

Tomorrow's architects learn from past masters in education abroad "studio" programs around the world.

BY NICOLE BRANAN

ICELAND'S WILD AND UNINHABITED INTERIOR, where nature is pristine and infrastructure absent, doesn't appear to be much of a workplace for architects. But the group of students around Orri Gunnarsson, leader of the University of Michigan's Architecture and Urban Planning International Studio in Iceland, shows otherwise. Even though no one lives within a radius of many miles, the team traveled out here to come up with new design ideas for houses. Portable houses, that is, which can be

put up at the beginning of the short summer tourist season and taken down a few weeks later without leaving a trace in the immaculate environment.

The need for such novel cabins is growing as more and more adventurous hikers and backpackers flock to the rugged parts of the island nation, putting "an increasing strain on the highlands and their very delicate nature," Gunnarsson said. As a possible solution, University of Michigan students designed a new type of hiker-friendly, self-sustaining mountain lodge that blends in with nature while at the same time providing modern amenities. Graduate student Patrick Carmody, for example, developed a design for a cabin that is powered by a combination of photovoltaic cells and wind turbines and that can be broken down into a series of small parts that are easy to transport. The University of Michigan program is one of many that take students across the globe to learn about architecture, urban planning, and design approaches in foreign cities and countries and work on solutions tailored to the unique requirements of each place. Such education abroad programs let students come face to face with architectural and urban planning issues in other parts of the world, ranging from urban sprawl in modern European cities to the many opportunities and challenges that result from the booming development in parts of Asia. These trips also open the students' minds to cultures

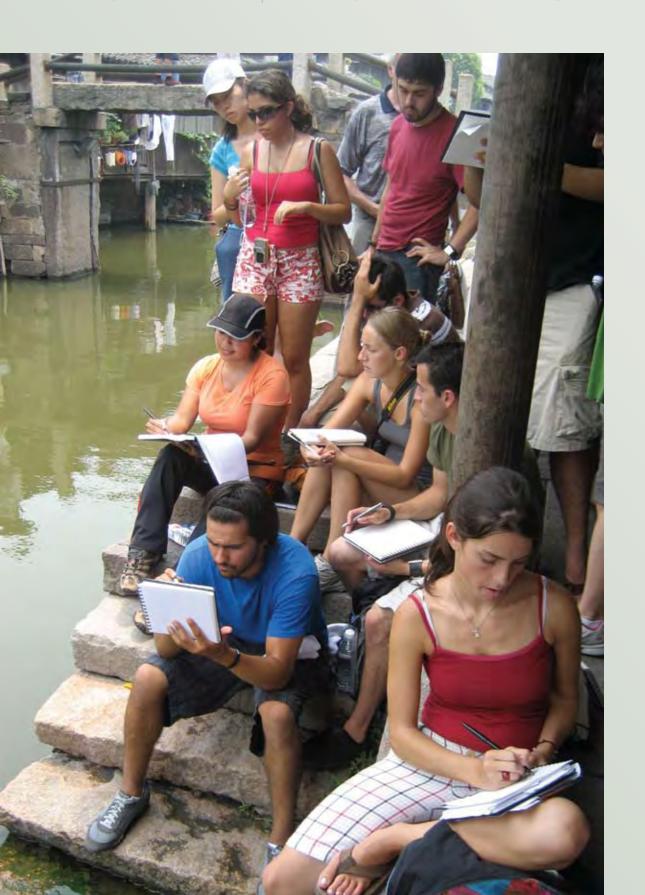
and practices different from those in the United States. That's essential for architecture students, said Tom Buresh, professor, chair of architecture and associate dean for academic affairs at the University of Michigan's Taubman College of Architecture and Urban Planning. "Experiencing cultures as well as the physical apparatus of those cultures matters enormously in an architect's education," he said. "That's basically what architects do; they translate cultural ideas into physical space."

Opposite: Students and faculty participating in the California State Polytechnic University School of Environmental Design's education abroad program in China sketching during a visit to the Wuzhen Watertown in Zhejiang Province, 2007. Above: Students participating in the California State Polytechnic University School of Environmental Design's education abroad program sketching at the Summer Palace in Beijing, China, 2007.

