New Windows on the World

By Christopher Connell

THE RESPONSE WAS STUNNING. Vas Taras was looking for just one professor and one class at a university overseas to collaborate with on a new international business course he was designing for his students at the University of North Carolina at Greensboro in 2010. He sent out a feeler on a listserv of the Academy of International Business. When he checked his e-mail from home that evening, he found "dozens of replies from around the world."

Taras ran with it. That fall, he and a half-dozen other business faculty from universities in Japan, Lithuania, Pakistan, Poland, Slovakia, and Turkey had 460 students working on 125 multinational teams designing mock plans for multinational corporations to expand into new markets. They called it the X-Culture Project.

Today upwards of 2,500 undergraduate and master's students from almost 100 universities in 43 countries on six continents participate each semester in drawing up global business plans. In teams of seven or eight, the students communicate in English using such free, online tools as Google Docs, Dropbox, Facebook Groups, GoToMeeting, Prezi, Skype, and video chat, and the project has attracted sponsorship from real companies such as Mercedes Benz and Home Depot.

"A project like this wouldn't have been possible five years ago," said the Ukrainian-born Taras. "Now it's very easy."

Inexpensive and rapidly improving technology has put such virtual collaborations within reach of students and scholars almost everywhere and opened a new frontier in internationalization. No longer are collaborations limited to universities with high-tech classrooms furnished with pricey cameras, computers, and sound equipment that partners, especially in less developed countries, struggled to match.

Today's connections are driven less by gear and more by the passion to internationalize coupled to inexpensive software.

Still, in many cases, this remains largely the province of individual faculty members determined to bring the world into their courses and classrooms, not across entire institutions and curricula. Like education abroad, only a small number of students currently reap the benefits and get to collaborate from a distance with peers in other parts of the world.

"It's in a development phase for sure," said Hans de Wit, director of the Centre for Higher Education Internationalisation at Università Cattolica del Sacro Cuore in Milan, professor at the Amsterdam University of Applied Sciences, and editor emeritus of the *Journal of Studies in International Education.* "It will take quite some time before it becomes embedded in the curriculum, but there are positive signs. People gradually are becoming aware of the new opportunities that are there."

Taras' X-Culture Project is a triumph of grassroots internationalization, run on what he calls the "pure enthusiasm" of the dozens of professors who have made this

Despite some continuing
technical challenges and
slow adaptation among some faculty,
cheaper and more widespread
technology is opening new opportunities
for internationalization of the curriculum.

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part of their international business classes. The project has a website (www.x-culture.org) but no administrative staff. With corporate help, it has staged conferences in Istanbul and Atlanta that brought together students from top teams. It has also produced a trove of research papers for Taras and colleagues who regularly conduct pre- and post-tests that demonstrate gains in cultural competencies.

Robert Gilbreth, a MBA student at Florida Institute of Technology (FIT), had serious doubts about fitting "a group project that spanned multiple time zones and countless borders" into his already hectic schedule. It got off to "a rocky start," but when the team members from the United States, Mexico, India, and Kazakhstan finally spent an hour together on Google Hangouts, "it totally exceeded my expectations." They are drafting a blueprint for a Florida leadership training company to branch into India. The exercise "is better preparation for having to deal with the real world," said the former Army paratrooper.

Gilbreth's professor, Timothy Muth, said his FIT students generally "have a love/hate relationship with the project, however, they learn firsthand many valuable international business lessons."

Sacred Heart University business professor Kittipong Laosethakul with students in his management information systems class who collaborated on projects with students at Bangkok University in Thailand using an online program called Link. Welch School of Business Dean John Chalykoff looks on.

MOOCs Offer Global Access to Elite Universities, but Few Persist

Massive Open Online Courses (MOOCs) have opened the halls of higher education to learners around the world, with prestigious universities vying to share their educational riches and project their brands into new territory. A precursor was Massachusetts Institute of Technology's decision in 2001 to share its syllabi online. The rush accelerated after more than 100,000 people signed up for a free artificial intelligence class that Stanford University professors offered in 2011.

