

## PRACTICE

# Academia and practice can work together

Practical examples of how relationship is beneficial.

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**M**ultidisciplinary collaboration drives innovation. That's why it's important for practice to embrace academia and vice-versa. Benefits are evident on each side of the fence, experts say.

Marvin Malecha, dean of the College of Design and professor of architecture at North Carolina State University in Raleigh, feels it's equally beneficial for students to embrace business, and for business to work with students and faculty.

"Each serves the other," Malecha says. "We need to engage the profession to be partners on research projects and to embrace the spirit of investigation, creative collaboration, and practical business operations."

Malecha adds that for students, the business side of the profession is where they are lacking a solid knowledge base, which is why he designed the freshman course, "Design Thought as Business."

"You cannot be a great designer without a deep sense of business and engagement with clients to stay on time and on budget," Malecha says.

## PRACTICES ENGAGE STUDENTS.



Katherine Peele,  
Managing  
principal and VP,  
LS3P Associates,  
Ltd.

Katherine Peele, managing principal and vice president at **LS3P Associates, Ltd.** (Raleigh, NC), a 200-plus-person architectural, interior architecture, and strategic visioning services firm, says the firm offers multidisciplinary services to a wide variety of clients nationwide, and engages students on a regular basis.

"The ability to bring 'real world' experience and lessons learned to the students (and sometimes, the faculty) is the most important goal," Peele says. "I know from personal experience that when I got out of school, I was not pre-

## THE BENEFIT OF CASE STUDIES

At LS3P Associates, staff works with a team of students over the course of a semester (typically the "professional practice" class) as they investigate the details of one of their built projects.

Students are responsible for covering all aspects of the project, from how it was "won" through all design phases, construction, and close-out/post-occupancy. These case studies reveal the dynamics of the project team and the particular uniqueness of the client (good and bad) with a goal of providing an honest assessment of the successes and failures of the project.

The time demands on the firm are well worth it—the outcome of these case studies really makes the firm go back and examine its design and management process.

pared for the complexities of architectural practice and the realization that there are so many personal skills that are required, above and beyond the ability to design. For instance, communication skills, consensus building, and the ability to work as a team, all play a huge role in the process of design. So, I believe that 'sharing the stories' of how real projects come together can be an eye-opener for students."

So, how does LS3P engage students? They include students in design charrettes and even project interviews. For the most part, they find their clients embrace the idea of student involvement. Sometimes, a lack of experience brings a fresh and unbiased perspective to design or may even spark a new idea for a marketing proposal or interview. They also enjoy having their student interns bring their studio work to the office to present to staff.

"We always learn something new," reports Peele.

Beyond offering employment and internship opportunities, staff at LS3P encourage students to come in and job shadow for a few days and to participate in "a day in the life of" one or more of their staff members.

"It lets them experience different facets of the business (marketing and business development, construction administration, etc.)," Peele says.



David Zeng, Chair  
Professor and  
Chairman for the  
Department of  
Civil Engineering,  
Case Western  
Reserve  
University.

David Zeng, chair professor and chairman for the Department of Civil Engineering at Case Western Reserve University in Cleveland, Ohio, says that there are two primary goals for bridging the gap between academia and business. They are: 1) the results of latest research by professors can be quickly applied in engineering practice, and challenges in engineering practice can be

identified and studied by researchers; and 2) examples of engineering practice can be used in classroom teaching so that students can learn better and be prepared better for the real world.

For instance, Zeng explains that a company recently asked him to find a solution to a challenging engineering problem in the field. He and his students performed some quick research and developed a new method. A solution was found and the company was happy with it. The school even received some support for its research and published a paper on it.

**Pile Dynamics, Inc.** (Cleveland, OH), a firm of about 45, regularly works with the civil engineering students at Case Western University.

Gina Beim, senior consulting engineer, marketing, reveals that several Pile senior engineers have served as advisors in research projects and have frequently offered seminars to CWRU geotechnical engineering students. Recent and current collaborative research projects include monitoring of scour of bridge foundations and finite element analysis of pile driving.

Current co-op Erik Bogen says, "As a co-op with GRL (Pile's sister company) and Pile Dynamics, I have been able to expand my engineering education by learning more about and applying coursework I have taken at CWRU, in particular my soil mechanics and electrical circuits' classes. It is also great that one of the development projects I have been working on has used the new civil engineering structures lab at CWRU." ■■