EDITOR'S NOTE:

The study of science is often underrepresented in discussions on education abroad and international exchange as traditionally these areas were established in humanities and social science disciplines. This article is the fifth in an occasional feature series on science in international higher education. Earlier articles have been on marine biology (March/April 2007), archaeology (July/August 2007), engineering (November/December 2007), and global climate change (May/June 2008).

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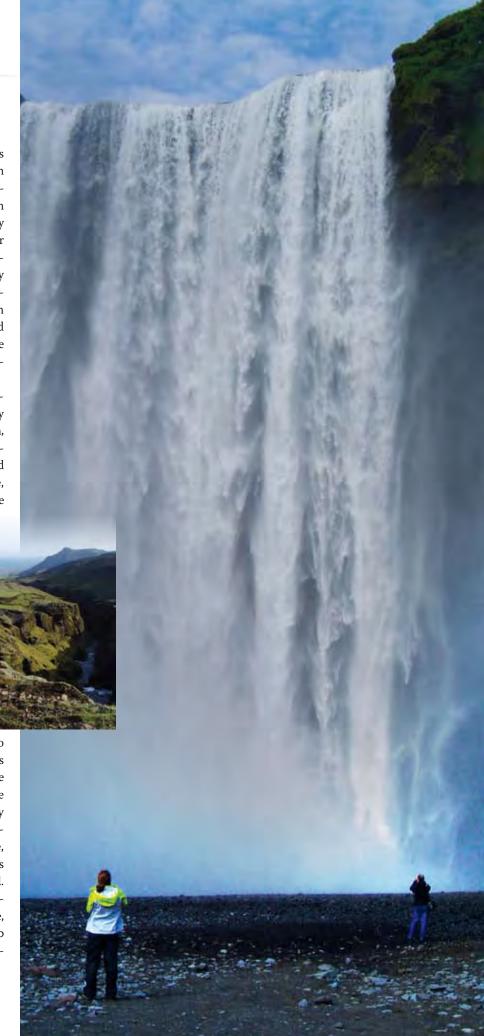
Architectural Masterpieces Mostly Overseas

The trips also allow students to see individual buildings and architecture projects in other countries. That's an important part of their education because "the majority of architecture examples that we talk about in school, especially in history, are overseas," Carmody said. Buresh added that "architects are notorious for wanting to see and experience buildings and cities first-hand because there is nothing quite like it. That's why going abroad has always been part of architects' education and even continuing education." Participating in architecture education abroad programs, often called international studios, is a way for students to see some of the best work that has been produced and that currently is being produced in the world, he added.

The University of Michigan has offered international studios in various parts of the world for many years, and last year Iceland joined the list. Gunnarsson, who had just completed a master's degree in Michigan, sparked the idea for the program. An Iceland native, Gunnarsson had worked at an architecture, engineering, and urban planning firm in his home

country before coming to the United States. That experience gave him unique insight into architecture in both countries, making him a perfect candidate to lead the program. And traveling and spending time abroad had always been a high priority for Gunnarsson. "I think it is of utmost importance to travel and study abroad, especially for people from Iceland, which has such a small population," he said.

"It would never have been an option for me *not* to study abroad. Traveling and spending time abroad has made me who I am." Gunnarsson decided to pursue his graduate studies in the United States to learn more about the country. "Icelanders are under lots of heavy influences from America—from American entertainment, the American way of life, American culture, and literature—and still I felt like I didn't know this giant that was influencing our lives so much," he said. "So, in a way, coming to the U.S. was a way of learning more about myself." After completing his degree, Gunnarsson returned to Iceland and his previous job and now teaches the University of Michigan international studio in Iceland once a year in the summer.



A small country with no more than 300,000 residents, Iceland is an interesting place with respect to building design. Until recently, the country didn't have an architecture school and all Icelandic architects were trained abroad, Gunnarsson said. "That means that there are influences of all kinds of different styles that architects have brought home with them after studying abroad." And Iceland has a unique energy situation. The island sits atop the Mid-Atlantic ridge where the North American and Eurasian plates come together like two pieces of a jigsaw puzzle. Because of this geological oddity, the country is rich in geothermal energy. "It's interesting for architecture and urban design students to see how that energy source is employed," said Jonathan Levine, professor and chair of urban and regional planning at the University of Michigan's Taubman College of Architecture and Urban Planning.

