THINKING OUTSIDE THE BOX

3D Printing Enhances Tongji University Students' Architectural Creativity

"The Objet30 Pro 3D Printer allows students to express their creativity in a real physical model. Its user-friendliness and personalized workflow make teaching and learning easier and more efficient."

— Mr. Chengyu Sun
College of Architecture and Urban Planning (CAUP), Tongji University

Tongji University's new 3D printer enables students to quickly create 3D models of their designs.

The teaching staff at the College of Architecture and Urban Planning (CAUP) at Tongji University believe that creative thinking is just as important as professional skills. Teaching at CAUP prepares students to meet the challenges of modern scientific developments while also accommodating social demands.

In the past, CAUP relied on computer numerical control (CNC) and stereolithography (SLA) prototyping technologies. However the faculty felt these technologies' shortcomings seriously limited students' creativity.

Recognizing that being able to fully visualize design ideas was crucial to meeting CAUP's goal, the college sought a 3D printing solution that it could install onsite for easy and cost-effective student use. The intent was to enable students to maximize their creativity by modeling whatever they could conceive. The CAUP selected the Objet30 Pro™ 3D Printer because it fit all of its requirements.

Ease of use makes the teaching process more effective

The Objet30 Pro 3D printer enables students to build their 3D designs quickly and with a very high degree of accuracy. The students and teaching staff are pleased with its fine level of detail and smooth surfaces. The system is easy to use, enabling students with no prior 3D printing experience to safely and efficiently produce their designs with no need for complicated post-processing. The Objet 3D printer has opened the way to enhanced educational and research possibilities for the department's students as well as providing opportunities to share information and technology with other departments.

"The Objet30 Pro 3D Printer allows students to express their creativity in a real physical model," said Chengyu Sun, College of Architecture and Urban Planning

At a Glance

Challenges
- Stimulate students to think more creatively
- Provide more practical, hands-on experience
- Prepare students to meet the challenges of modern scientific development

Solution
- Objet30 Pro 3D Printer

Results
- Enhances students' educational experience
- Enables students to create accurate models of building designs with curved shapes and highly detailed parts
- Empowers students to maximize their creativity to deliver more diversified designs
- Enables enhanced functional testing and assembly of parts in application practice projects
- Saves teaching costs and increases efficiency

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(CAUP), Tongji University. “Its user-friendliness and personalized workflow make teaching and learning easier and more efficient,” he added.

Working professionally; thinking creatively

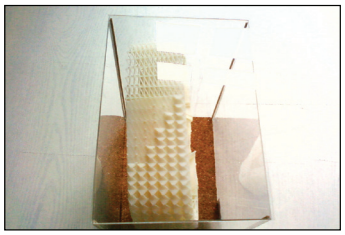
The Objet 3D Printer printer provides students with an opportunity to use an up-to-date, innovative component of modern integrated product design and development during their professional education. This allows them to become acquainted with this technology before entering the workforce and promotes a higher level of professionalism.

The model material used by the Objet printer and its high-resolution, thin-layer printing technology ensure high-quality models. This enables students to visualize their creativity and enhances their enthusiasm for innovation.

“The passion for creation is the essence of architectural education,” says Mr. Sun. “The Objet 3D printer encourages students to try out their ideas with lots of trials and modifications.”

In the past, the university produced CNC and SLA prototypes

The university selected an Objet 30 Pro 3D printer because it is economical and easy to use



3D printing has stimulated the creativity of the students at the university

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