

30 YEARS OF ARCHITECTURAL SUCCESS

AN INTERVIEW WITH URS GAUCHAT

INTERVIEWER:
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URS GAUCHAT IS DEAN OF NEW JERSEY SCHOOL of Architecture (NJSOA), a post he has held since 1991.

Weinstein: NJSOA celebrates its 30th anniversary this year. Can you name some of the school's accomplishments?

Gauchat: It has been an exciting 30 years, and it's interesting to look back and identify some of the highlights. The school's first few years were devoted to establishing a viable program and attracting qualified students and faculty. The last decade has been marked by establishing clear foci and a relentless quest for excellence. Our emphasis on computer-aided design (CAD) and the design of communities has propelled us to national prominence. Our new building, occupied in 1998, was a real milestone. It was a physical manifestation of our progress and established a strong sense of identity. Today, our continued growth is testing the limits of our building and any adjacent space available to us.

At the same time, we have been able to assemble a cadre of superb faculty members who share a passion for architecture. They also share a remarkable unanimity of purpose and a commitment to the success of our students.

NJSOA continues to attract ever better students, among them a significant number of Fulbright scholars. What really distinguishes architecture students is a sense of intellectual adventure and a great deal of enthusiasm. Admissions to NJSOA have jumped, from 426 students in 2000 to 755 students in 2004, and we can be highly selective. Our average

SAT scores have increased 40 points since only last year. Today, I believe we compete against the likes of Carnegie Mellon, Rensselaer Polytechnic, Virginia Polytechnic and Syracuse for students.

The tragedy of September 11 and publicity about the design competition for the Twin Towers site has greatly increased the public's interest in architecture. This emphasis on architecture has translated into a vastly increased applicant pool, and each generation of students has increasing expectations. They motivate us — professors and staff — to remain leaders in our field.

Weinstein: How do these developments impact NJSOA's rank relative to peer institutions?

Gauchat: Architecture schools have no credible national ranking. The Association of Collegiate Schools of Architecture, ACSA, rejects national rankings on the basis that there is insufficient information to make fair comparisons. However, there is an informal understanding of the pecking order among schools. There are approximately 140 schools of architecture in North America. I consider NJSOA to be firmly in the top third.

Weinstein: That's great news for students and enrollment, but what about NJSOA's mission? How has NJSOA been affected by global competition for services as well as goods?

Gauchat: We're at an interesting juncture. The change in the context for professional services is, in large part, due to easy electronic transfer of complex information. As a consequence, certain services will gravitate away from the highest-cost

First World countries to lower-cost Second World countries. The outsourcing and out-shoring that has restructured manufacturing in the U.S. is starting to impact professional activities. A significant portion of professional and technical services will move to countries such as India, China, the Philippines and Singapore. In architecture, present projections are that approximately 20 percent, or about 40,000 jobs, could be exported in the next five years.

Weinstein: How will outsourcing and out-shoring impact the curriculum at NJSOA?

Gauchat: The new business climate will require different skills and attitudes. An emphasis on communication, an understanding of systems, an understanding of risk and an entrepreneurial attitude will distinguish the new curriculum. The curriculum will reflect a world in which geographically dispersed teamwork across time zones is the rule rather than the exception.

One of our most important changes will be to expand computer-aided design to include computer-aided manufacturing (CAM). CAM will focus on producing customized products through flexible manufacturing techniques in limited quantities at a small premium. We're also looking forward to reinventing large-scale planning and community design as a core course. Since community design projects are real, not hypothetical, they expose students to real-life parameters that can inform the design process. We want our students and faculty to think differently. We're going to ask them to invent, to take risks, and to reexamine the present building-delivery processes.

In parallel, we are exploring the possibility of developing an industrial design program. Not only will this program enlarge the professional role of architects, but it would offer NJIT a first-mover advantage in developing licensable intellectual property. We are going to establish a laboratory where our students can create the products they design. The new Fabrication Laboratory, or FAB LAB, will house advanced CAM equipment.

Lastly, I see a vastly expanded role for design. In a world awash with manufacturing capability, the design of products creates a competitive edge. I believe that the potential job loss due to outsourcing will be more than compensated for by the expanded role of design. Architects of the future will have to be more entrepreneurial, create value and realign

interests. With the right education, I think that the future for architects and designers is bright indeed.

Weinstein: Can you expand on your earlier comment that a primary goal of NJIT and NJSOA has been to help the local and state economy?

Gauchat: As I see it, our proposed plan will have an economic impact beyond the significant contributions that we already make through our community-design program. The CAD/CAM initiative will establish a bridge between design professions and New Jersey's waning manufacturing base. An emphasis on quick prototyping and production of components using flexible manufacturing techniques will allow New Jersey's businesses to compete effectively on a national and global scale.



Preparing to take on the future – Dean Urs Gauchat with NJSOA students

The greatest impact will be to equip people with the skills needed to compete in a rapidly changing business climate. The training of design professionals versed in CAD/CAM will be an important ingredient in this endeavor. New Jersey, like the U.S. as a whole, has much to gain from the training of a professional labor force able to compete in a climate that tends to commodify and out-shore professional services. ■

New Jersey School of Architecture on the Web:
<http://architecture.njit.edu>