Today rival companies offer courses taught by professors from Harvard, Princeton, and the University of Michigan as well as the National University of Singapore, McGill, Australian National University, ETH Zurich (Swiss Federal Institute of Technology), and dozens more. Coursera and Udacity are for-profit "start-ups" funded by venture capitalists banking on an eventual payoff from their million-dollar investments. Rival edX is nonprofit, but was started with $60 million from Harvard and MIT.

One route to profitability and sustainability is to charge for extra attention, certificates of completion, or actual credits. Most MOOCs now feature only machine-graded, multiple-choice quizzes, or papers graded not by faculty but fellow students, who may be encouraged to form their own study groups and meet in coffee shops in hometowns from Dallas to Delft to Delhi.

The fly in the MOOC ointment is that while eager learners sign up by the tens of thousands, very few do the work. A 5 percent completion rate is par for these courses. Many who sign up are college-educated adults pursuing personal enrichment or simply following their curiosity, not impoverished, teenage strivers in countries with narrow pathways to higher education.

University of Pennsylvania education researchers who tracked 1 million users who signed up for Penn's 17 Coursera courses in 2012–2013 found only half viewed at least one lecture.

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International business is a natural topic for these long distance collaborations. As FIT's Richard Griffith and Brigitte Armon, and Lori Foster Thompson of North Carolina State University, wrote in their *Internationalizing the Curriculum in Organizational Psychology* textbook, "Studying international business (IB) solely in a classroom is like learning to ride a bicycle on a stationary bike …. You cannot learn to ride a bicycle until you practice riding on the road, struggle with turns, bumps, and the wind and maybe even fall off the bike a few times."

A Global Experience for Business Students in Connecticut and Thailand

That realization was the impetus for the Welch School of Business at Sacred Heart University in Fairfield, Connecticut, to start experimenting with adding a "Global Experience" component to courses. Dean John Chalykoff looked to the professors with international backgrounds to lead the way. Kittipong Laosethakul found a willing partner on a summer 2013 trip to Bangkok University in his native Thailand. On a summer 2013 exploratory trip, he quickly found a partner for a pilot Global Experience project. Within a few weeks students in Laosethakul's management information systems class were collaborating with Thai students in a data management class taught by Raweewan Kaewwit. Eight teams—four U.S. students and up to eight Thai each—were assigned to draw up business entry plans and database systems for web-based, start-up companies selling products ranging from used furniture to comic books. "We allowed them to communicate by e-mail, Facebook, Skype, and Line, which is very popular in Asia," said Laosethakul. "It turned out they (mainly) chose to do texting."

The Thai students "had (programming) skills that we did not possess," said Dustin Trinidad, a Sacred Heart business administration and marketing major. "This assignment really put the term 'globalization' into perspective."

Kaewwit said her students "learned a lot from this project" despite logistical and language challenges. The universities' semesters did not align squarely and "there were times when my students were busy with other class assignments and exams and they did not appear to be responsive to the U.S. teams and vice versa," she said.

Sathita James, 21, a Bangkok University management information systems major, said, "We did not quite

Still, the Penn offerings attracted more than 40,000 people from China and India alone.

China has a half-billion Internet users and MOOCs are so popular that some of the country's biggest entertainment websites such as 163.com, sina.com, and yyets.com provide links to MOOCs alongside celebrity news. Some have organized volunteers to translate English language lectures.

Jingfeng Xia, an associate professor of library and information science at Indiana University-Purdue University Indianapolis who studied this phenomenon, found a Yale course on Fundamentals of Physics was viewed 1.9 million times on 163.com and a Harvard Positive Psychology course attracted nearly 2,200 comments, many of them expressions of gratitude.

"They are dedicated learners. They are working very hard on their MOOCs," said Xia. He quoted one college senior's post: "Open courses open a window for us to sit inside top universities of the world. It's like fresh air that makes people revived."