During their five-week trip University of Michigan students spend most of their time in Reykjavík, working on designs in the form of posters and visit with local urban planning, tourism, and travel agencies and other companies. That gives students a new perspective on architecture and allows them to reflect on their own experiences at home, Levine said. The international studio not only exposes the students to another location in a very intimate fashion, but it also lets them understand their own country better "because you don't understand your own country until you get out of it," he said.

Iceland also provides a very different cultural environment from the United States. Number one in the United Nations' Human Development Index, the island nation is fairly wealthy, has zero illiteracy, zero poverty, and a very developed social welfare system. "In addition to that it's probably one of the safest places on earth," Levine said. That's often eye-opening for U.S. students, he added. "They'll say, 'wait a second, you can have a country where one can walk around in the city at day or night and it is a safe place.' But they also see that that depends on certain social norms and social structures."

'International Studios' Prepare Architects for Global Careers

The University of Michigan's international studios also help prepare students for their later careers, Levine said. Particularly in the field of architecture, the range of practices on the global scale is much greater than the range of practices in the United States, he said. "That means that students who go abroad come back with a much broader base of experiences from which to draw."



One example is the field of transportation and land use, which focuses on the options that people have as to how to live, where to live, and how to travel. The U.S. excels at providing choices such as single-family housing and suburban-style living, but it is a lot weaker at offering alternatives. Yet, in much of the rest of the developed world and even parts of the developing world, "alternatives are just second nature," Levine said.

Students participating in the international studio in Iceland get to experience that during a trip to Copenhagen, a city that has become a model of walkability and bike-friendliness. "When students see that they say 'Aha, I see, it doesn't necessarily have to be the way it is at home." Levine thinks that this insight is the mark of a professional as opposed to a technician. "A technician wants to maintain the system, a professional wants to see beyond current practice," he said. "And I think the experience abroad really helps architects and urban planners to do that."

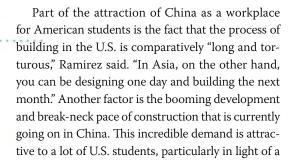
Sometimes architecture education abroad programs even inspire students to return to their host country and work overseas, said Irma Ramirez, associate professor at the California State Polytechnic University Pomona, California, and director of the university's College of Environmental Design China Studio. Ramirez takes her students to China for about eight weeks where they visit modern, traditional, and ancient cities and work on real-life projects with local architecture and design agencies. A couple of participants have gone back to Asia after they graduated, she said. One alumnus, for example, now works at an international firm in Shanghai.

Students participating in the California State Polytechnic University School of Environmental Design's education abroad program in China interacting with Chinese faculty of the North China University of Technology in Beijing, China, 2007.

Oposite page:
Students Jenni
Pilnik and Paolo
Mastrogiacomo, who
participated in the
University of Michigan
Taubman College
of Architecture and
Urban Planning's
International Studio
in Iceland, standing in
front of the Skogafoss
waterfall on Iceland's
southern coast.

Opposite page, inset: Graduate student Patrick Carmody, who participated in the University of Michigan Taubman College of Architecture and Urban Planning's International Studio in Iceland, during a hike in Iceland.

PHOTOS COURTESY OF PATRICK CARMODY.





Lodge where several students participating in the University of Michigan Taubman College of Architecture and Urban Planning's **International Studio** in Iceland stayed after a hike to a natural hot spring. Inset: Orri Gunnarsson, leader of the International Studio in Iceland, walking along the natural hotspring river. The air temperature was just above freezing.

slowing domestic economy, Ramirez said. "The students see so much movement and development in Asia that a lot of them consider either doing work here [in the United States] that has to

do with Asia or going to Asia and working there."

The rise of China has offered unique educational opportunities for architecture students. "China has become this incredible laboratory for a completely new type of development, namely the instant city," Ramirez said. Until recently, architecture in China was focused on developing cities from the perspective of the building rather than from the perspective of the city. That has changed dramatically in China's thriving economy where new buildings pop up like mushrooms across the country. "For the students it is an incredible shock to go there and see these developments," she said.

