



Steve Sauer (left) of Lake Orion, Jessica Slomka of Rochester and Ben Gregory of Southfield show off the model of the solar house they and fellow Lawrence Tech students are building.

Go green

LTU students navigate twists, turns in building a solar house

BY PAT MURPHY
STAFF WRITER

Phillip Plowright doesn't mind when things go wrong for students he's advising as they design and build an energy efficient house at Lawrence Technological University.

Things go wrong in the real world, reasons Plowright, an assistant professor in the

College of Architecture and Design. Thus "wake up calls," as he refers to them, should be part of any real learning experience, he said.

Students should learn to adapt.

Plowright is the faculty advisor for LTU team taking part in the National Solar Decathlon Competition, sponsored by the U.S. Department

of Energy.

Since January 2006, LTU and 19 other schools — including MIT, Carnegie Mellon and universities from Canada, Spain and Germany — have been working on a modular, energy efficient house.

Not just any energy efficient house. One that can collect and store enough solar energy

to provide heating and/or air conditioning, run appliances and operate computers needed for a home business.

Any extra power will be used to fuel a light weight vehicle resembling a golf cart.

The collegiate teams were given \$100,000, specifications (a functioning house

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with 500-800 square feet) and a time table — the solar power homes will be assembled on the National Mall in Washington, D.C. in October, where they will be judged and open to the public for tours.

Until this week, much of the work has been devoted to designing the house, ordering materials and making sure everything is ready.

"Students are learning on the fly," said Plowright, "and there

have been numerous wake up calls."

It was a wake up call, for example, when a company in Washington unexpectedly could not deliver the solar panels it had promised months ago.

Not only could the supplier not deliver, said Steven Sauer, a student from Lake Orion. "But the person we were dealing with was no longer with the company," he said.

Furthermore, officials made it clear they were no longer willing to support the project, Sauer said, and the company made no effort to make amends.

As wake up calls go, the unreliable supplier was easily remedied. "We found a better supplier," Sauer said, who could deliver the panels on time.

But other wake up calls might not be as readily apparent, said Plowright.

"Changing something by an inch now, could have unintended consequences" that will hurt much later, he said.

"But this (LTU) isn't a trade school," Plowright said. Students are expected to think, he said, and solve problems.

Larry Bukowski, a student from Sterling Heights majoring in construction management, uses the term "curve ball," instead of wake up calls. "I've seen so many curve balls," he quipped, "I don't remember what a fast ball looks like."

Students can expect more curve balls this week as work on the house enters the construction phase. Modular walls and other component of the house are expected to arrive on campus beginning Monday, and the LTU Solar Decathlon team can expect to make some adjustments as their house takes shape.

Over the next months, students — with help from the Michigan Regional Council of Carpenters and Millwrights — will put their house together on campus. Then they will tear it down again for transporting to the nation's capital, where it will be re-assembled and opened to the judges and public.

LTU faces some pretty tough competition, said Karen Jackson, a West Bloomfield resident pursuing a master's degree in technical and professional communications.

Some of the other teams have competed in previous solar decathlons, she said, "and experience helps." The team from the University of Colorado, for example, has competed in both of the previous solar decathlons — and won both times.

But competition is what it's all about, said John Horst, spokesperson for the Department of Energy. "Students can expect to be challenged," he said, "otherwise stay home."