The reach of MOOCs is growing. In Jordan, Queen Rania Al Abdullah's foundation has launched Edraak.org, an Arab language portal for MOOCs built on the edX platform. "Edraak will open up a world of possibility for intellectually hungry Arab youth," she said in November.

Although questions remain about how to sustain MOOCs, online education already was burgeoning on U.S. campuses thanks to vast improvements in technology and access to high-speed connections, said Kenneth Green, director of the Campus Computing Project.

Green, writing in *Trusteeship*, the Association of Governing Boards' magazine, noted that colleges have long harnessed new technology to reach wider audiences, from extension courses on radio in the 1920s and 1930s to CBS's "Sunrise Semester" on television in the 1950s. But Green cautioned, "MOOCs do not, at present, offer a quick and easy path to new revenues."

Still, with people watching lectures on YouTube and iPhones, MOOCs give universities new opportunities to meet their often expressed missions of service to the world.

A decade after opening shop, the 2,200 courses on MIT's OpenCourseWare website draw 1 million visitors each month. After logging a combined 100 million visits, MIT has set a new goal: one billion by 2021.

Sacred Heart University business professor Kittipong Laosethakul's data management class partners with Bangkok University's professor Raweewan Kaewwit class.

understand information from the U.S. team in several areas." Video chats were difficult "because Thailand still does not have high-speed Internet available in public locations. But when we simply chatted … through Line, we had no problem." He added, "I was excited and surprised by how friendly my American friends were and their effort to learn (the) culture difference… I believe that we learned something beyond class contents (about) American culture, language barriers, and team work."

Both professors plan to partner again, and a Sacred Heart management professor from China is working on a class collaboration with a university in Macao. Chalykoff hopes eventually every Sacred Heart business major will have the opportunity to learn this way.

Global Understanding at East Carolina University

East Carolina University (ECU) in Greenville, North Carolina, boasts an even older initiative that bridges classrooms in dozens of countries to teach primarily freshmen about world cultures. Rosina Chia, a cross-cultural psychologist, Elmer Poe, an expert on technology-based learning, and Biwu Yang, a data network expert, built the Global Understanding classes around real-time video conferencing and Internet Relay Chat. Each course links ECU students and faculty with three international partners, one at a time. The semester is divided in thirds, with students in each country switching partners every five weeks.

ECU offers upwards of 20 Global Understanding classes in disciplines including anthropology, English, hospitality management, and foreign languages. Each class includes whole group discussions and one-on-one chats via the Internet. The students keep journals and the Americans read the front page of English-language newspapers in their partners' country daily.

It isn't for everybody. "This is a different kind of class. Students must be active," said Poe, assistant vice-chancellor for emerging academic initiatives. But for both ECU and the partners, it opens windows on three different parts of the world.

Mariko Eguchi, an English professor at University of Shimane in Japan, has integrated Global Understanding into eight classes over the past four years, with her students' interacting with peers in China, Mexico, Peru, and Russia as well as the United States. "Everyone loves this. Even though their English is minimal, they enjoy meeting their peers so much," she said. "When we started in 2009, we were able to use only one classroom and needed a special Internet connection. Now we can video conference in any classroom."

Fukuda Tomoyuki, 21, a University of Shimane junior, said some classmates struggled to understand the U.S. students' rapid-fire English in live conversations and some had to keep reaching for the dictionary while "chatting" via text messages. Nonetheless, he said the class was the best way to learn about other cultures. "If more people had an opportunity like this class, international stereotypes and conflict will be resolved," he said.

SUNY's COIL Serves as a Guidepost

Many universities look to the State University of New York's Center for Collaborative Online Learning (COIL) for inspiration and models of how to harness technology to make practical, international connections. Through COIL's annual research conference, case studies, workshops, and grant-funded outreach, its impact extends beyond SUNY's 64 campuses.