"The trip really opened my eyes to what's going on in China and how quickly this country is developing," said Salvador Ceja, who participated in the

China studio last year. China's growing prosperity is leading to vast improvements in the country's living standards but Cal Poly Pomona students also get to see the negative repercussions of this trend, most of which are strongly rooted in the fast pace of the development. One example is the shift from individual homes to skyscrapers to house a growing population. Such fundamental changes of housing topology have consequences for the entire fabric of society, Ramirez said. "Family networks are actually really suffering because of this change." Other examples are traditional cities with streets designed for bicycles that are now transformed overnight to accommodate cars. "These roads were usually no more than 10 feet wide and suddenly you need 5-lane streets," Ramirez said. Ceja added that "China is developing very efficiently in a sense but there are also a lot of issues that arise from the fast change, and I think that having experienced that will really help me in my later career."

Participants in Cal Poly Pomona's China studio

work closely with faculty and students at the North China University of Technology. The personal interaction allows them to make a lot of intercultural connections. "I had a wonderful time and I can say that I made friendships that could last a lifetime," Ceja said.

Student teams also get together with agencies in Beijing and help work on specific problems. That gives the program a service-oriented component because "these are not fictitious problems—instead our students work on actual projects for the city," Ramirez said. And students get a taste of teamwork within various disciplines, because architecture, urban design,

regional planning, and landscape architecture students are working together. "The projects that these students do together are meant to be sort of a test run of reality where all of these professions have to work in collaborative teams and have to come up with solutions," Ramirez said. Last year, for example, student teams looked at Hutongs, historic districts that are hundreds of years old but are vanishing rapidly from the city. "As part of the incredible development in China, people are tearing a lot of them down to build modern housing units or even commercial districts in these areas," Ceja said. However, world pressure—intensified by the 2008 Olympic Games—has caused a movement to look for ways to preserve some of the remaining Hutongs. Cal Poly Pomona students came up with different planning

strategies to preserve the historic fabric, Ramirez said. "Their proposals centered around moving to the future while at the same time preserving the past."

The students' time in China not only allows students to hone their skills but it is also an incredible opportunity for self-reflection, Ramirez said. "We come from a very democratic society where we put a lot of value on the individual and the individual's role in society. It's very different in China where the approach is very much from top to bottom rather than from the bottom up." And experiencing a culture so different from their own allows students to think about their lives at home. "I think the most important thing that the students take away is a reevaluation of their own values and their own ways of life," Ramirez said. "They learn about all the things that we in the U.S. take for granted and about our wastefulness, for example with respect to food. "In China they see a culture that does, for example, not waste anything of an animal." And China and Asia in general are very challenging places to visit, Ramirez added. "It's nothing like traveling through Europe, which has much more of a western comfort." For example, if communication problems arise, "you can't just stop and look something up in a dictionary." But Ramirez said that the language barrier has actually been a welcoming challenge. "I think it's often a good thing because the creation of a communication handicap makes our students resort to other more humanistic ways of communication, and it causes them to spend more time with their hosts," she said. "And as a result our hosts teach us by actually taking us into their lives rather than by just telling us about them."

Europe Remains Prominent

Even though the interest in architecture education abroad opportunities in Asia has grown in recent years, the majority of students still gravitate towards Europe, Ramirez said. That's partly because "the most influential architectural work, particularly with respect to the twentieth century, is European," said Richard Dagenhart, associate professor of architecture and adjunct professor of city and regional planning at the Georgia Institute of Technology. "Because of that there is a natural tie of architects to Europe," he added. Dagenhart and his colleagues have been conducting a graduate education abroad summer program in Europe since 1991. Called "Modern Architecture + the Modern City," the program takes graduate students to major cities and countries in Europe that are centered on urban twentieth century architecture, including

Berlin, Paris, and the Netherlands. Students travel in Europe for about two months and spend a few weeks in each place, attending seminars and lectures and visiting and studying important buildings, urban projects, and landscapes. Rather than touring city after city in quick succession, students spend enough time in each place to get acquainted with the local culture and politics, Dagenhart said. "We think that that's the best way to educate young architects because it allows them to learn about the places in relation to the buildings they study." During their trip students also work on independent research projects related to modern or contemporary architecture in Europe, such as building technology and construction, affordable housing, and urban and landscape design of public spaces. Participation in the program is often a good preparatory step for the students' master's projects, Dagenhart said. "The ideas for many of those projects emerge from that summer experience in Europe, from buildings that they have actually seen rather than just read about or seen photographs of." But the program is also valuable for the students' professional careers, Dagenhart said. "They see building projects and design work that is far better than almost anything that was built in the U.S., not in terms of the quality of construction but in terms of buildings that are advancing the art of architecture," he said. "And that is something that stays with them forever."

