



Knowledge Exchange

Supported by KE funding, HKU's Department of Physics is raising public awareness about light pollution by running on-going workshops and programmes including a photography competition. This year, 42 teams from 132 secondary schools across Hong Kong took part and this is the winning entry. Form 5 student Kwok Man-tai took the picture at around 10pm lying on his back in the middle of a street in the busy Mongkok district.

Turning Knowledge into Action

Knowledge exchange (KE) has become entrenched at the University. It is closely entwined with our academic endeavours and is part of our value system. KE is incorporated into our strategic development planning, it is recognised in the performance review process of academic staff, and it is a factor in the internal resource allocation for Faculties. Outstanding KE achievements are also celebrated at HKU. This foundation of support has evolved over the past five years, and in 2013-14 attention began to turn to the next stage of our KE development: enhancing our impact in the community.

If KE is the process, impact is the outcome. It is the way in which we demonstrate the value and success of our efforts to bring

social, economic, environmental and cultural benefits to the community. The quality of KE projects is getting higher every year and the University is focusing more on this question of impact, both for external and internal reasons.

Externally, impact beyond academia has recently become a factor in the research assessment exercise in Britain. While it is not yet known whether Hong Kong will follow suit, the University considers the UK experience useful in helping different disciplines look at their KE initiatives and devise their future KE plans in the context of impact.

During 2013-14, we invited four scholars from Leeds University's Arts Engaged programme to conduct impact workshops and share their experiences in preparing impact case studies, both with our scholars and those at other universities in Hong Kong. We will also hold a joint conference with Leeds in 2014-15 to further explore the complexities of shaping an impact agenda in higher education.

Impact Evaluation

Internally, the key element underpinning the University's KE

strategy in this triennium (2012-15) is the emphasis on communicating and evaluating the impact of HKU's excellent research. We continue to make use of the University Grants Council's earmarked funding for KE to support staff members and students in undertaking meaningful projects that have the potential to create an impact in society. Our Competitive Impact Project Funding Scheme supported 42 proposals in 2013-14, while the Student Knowledge Exchange Project Grant Scheme funded 28 projects.

We also organise the Knowledge Exchange Awards Scheme each year to recognise outstanding examples of KE, and in 2014 we further promoted KE projects by initiating the production of KE videos. The University has also established the HKU Scholars Hub to make our scholars and their research more accessible to potential partners and users in the community; in 2013-14 its view count increased to more than 1.5 million, up nearly 50 per cent over the previous year.

Products and Applications

One major way of achieving impact is by working with industry and by being entrepreneurial about translating our research findings into products and applications. The Technology Transfer Office (TTO) helps industry access our discoveries, and academics further their research collaborations with industry. In 2013-14 the TTO underwent a major re-organisation to connect it more firmly to the University's structure. Most staff members of Versitech Ltd, the wholly-owned commercial subsidiary of HKU, are now staff of the TTO, reflecting the importance of technology

70

KE projects funded (28 for students, 42 for faculty)

94

patents filed in 2013-14 for discoveries at HKU

1.5 million

hits received by HKU Scholars Hub



Architecture students talking to village elders as part of a data collection exercise on rural villages in China (see p. 35)

transfer in the University's mission. The TTO also runs the eight-week Entrepreneurship Academy, which provides workshops and networking opportunities for research staff and research postgraduate (RPG) students. In 2013-14, full attendance started being recorded in the transcripts of RPG students to reflect their skill development in this area.

Community engagement through KE and impact will receive increasing attention in the coming years. This is a direction that not only keeps the University at the forefront of international developments, but also aligns with our mission to contribute to the advancement of society in Hong Kong, the region and the world.

Budding Entrepreneur Gets Motivated

Ivan Law Hoi-wang participated in the Entrepreneurship Academy twice before graduating with an MSc in E-Commerce and Internet Computing in 2014. He received



Ivan Law Hoi-wang

not only training in the basics, such as accounting and marketing, but something more: inspiration. "I had joined other programmes for entrepreneurs but this one was the best. They brought in guest speakers who shared both their successes and failures, and they were really motivating. For me, the Entrepreneurship Academy was life-changing," he said. In fact, it spurred Ivan to set up a start-up with

a classmate from his MSc to develop software that attempts to solve non-profit organisations' logistical issues.

