

U. of Hong Kong Looks to the West in Curricular Redesign

July 19, 2010

Chronicle of Higher Ed

By Mary Hennock

Jessica King is a geologist at the University of Hong Kong. This year she taught a new course on scientific literacy to first-year students, encouraging them to take an informed and skeptical look at how data are used in media coverage of controversial topics like climate change.

The class, she says, was a success. Students are not afraid to ask questions, she jokes, because “they’re no longer scared that if they don’t know the correct terminology I’m going to beat them up.”

Ms. King believes that the open-ended nature of the new course aided that dynamic.

Her class is just one example of the University of Hong Kong’s radical redesign of its curriculum. Spurred by the government’s decision to move to an American-style, four-year bachelor’s program in 2012—away from the three-year degree inherited from the British—the territory’s eight public universities are revamping their academic programs.

The boldest reworking is taking place at the University of Hong Kong, the most prestigious of the eight, which has seized the opportunity to reimagine its entire curriculum.

Gone is any trace of early specialization. In its place is a “common core” curriculum from which all students must take courses during their first two years, no matter what their major. Academic departments are changing the requirements for some majors, but the common core has perhaps garnered the most energy and attention on the campus.

The common core is designed to be provocative, modern, and multidisciplinary, its architect says.

"The first thing I want to get them to do is to ask questions. It's not really about right or wrong, it's about perspectives," says Amy B.M. Tsui, pro vice chancellor for teaching and learning, who is leading the redesign.

The common core covers four "areas of inquiry," as they are known: humanities; global issues; Chinese culture, state, and society; and scientific and technological literacy.

"We're trying to get away from the idea that there's a body of essential knowledge," says Gwyn Edwards, coordinator for the common-core curriculum and a former member of the education faculty. "The common core is an attempt to engage students with questions about the human condition."

The humanities, which are taking on a greater role even outside that explicit area of inquiry as they are woven into other areas, will now reach students in sciences and medicine, the faculties with the largest enrollments.

Undergraduates are required to take six courses from within the common core during their first two years. Along with compulsory English- and Chinese-language courses, that counts for nearly one-quarter of total credits.

Designed by Professors

The experiment began this past academic year, when the university offered six pilot courses, including Ms. King's.

Daniel De Sousa, a psychology major, was a guinea pig for "Sexuality and Gender: Diversity and Society," another of the six pilot courses. In one class, a dominatrix showed the students videos of sessions with clients.

"In psychology, these people are being labeled as dysfunctional or abnormal," says Mr. De Sousa. "The speakers taught us to see these issues from another perspective." Discussion segments ranged across philosophical questions of good and bad; laws on homosexuality, marriage, and divorce in different societies; and distinctions between social and legal tolerance.

This fall the university will greatly expand the core curriculum, offering 68 pilot courses. They include "Feeding the World," which explores global food security, water shortages, and bioengineered crops.

Harold Corke, an associate professor of biology, who designed the course, wants students to "be aware that most of the hunger in the world today can be attributed to political factors, not technological ones."

Another course, "Body, Beauty, and Fashion," ranges across the terrain of psychology, media studies, and gender studies. "Science and Music" takes a multidisciplinary dip into mathematics and aesthetics.

Courses are taught in large lectures, of up to 120 students, followed by small discussion sections, or tutorials, with a maximum of 12 students, introducing such sections collegewide for the first time.

The goal is to make sure students see the core courses as more than lectures, says Mr. Edwards. "The tutorial gives them a chance to unpack the material that was presented in a lecture." About 100 new teaching assistants, some of them graduate students, will run the discussions, and Mr. Edwards will coordinate the training of them.

The dynamo behind this gargantuan task is Ms. Tsui, a professor of education who insisted that the pro vice chancellor job be created inside the senior management team to provide sufficient authority to push through decisions.

She acknowledges that the revamp, on top of normal teaching and research, is exhausting everyone.

"I think they all hate me by now," she says with a laugh.

But, she insists, the new curriculum was designed with extensive faculty participation, built on annual faculty retreats since 2006 and a campuswide faculty survey in 2007. What struck her most about the survey responses, she says, was that "none of them were talking about what to do in that extra year. They were all talking about, What are our students like?"

Asian students have a reputation for being more comfortable with rote learning than conceptual thinking, she says, but that's not true. "They've got views, but they lack confidence. They think the teachers have the answers."

As part of the design process, the university invited guest speakers from the United States, Britain, and Australia to explain their universities' approaches to curricular reform, or topics like monitoring students' learning experience.

Ms. Tsui visited Harvard and Columbia Universities to study their general-education programs. Other faculty members visited British and Australian universities for expertise on specific issues like student assessment.

Ms. Tsui says faculty members agreed that they needed to do a better job of training students to thrive in an interdisciplinary, fast-paced world, one in which "new knowledge is generated every day," and people jump from one career to another.

Once the goal of a common core curriculum was set, Ms. Tsui says, faculty members looked to North America for models.