COIL grew out of an effort that SUNY's Office of International Programs and Office of Learning Environments launched in 2004 to develop more online courses with an international dimension. Two years later, the international

programs office joined with SUNY's Purchase College to launch COIL, with Jon Rubin, then a Purchase film and new media professor, as director.

As is often the case with faculty who try innovative teaching approaches, Rubin had a personal experience that whetted his appetite for international collaborations. Rubin came back from a year teaching film on a Fulbright Scholarship in Belarus and created a Cross-Cultural Video course in 2002 in which his students collaborated with peers in Minsk.

His students had evinced no interest in hearing Rubin talk about his own experiences, but when he showed short clips of Belarus students' home movies, "all of a sudden they had a million questions about this other culture," he recalled. So he constructed the course where the primary assignment was for the students to make a 15-minute film, alternating shots and scenes.

Advancing From
Slow-Speed Modems to Smartphones

Rubin has witnessed "a sea change" in available technology.

"I'll tell you how bad it was the first year we did it. The Internet in Minsk was almost nonexistent. It functioned but everybody had slow speed modems, including the university," he said. "The only way they could send or receive videos was when the university IT center closed for the night at 8 o'clock. They would click 'Send' and over the next six to eight hours, the little modem would chug out two, three, or four student videos and we would receive them the next morning in New York."

"There was no YouTube, no model for this back then. Now everybody does it. They have cell phones and more or less the same technology we do," said Rubin.

The key to making online connections and collaborations work, he believes, is not the technology but the attitude.

"When people ask us, 'What do you need to do this?' they expect me to give them a list of tools, but I say, 'Flexibility and sensitivity. It's not always going to work,'" Rubin said.

"A school gets in their head, 'Oh, we need high end facilities. Let's build a room for $200,000 and hope that our partner in China or India will do similarly.' Then it doesn't work. That's completely backwards because the main thing you're trying to develop is a real partnership. You're talking more about pedagogy, collaboration, (and) sharing. The technology really should be in the background," he said.

Rubin suggests letting students Skype each other rather than making live, full-class videoconferences the focal point. "Time-wise and technology-wise, it's very hard to have good enough quality video that you can have 60 people engaging live, whereas if it's just two people looking at each other across their laptop screen, if they have a connection that's almost certainly going to work," he said.

SUNY Oswego has benefited from a strong push from the top. "We've really embraced COIL as part of the comprehensive internationalization efforts on our campus," said Provost Lorrie Clemo. Faculty receive $3,000 stipends to develop a COIL course and are to get help a quarter of the time from a Technology Services professional.

Oswego offered four COIL courses this spring and hopes to roll out as many as eight in the fall. Classes now have linked online to universities in Lebanon, Russia, Sweden, India, Taiwan, Australia, Costa Rica, and other countries. It already had student exchange agreements with most of them. "We asked them, 'Would you like to expand our partnership to include online learning?' Almost every institution we've talked with has been very, very eager to do this," said Clemo.

Mariko Eguchi

Mariko Eguchi, an English professor at University of Shimane in Japan has partnered with East Carolina University's Global Understanding courses for the past four years. One of her classes is shown here.

Studying Gender Equity in New York and Beirut

Susan Coultrap-McQuin, professor of English and women's studies and director of the Institute for Global Engagement, taught the first COIL class in 2012 on women in the workplace, collaborating online with Lebanese business students who actually were enrolled through Empire State College, SUNY's distance education branch.

Coultrap-McQuin and her counterpart in Beirut, Ina Pfeifer Issa, wove the five-week collaboration as a module into their separate classes. The students discussed the problems women face in workplaces in the United States, and Lebanon then drew up recommendations on how a multinational company could attract and promote women into executive ranks. "The very first time we were still learning how to do it. Each semester we get a little better," said Coultrap-McQuin, who now has taught the class three times, each with fewer technological hiccups. She used the Angel online learning management system. Issa started with Angel but switched to Moodle.