Venus Debuts at HKU

Botticelli's painting of the goddess Venus came to HKU in the autumn of 2013 for an exhibition at the University Museum and Art Gallery (UMAG). It proved to be not only a feast for the eyes, but a wonderful launch pad for KE activities. Guided tours and special texts were arranged on everything from Renaissance workshop culture to iconographic values. About 30,000 people visited the exhibition, including 38 school groups. This was the first time the Museum staged an event of this kind and in autumn 2014 it organised a second major exhibition featuring Picasso's ceramics.



Venus at UMAG (left) and a Picasso ceramic



Faculty Knowledge Exchange Awards 2014

These awards recognise each Faculty's outstanding KE accomplishment that has had demonstrable economic, social or cultural impact to benefit the community, business / industry, or partner organisations.

- Architecture:** **Mapping Modern Architecture in Hong Kong**
A team led by Dr Cole Roskam helped to launch a local chapter of the international organisation Docomomo (Documentation and Conservation of the Modern Movement) to spotlight examples of architectural modernism in Hong Kong.
- Arts:** **Linguistic Minorities.HK: Connecting with the Communities**
Dr Lisa LS Lim set up a website to recognise the richness and diversity of Hong Kong's linguistic environment and to give a voice to those communities that are often sidelined because of language barriers.
- Dentistry:** **Oral Health Promotion among Indonesian Domestic Workers and Their Employers' Families**
Dr Gao Xiaoli and her team developed a large-scale project to help Indonesian domestic helpers (of whom there are 140,000 in HK) take care of their oral health.
- Education:** **A Meaningful Journey of Teaching and Learning of Chinese for Non-Chinese Speaking Students: Towards Local, Regional and International Advancement**
Professor Tse Shek-kam and team (see 'Language for All', overleaf).
- Engineering:** **Knowledge Exchange of e-Learning Technology and Pedagogy in Hong Kong and Overseas**
Dr Wilton WT Fok mentored his students in developing iClass, a mobile platform which enables students to share knowledge immediately with their teachers and classmates, enabling simultaneous interaction across the whole class.
- Law:** **The Community Legal Information Centre (CLIC) Series**
Professor Anne SY Cheung and team set up the Community Legal Information Centre website series to provide free bilingual legal information for the lay person. It includes Youth CLIC, Senior CLIC and Family CLIC.
- Medicine:** **Life and Death Education through HKU Body Donation Programme**
A team led by Dr Chan Lap-ki has undergone a campaign, via HKU's Body Donation Programme, to teach people how even after death they can contribute to society by donating their body for use in anatomy lessons by medical students.
- Science:** **Science and Art Crossover Project – Visualizing Science via Creative Lens and Interactive Art**
The general tendency to view science and art as two very different extremes prompted Dr Benny CH Ng and his team to start a programme to show youngsters how the two continually interconnect.
- Social Sciences:** **Promoting Ageing-in-Place for Elderly Tenants in Rental Housing Estates of Hong Kong Housing Society**
Dr Terry YS Lum and his team developed a project aimed at giving more elderly people the chance to stay in their own homes longer, rather than go into care.
- KE Award (Non-Faculty Unit)**
- UMAG:** **Botticelli's Venus at the University Museum and Art Gallery, HKU**
Led by Dr Florian Knothe, with team member Dr Opher Mansour (see facing page).

Sharing Academic Knowledge

HKU academics are encouraged to share their knowledge in ways that benefit the community. This typically involves working with community partners and learning from their experiences. The University supports these activities through the Knowledge Exchange Fund and Knowledge Exchange Awards. External donors are also keen to support these kinds of exchanges.

Language for All

Hina Butt first heard about the Faculty of Education's efforts to promote the teaching of Chinese to non-Chinese speaking students after she failed her high-school Chinese examinations three times. She was determined to become a teacher of Chinese to people like herself, but found it impossible to succeed under the local system because it did not cater to non-native speakers.

In 2010 the Faculty's Centre for Advancement of Chinese Language Education and Research (CACLER) supported Hina to study Chinese at Beijing Normal University's campus in Zhuhai, which has a programme specifically for non-Chinese speakers, and in 2014 she graduated with a BA. The CACLER has been involved in over 20 projects to help non-Chinese speaking students like Hina, who has made a great success of the opportunities provided to her: she now teaches Chinese to non-Chinese speakers in a local school, and is studying for HKU's new two-year part-time MEd (Teaching Chinese to Non-Chinese Speaking Students).

"In secondary school I cried every day because no one was willing to help me in Chinese. My parents were very supportive and they taught me not to give up. Then the CACLER came along and what they did for me changed my life. Now I am teaching Chinese to ethnic minorities in Hong Kong and studying for a Master's degree. I tell my students, 'I will fight for you, I am the example'," she said.