Even though Europe has always been a major travel destination for architects, it wasn't always education abroad programs that took them there. "When I was in school most people went to Europe after they had



Students
participating in
the California
State Polytechnic
University School
of Environmental
Design's education
abroad program
at Tiger Hill
Gardens, Suzhou,
China, 2007.

"When I see our students talk to the employers and the way they present themselves, I see a maturity that I think comes from the confidence that they have built traveling abroad."

finished graduate school," Dagenhart said. "Nowadays students go while they are in school." Part of the reason is the availability of student loans and financial aid, he added. "It's much easier now to get the money to go." And as connections with respect to architecture practices between the European Union and the United States become stronger, students realize the importance of getting acquainted with architecture practices in Europe. "More and more frequently American firms have offices in Europe and vice versa," Dagenhart said. "That has been a big change just in the last 10 years or so." And as the internationalization of architecture firms progressed, students' attitudes have changed as well. "Today students have much broader visions of what they want to do," Dagenhart said. In addition, "there is a lot more public acknowledgment today of the need to be more globally involved," said Lynn Ewanow, associate professor, associate dean and director of international programs at the College of Architecture, Planning, and Design at Kansas State University.

Students in Kansas State University's architecture, interior architecture, product design, and landscape architecture and planning programs have the opportunity to participate in semester-long education abroad programs in such countries as Italy, Australia, the Czech Republic, Denmark, and Germany. The ability to connect with faculty and students in foreign countries is immensely important for the students, Ewanow said. "By living and interacting with students and design professionals and other people from these countries, students are very much exposed to the complexities of our world and what we share." In addition, "they build a repertoire of experience and knowledge in their profession as well as in the history of their profession."

Students don't have to spend time in an architectural mecca to get acquainted with different design approaches and other cultures. At the International Institute of Architecture (i2a) for example, students from all over the world come together in the medieval village of Vico Morcote, a hamlet of about 300, located in the Italian-speaking part of Southern Switzerland at Lake Lugano. Architects, critics, and artists from all over Europe and the United States come to teach and lecture at the school, which serves as the European branch of the Southern California Institute of Architecture in Los Angeles. i2a is housed in a small villa that used to be a monastery. This cozy setting creates an atmosphere of informality. That allows teachers to give lectures in front of small audiences and makes group discussion possible, said i2a instructor Ludovica

Molo. At the same time "students enjoy the proximity to guests who can be approached in a very immediate way," she added. Interacting with and learning from professionals who come from such a wide range of different backgrounds helps expand the students' horizons, makes them aware of the multiplicity of means of expression and ways of perceiving phenomena, Molo said. During their time in Switzerland, i2a students work on specific projects that are designed to give them an understanding of the character of public space in the contemporary city, Molo said. The academic program this fall, for example, centers around the topic "Sport and the City." In a society where leisure time is important, sport has become part of everyday life for the majority of the population, and sports arenas and stadiums often assume the role of modern landmarks in cities, Molo said.

Because i2a is located in the center of Europe, part of the students' educational experience at the school consists of trips to various sites across the continent, including Berlin, Vienna, Prague, Barcelona, Paris, Madrid, Dublin, and Tuscany. In addition, they participate in various classes, seminars, and workshops that i2a instructors and guest lecturers conduct. Participating in a program where students and faculty from many different cultures come together is an important preparation for students' later careers, Molo said. "The awareness of such a complexity and diversity modifies the way [students] look at things" and also changes their way of designing, she said. Ewanow added that education abroad programs also help students build confidence. Kansas State University holds a design expo every year where firms come to meet and interview students. "When I see our students talk to the employers and the way they present themselves, I see a maturity that I think comes from the confidence that they have built traveling abroad," Ewanow said. Spending time at foreign schools also has a tremendous impact on the students' capacity as young architects and designers, she added. "They develop a much broader view of the sources from which they are going to be inspired." Buresh agreed and added that "architects are always interpreting other people's desires and wishes, and the more experience they have in seeing different forms of that kind of production the more effective they will be."

NICOLE BRANAN is a freelance journalist based in Colorado Springs, Colorado. Her latest article in *IE* was "Not So Glacial Changes" in the May/June 2008 issue.