Issa said some of her students "were very curious, very eager" to connect with the Americans and others were more reluctant. Once they broke the ice, they welcomed the back-and-forth and "learned a lot. The most important thing was just the experience of being able to practice their communications skills…and learning about a different culture." Though her students own computers, they deal with slow Internet connections and power outages.

"Here in Lebanon we are still a little behind compared to the resources you have in U.S. and Europe, but we're getting there," said the Norwegian-born Issa. "It's wonderful to see how we can learn from other institutions and connect to other students without having to travel."

Tarek Ghanem, 27, who just completed a business management degree through Empire State classes after taking most classes at the American University of Science and Technology in Beirut, said of the COIL class, "The environment was very friendly and welcoming. I felt as much at ease talking to the Oswego students as talking to my fellow Lebanese students."

"Technology has made the world smaller. It's really good. It's destroyed all the boundaries, actually, between humanity. Now I can know what's happening in Ukraine and Venezuela just by one click. It's definitely for the better," he said.

The experience was rewarding, too, for Oswego senior Lillie Mitov, 21, who is interested in pursuing an international career working on behalf of women's rights. "There were difficulties because of time differences, but in general it was a free-flowing conversation," said Mitov, whose parents emigrated from Bulgaria.

Beforehand "one of the questions most of my classmates had, was whether or not (the Lebanese students) would be able to communicate clearly with us. Aside from small punctuation errors here and there, they were pretty much on par with us," Litov said. "In terms of having laptops and phones, they were just like us."

"There are so many skills you can take from an experience like this in terms of cross-cultural communications and technology that are such a vital part of becoming a career person right now. This provided that perfect space to gain these resume skills essentially. I would rank it in my top three courses I've taken in college," said Litov, who keeps in touch with one of her Lebanese teammates through LinkedIn.
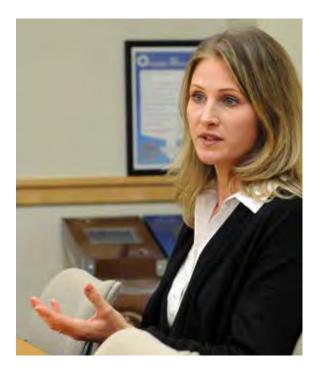
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COIL's Rubin sees "an incredible interest and surge in doing this kind of work right now," but more universities need to bring faculty, international program offices, and technology staff together to "design something sustainable that can affect thousands of students, not just a couple of classrooms."
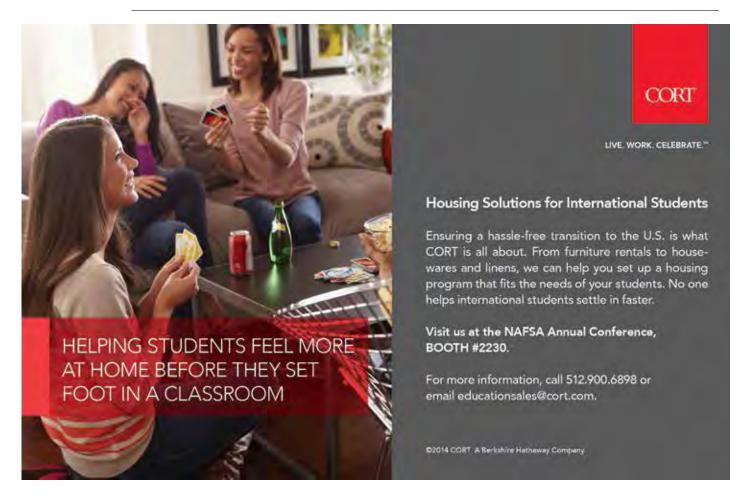
The American Council on Education and COIL recently named the first winners of a new Internationalization Through Technology Award in March (see story on page 10). In launching the competition last August, SUNY chancellor Nancy Zimpher said, "Allowing students to virtually experience higher education abroad without leaving campus is a deeply innovative concept that is taking shape and putting down roots across the U.S. and internationally."