Since 2006, the CACLER has organised a series of projects and after-school lessons from kindergarten to secondary school level, benefiting more than 3,500 secondary school students, 500 primary school students and 1,000 pre-primary children and their parents. It has also provided research-based professional training and development to teachers, guidance on curriculum development, books and related materials, and other resources for teachers, and held four international conferences on learning Chinese.



Hina Butt



Architecture students in rural China

A Bird's Eye View

The Faculty of Architecture combined legwork by students with drone technology to experiment with how to create 3-D models of a remote village in China. The project aimed to integrate both physical data, such as building plans and photos, as well as soft data, such as information on the economy, culture, customs and other aspects of village life. The project was a useful learning exercise for students and was part of ongoing research to produce applicable tools for local government officials and professionals when developing new projects.

Facilitating Political Debate

2014 has been a significant year in Hong Kong's political history. The city's future political reform moved to centre stage at the end of August, when the Standing Committee of the National People's Congress announced its decision on the framework for the next election of Hong Kong's Chief Executive. However, well before then, HKU scholars were providing platforms for people from across the political spectrum to present and discuss their differing views and opinions, and hence enhance understanding of the issues at stake, among the campus community and the general public.

In December 2013, the Centre for Comparative and Public Law launched the Design Democracy Hong Kong website, where people can learn about, design and debate different models of universal suffrage. In spring 2014 it also organised an academic roundtable on universal suffrage and nomination procedures; a seminar series on political reform; and a panel discussion by leading figures on political reform. The Centre for Chinese Law also organised a forum on central government policy towards Hong Kong that featured speakers from both Hong Kong and Mainland China.



Occupy Central protests

Student Initiatives

Many HKU students are keen to make a difference in the world and improve the lives of others. They are supported formally through the Centre of Development and Resources for Students, which provides support for incubating ideas and help in connecting with donors, and the Student Knowledge Exchange Project Grant Scheme. But mostly, it is the students who do the fundraising and organising, making their KE activities a learning experience, too.

Engineering Solutions in Cambodia

A Quantitative Finance-turned-Mechanical Engineering student has put his skills to work to help people in Kenya and Cambodia. Thomas Lai switched to Engineering after joining friends on a service trip to Kenya in 2012, where he was tasked with designing a water filter.

He initially decided to study Engineering in Britain, but missed Hong Kong and the service opportunities at HKU, so he returned after one year. With a friend, he then formed Pathfinder, a group dedicated to improving water and sanitation conditions in Cambodia.

In the summer of 2014, after raising more than \$100,000, they visited a school where they designed and built a structure to keep its toilets and water filter safe from annual floods. Thomas has also designed a bicycle generator to provide backup power for wastewater treatment. More projects are planned for future.

"At HKU you not only have the chance to participate in service trips like this but you can organise them yourselves. I've had a lot of opportunity and support, and I've learned a lot," he said. "Even when I finish my studies, I want to continue working on these kinds of projects."



Thomas Lai in Kenya (above) and with Pathfinder friends and supporters at HKU.



Connect founders Jamie Tse and Shirley Wong.

Understanding Islam

A desire to understand Islam led a team of non-Muslim Arts students to launch a magazine, *Connect*, which looks at the Muslim community in cultural terms and tries to break down the barriers between Muslims and non-Muslims. The first issue, published in 2014, focused on love and marriage and proved enlightening for the students who discovered Muslims were happy and willing to talk about their beliefs and practices. The idea for the publication originated with Shirley Wong Lok-yin, a second-year Arts student, who was curious about Muslim religion and culture. "We want to facilitate cultural exchange and give a voice to those who are not so familiar to us, and to break down cultural stereotypes," she said.

Planetary Action

A Philosophy MPhil student was the driving force behind a project to reconnect secondary school students with the natural environment and empower them to initiate conservation and environmental education work in their schools. Kathleen Ho Ka-yan worked with two PhD students, Xoni Ma Kwan-ki from the Kadoorie Institute and Li Pui-sze from the Faculty of Science, to create a programme for 64 Form 4–6 students that involved four full days of field visits, reflection, and devising action plans for their schools, most of which were implemented. "The students' attitudes towards environmental conservation changed quite quickly with some help and a push from us. It made me think we should continue to provide this sort of education for the younger generation," Kathleen said.



Biodiversity programme developers (from left): Li Pui-sze, Kathleen Ho and Xoni Ma.