the sunlight was going to hit their buildings.”

-Helen Turner says of Pompeii’s ancient inhabitants.

In one of the sites she studied, the House of the Ceii (pronounced Chay-EE), she explained how painting surfaces was not just an aesthetic choice but that the materials reacted to the environment to create functionality by using solar energy. She describes a space, called a triclinium, where the Pompeians would host dinner parties long into the evening. The top of the walls were painted white to reflect the setting sun later into the evening. The lower walls were painted black to absorb the mid-day sun and then radiate that heat as the outside temperatures cooled.

With the invention of mechanical HVAC systems, Helen points out that modern designers have more choices than the ancient Pompeians. They don’t need to be as mindful about the same environmental concerns but the value of thoughtful design in the modern day includes a reduction in energy costs for a building’s inhabitants and benefits to society at large by reducing CO2 emissions.

In the classroom, Helen uses her experience to teach UK Interiors students about materials and their relation to sustainability, safety and wellness factors, performance attributes, and user requirements. While materials clearly play a vital role in design, she acknowledges the prevalent misconception that selection of materials is merely a matter of how something is going to look. One key point she imparts to her students: “It’s not just about aesthetics, it’s about creating a space that’s functional.”

With functionality already in mind, examining sustainability in instruction was a natural direction for Helen to focus her energy. In the spring of 2016, as students from her ID 422 senior studio were preparing to clean out their desks, she started looking at how waste was produced in the course of regular instruction activities.

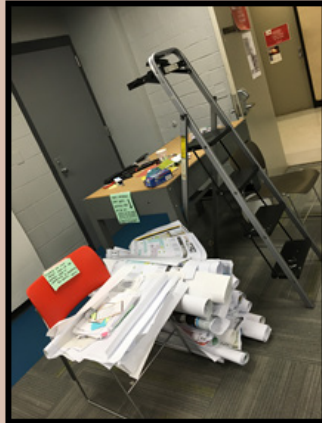
“It’s a long standing tradition to create boards.” She describes the deep-rooted academic convention where design students create displays of their work on large sheets of paper, up to 5 square feet in size, printed at least twice a year. While historically, students may have kept these displays to show future employers, now students throw them out and make digital files available to prospective employers online. Along with the boards, common student waste includes study models, ideation sketches, left over wall coverings and fabric swatches, foam core, handouts, 10-page syllabi, rulers, markers- all of which end up in the garbage.

The unnecessary amount of material waste was really irking Helen. “I want to think about ways to teach sustainably rather than just teaching sustainability.”

While Helen had her sights set on a new goal, she knew she couldn't be successful without the support of the administration. She credits her Director, Associate Professor, Dr. Patrick Lee Lucas, for being forward thinking and energizing in the areas of curriculum and sustainability improvements.

"I asked Patrick if he minded if I took a look at this within our program knowing that the results might not be pretty...Patrick was really supportive."

With her director's encouragement, Helen told her senior studio students to collect anything they were going to get rid of at the end of the semester and then she enlisted students Katie Wilborn and Karsyn Rohach to start processing all of the materials. They measured, weighed and inventoried everything and calculated over 100 lbs. of waste from the collection.



Materials for the art installation being collected and sorted



Give-Take-Make station located in room 102 Funkhouser (top) and recycled notebooks used in ID 365 (bottom)



In the fall, Katie and Karsyn started to assemble the materials into an art installation. The completed work was a visual representation of the design process including a student desk, conceptual development and all of the materials involved being sucked into a funnel-like vortex that ultimately terminated in a trash can.

Helen comments, "I wanted it to be in a space everyone would see and as it was going up people would question what it was, but we didn't have the formal opening of the installation until it was all complete."

The installation only stayed up for a week but the intention was to create dialogue among students and faculty about the use of course materials. Helen timed the big reveal to coincide with mid-term board presentations -just when students were going to start cleaning out materials again.

Unlike the design process depicted, this art installation created little waste. When the art was taken down, Katie and Karsyn set to work reusing and recycling everything in the installation. They set up a space for students to donate and source materials and named it the Give-Take-Make station. They also produced notebooks created from pieces of the installation. Helen used the notebooks in her ID 365, Interior Finish Materials class in the

fall. The excess journals along with other non-paper items from the art installation were placed in the Give-Take-Make.

Give-Take-Make demonstrates Helen's interest in addressing both environmental and economic sustainability and she has also pursued these dual objectives through curriculum redesign and the use of electronic resources. She told me she no longer teaches from a textbook, favoring a compilation of journals, articles and other electronic resources; and recently, she was awarded an Alternative Textbook Grant from UK Libraries, which she used to compile open educational resources for her Materials class. In May 2016 she was awarded an eLearning Innovation Initiative (eLii) grant from UK for over \$34,000 to create a digital 'Design Drive,' which would serve as an online bank of design resources for faculty and students alike to use in her department. The advantages of the Design Drive are increased ease of knowledge sharing among the design community across specialization; increased diversity of media including video, audio, images and articles; and, a decrease in the creation of paper waste in the form of hand-outs. In addition, there is an economic component -design students are sure to appreciate saving hundreds of dollars in textbook costs.

Currently, she has three additional faculty members (Christina Birkentall, Lindsey Fay, and Joseph Rey-Barreau) and four graduate students (Brad Fister, Heather Hemmer, Emily Preece, and Olivia Von-Bokel) working on content generation with plans in place to test the content on some courses in the Fall 2017 semester by having her partners integrate the Design Drive into their curricula.

“ In everything they do and the way that we teach them sustainability becomes a natural component,” says Helen.

In talking about sustainability with Helen, her successes all point back to an overarching sensibility of economy, broadly applied. Whether she is examining alternative uses of physical and informational materials, or more efficient use of finances and time, she views each problem as part of a larger system and it's this 'bigger picture' of sustainability she hopes to share.