Ina Issa, the Lebanon-based professor who partnered with SUNY-Oswego professor Susan Coultrap-McQuin on a Center for Collaborative Online Learning (COIL) class on women in the workplace

Studying Public Health in Michigan and Haiti

Collaborations with universities in the developing world can pose special challenges, like those that the School of Nursing at the University of Michigan (U-M) had to overcome in linking a community health class in fall 2012 with one offered by Faculty of Nursing Science of the Episcopal University of Haiti in Léogâne, Haiti. A U-M initiative provided instructional design and videoconferencing support to create such classrooms links, and clinical instructor Norma Sarkar traveled to Haiti to help with arrangements at that end.

But the Haitian classroom relied on a 3G cellular connection that was distributed wirelessly and connected with a MacBook Air. It "was highly sensitive to fluctuations in the weather and had to be reset often during class meetings," said Todd Austin, the videoconferencing lead in Instructional Support Services for the College of Literature, Science, and the Arts who comanages the initiative with Philomena Meechan of U-M's Language Resource Center.

Before the second iteration of the class in fall 2013, U-M dispatched Austin to Léogâne, where he helped get a high-speed, fiber link into the classroom and arranged improved lighting and a better microphone. They also switched to an easier-to-use, cloud-based videoconferencing tool called Blue Jeans. That worked almost without interruption. The nursing school is considering adding a videoconferencing component to global health courses.

Monitoring Indus River Pollution from Newcastle

Technology makes it easier for scientists such as Abdul Chaudhry in Newcastle University's School of Agriculture, Food & Rural Development to collaborate across borders. The British Council and the Higher Education Commission of Pakistan have provided seed grants for his work with counterparts at the Government College University Faisalabad monitoring pollution of the Indus River by tracking trace elements in fish. While there are exchange visits on both sides, "we also communicate by Skype and other means," he said. New technology makes communications easier, faster, and far less expensive.

It also facilitates graduate studies and other distance education. The University of Manchester has offered a fully online master of public health degree since 2002. A third of the 300 students enrolled each year are outside the United Kingdom, in approximately 40 countries including some in Sub-Saharan Africa, Asia, and the Middle East. As Isla Gemmell, a lecturer in epidemiology and biostatistics, and colleagues explained in a case study in the journal, *Innovations in Education and Teaching International* (2014), the course incorporates computer-based simulations, video and audio files, and readings from e-books. The students use discussion boards, Skype, and instant messaging services to carry out small group

assignments. Eight-five percent of those surveyed in 2011 felt that learning alongside students from other countries enhanced their learning.

So what holds more universities back from making greater use of technology to collaborate across borders? A recent study by the Austin, Texas-based New Media Consortium (NMC), which promotes and conducts research on new education technology, and Open Universities Australia concluded the largest impediment to wider use of technology in higher education is the faculty. "Most academics aren't using new and compelling technologies for learning and teaching, nor for organizing their own research," said their report, *Technology Outlook: Australian Tertiary Education 2013–2018*. This "low digital fluency" of professors is a common problem elsewhere, according to NMC's *2014 Horizon Report*. The nonprofit consortium urged administrators to provide more professional development to encourage faculty to embrace new technologies and impart digital skills to students.

The Centre for Higher Education Internationalization's de Wit is an optimist and a believer that COIL-type initiatives and "virtual mobility" can add an international dimension to teaching and learning for far more students than the small number who study in another country. "It is only an elite of students who can afford (education abroad) or are willing to do it," he said. "We see a lot of opportunities to use this type of internationalization much more than in the past. It won't replace the physical mobility, but it is a very strong addition" especially since COIL courses "are embedded in the home curriculum."

Clemo, the SUNY Oswego provost, said technology is necessary but secondary to a comprehensive strategy and campus-wide commitment to internationalization. "You need administrative support and have to have your international office, your instructional designers, your faculty, and your faculty development office on board to do it," she said. "There have to be incentives in place so everybody realizes this is an important goal." Otherwise institutions run the risk that the technology "will just be played with and explored by the faculty one-on-one." **IE**

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