"What I've liked in U.S. universities is the broad liberal education. In Hong Kong, students have to specialize too early," she says. "They don't have the opportunity to go into university and say, Here is a whole world of knowledge. The U.S does have that."

Yet in the end, the working group was disappointed by what it found in the United States. It felt that undergraduate education was neglected in favor of research, and that many colleges offered too many introductory courses.

"There's no coherence across the courses. We were looking for some framework that was coherent, not little boxes," says Mr. Edwards.

The university invited in Harry R. Lewis, a Harvard professor whose 2006 book, *Excellence Without A Soul* (PublicAffairs), looked critically at Harvard's experiments in curricular reform, particularly its attempt in 2005 to replace a core curriculum with looser distribution requirements. He warned that HKU's common-core approach itself risked becoming shallow and incoherent.

That criticism led the academics in charge of the various areas of interest to establish a set of “fundamental questions” that their courses must raise with students, says Ms. Tsui. For instance, scientific- and technological-literacy courses must get students to grapple with moral issues associated with research.

A High Rejection Rate

Once the common-core-curriculum committee set the basic goals, it solicited course proposals from the faculty.

During the first round, in 2008-9, it received 225 proposals and rejected 153 of them. The message was clear: Courses must meet the university’s ambitious goals, not just plug a gap.

The most common reason for rejecting a suggestion was that the course proposed was too heavily anchored in a single discipline and not conceptual enough.

But professors seem to have gotten the idea since then: 65 new courses have been approved for the fall of 2011, out of 96 proposals. “The rejection rate is much lower than the first round, which means that people are beginning to get the hang of it,” says Ms. Tsui.

In all, 150 courses are to be approved by 2012.

Course proposals are read by two reviewers: one in the same department and one from outside. Their recommendations go up the line to an area-of-inquiry working group, which commissions a full course outline for promising proposals.

Once fully developed, proposals must be finally approved by a committee of 19 people, comprising Ms. Tsui, Mr. Edwards, and area-of-inquiry coordinators and leaders.

Because many courses are topical in nature, Mr. Edwards expects that the life expectancy of each is about three years, so that the curriculum will evolve.

“We have to ensure that it doesn’t ossify,” he says. However, he sees a risk that such courses “are dependent on individual knowledge” and hard to replicate if an instructor leaves.

So how does a university support those new programs—not to mention the 3,000 additional students set to arrive in 2012, when the university adds a fourth year? Ms. Tsui says it is hiring 45 full or associate professors in addition to the roughly 100 new teaching assistants.

The common core is only part of the changes being made as the university prepares the four-year curriculum. Academic departments are also redesigning the teaching in their disciplines. Enthusiasm for a more conceptual, less discipline-based course structure is evident, too.

For instance, the science faculty is drawing up two compulsory foundation courses for all freshmen (who cannot declare a major until their second year); one deals with quantitative reasoning, and the other mixes the sciences. It is themed around moving through the natural world, from nanoparticles to galaxies.

Supporters and Critics

Supporters of the revamp say the common core will improve standards of teaching and research and stimulate more interdisciplinary research.

The common core's topicality means "you have to step down out of your technobabble and come down to a layman's level," says Ms. King. "It's helped a lot of the academics I've talked to to be more effective teachers."

"We're re-educating our colleagues," says Lung S. Chan, a professor of geology who heads the Scientific and Technological Literacy area-of-inquiry group. "Common-core courses are issue based. and our teachers, especially sciences, are not used to having questions without a set answer."

But the common core has its share of critics as well.

Some professors were adamant that only an introductory general-education year rooted in departmentally based foundation courses would work.

"They felt, This is the easiest; this is my area of expertise," says Ms. Tsui, while the new courses require more time to develop than do the more traditional, discipline-focused ones.

Some science professors worry that the breadth of the core curriculum will produce students whose grasp of scientific disciplines is too shallow to allow them to pursue academic research as postgraduates, according to Nam Kiu Tsing, the science faculty's associate dean for teaching and learning. He says he does not share that view.

In the end, though, the University of Hong Kong may simply be changing with the times. There is a push within Asian universities for a broader undergraduate academic experience, particularly one that allows students in the hard sciences more exposure to the humanities.

In Australia, the University of Melbourne and the University of Western Australia are carrying out similar reforms. In Hong Kong, other universities are exploring versions of general-studies programs.

At Hong Kong Polytechnic University, known for its professional degrees, there is a new emphasis on writing, debating, and language skills. They are in "demand from the government and the citizens," says Walter W. Yuen, vice president for academic development. "We want our students to be well rounded, more knowledgeable."

Peter McPhee, who retired as Melbourne's provost last September, says the reforms are a "very impressive" version of that trend. He's familiar with the changes—a member of Ms. Tsui's committee visited Melbourne for advice in the early stages—and he heard a presentation on the common core at a conference in Australia in February.

The common problem is "getting that balance right between discipline and expertise," between depth and breadth, so that students "have the flexibility that they're going to need in the 21st century," he says. "When I look around the world and listen to all the changes that appear to be going on, so many of the conversations really boil down to this balancing act."