



Hong Kong's Collaborative AI Revolution in Higher Education:

A Model for Global Innovation



Imagine entering a virtual wind tunnel before setting foot in a lab or receiving career advice from an artificial intelligence (AI) coach available 24/7. For Hong Kong students, these scenarios aren't science fiction — they're the new reality of higher education.

Generative AI, augmented reality (AR), and other tech breakthroughs are reshaping higher education, changing how students learn and professors teach, and opening doors for closer ties between universities and industry.



Mr. Park and Professor Li (HKUST)

As these new technologies transform education worldwide, universities face crucial questions: How can they prepare students for a future where AI is ubiquitous? How can they ensure graduates are both tech-savvy and responsible? Perhaps most crucially, how can universities collaborate rather than compete to lead the way in technology-driven education?

Hong Kong, a global city and a leading knowledge hub in Asia with world-class institutions of higher learning, is uniquely positioned to answer these questions through an unprecedented collaboration among its universities, spearheaded by the [University Grants Committee \(UGC\)](#), which is responsible for allocating public funding to the universities. The goal? Cultivating responsible, tech-savvy graduates ready for the digital economy — and helping the younger generation deal with the challenges of Hong Kong's transformation as an innovation powerhouse.

"Hong Kong is a melting pot for people, ideas, and talent," says Larry Li, engineering professor at The Hong Kong University of Science and Technology (HKUST). "Working with a variety of different researchers in Hong Kong in completely different areas, just goes to show how many opportunities there are in Hong Kong to experiment with new pedagogical technologies. I'm not sure we could have done this anywhere else in the world."

The Catalyst: UGC's Fund for Innovative Technology-in-Education (FITE)

The UGC's HK\$100 million (US\$12.8 million) [Fund for Innovative Technology-in-Education \(FITE\)](#), launched in 2023, is pushing Hong Kong's eight publicly-funded universities to embrace cutting-edge tech and revolutionize students' learning.

FITE's four-pronged approach tackles technology challenges in higher education head-on: Transforming learning methods and assessment, boosting tech skills across all disciplines, addressing digital ethics, and bridging the education-industry gap. Universities can apply for funding for projects under any of the four themes.

The UGC's comprehensive strategy is already bearing fruit. Nearly 100 projects have been implemented across Hong Kong's universities. HK\$20 million is set aside expressly for inter-institutional projects to encourage collaboration.



Dr. Julia Chen (PolyU)

Transforming Learning and Assessment for the AI Age

Hong Kong's universities are working swiftly to equip students for an equally rapidly evolving job market. Their approach? Embracing AI as a tool for learning rather than a threat to be countered.

At [The Hong Kong University of Science and Technology \(HKUST\)](#), engineering professor Larry Li and PhD student Jungjin Park are developing a suite of aerospace labs using AR and AI technologies. These include an AR-powered wind tunnel accessible through students' phones. "Students can immerse themselves inside a virtual lab before stepping into a physical one," Li explains. The project aims to boost student engagement, enhance knowledge retention, and provide accessible learning tools.

Park adds, "It's about putting more immersive learning elements into that short time students have with the technology." The project has already caught the eye of engineering firms eager to hire graduates with hands-on experience, and Li hopes to expand this AR tech into medicine and other fields.

Meanwhile, Julia Chen, the director of the Educational Development Centre at [The Hong Kong Polytechnic University \(PolyU\)](#) is engaging educational development professionals from all UGC-funded universities in reimagining assessments for the AI era. Rather than relying on detection tools to identify AI-assisted cheating, PolyU is creating more authentic assessments that require students to demonstrate genuine understanding and application of knowledge. "Instead of using plagiarism detection tools to test students would be abusing AI, we put our effort and time into redesigning our assessments," Chen explains.

Bridging the Gap Between Industry and Education

Hong Kong's role as a global financial center and a business and communications hub linking China and the rest of the world provides fertile ground for bridging the gap between industry and innovative universities, with real-world experience and excellent employment opportunities for students.

At [The Chinese University of Hong Kong \(CUHK\)](#), an AI-powered career coaching system is helping students navigate an increasingly automated job market. The platform analyzes student data and industry trends to generate tailored recommendations, application materials, and even AI-driven mock interviews.

John Lai, director of CUHK's [Co-operative Education Programme](#), emphasizes that the AI coach augments rather than replaces human advisors. "Students can get 24/7 support, but we still ensure human oversight and personalized guidance when needed," Lai explains. "Our goal is for students to be comfortable using it, with the system providing increasingly accurate guidance." As the system matures, CUHK plans to expand it to other academic and administrative units.

[The University of Hong Kong \(HKU\)](#) is taking a different approach through AI hackathons. Jack Tsao, associate director of HKU's Common Core Office, organized a month-long Generative AI Hackathon for Social Good in 2023, bringing together students from diverse disciplines to develop AI solutions for real-world challenges. "We're getting students outside their disciplines across the university," says Tsao. "It was amazing to see how before."

The hackathon challenged students to develop ethical AI solutions for real-world problems related to social inequality, education, and public health. "One group used AI to design an app for visually impaired students," Tsao recalls. "They worked directly with our university libraries to understand the need."



Dr. John Lai (CUHK)

"Technology will not be replacing us," shares John Lai, director of the Co-operative Education Programme at The Chinese University of Hong Kong (CUHK). "But we need to be comfortable [in] how we can leverage the technology to make our work much more effective and efficient."

Fostering Inter-Institutional Collaboration and Innovation

One of FITE's most transformative impacts is its support for inter-institutional collaborations. PolyU exemplifies this collaborative spirit with a project uniting all eight UGC-funded universities to explore AI-enhanced teaching practices. A recent webinar on the project drew 1,340 registrations from 34 places worldwide, highlighting global interest in Hong Kong's approach.

"We want to show the world that institutions don't have to compete with each other," says Chen. "We've been looking at similar initiatives in other places to benchmark our progress."

"We are forging a path prioritizing collaborative efforts from the start, which distinguishes our approach from similar initiatives elsewhere."

This collaborative approach is fostering a unique ecosystem of innovation. Tsao notes, "Hong Kong is very receptive to experimenting and adopting new technologies. People just seem to exchange ideas very fast."



Dr. Julia Chen (PolyU)

"Hong Kong is very receptive to experimenting and adopting new technologies," shares Jack Tsao, associate director of The University of Hong Kong (HKU)'s Common Core Office. "It's this kind of cross-disciplinary, real-world application that FITE is all about."



Dr. Jack Tsao (HKU)

Addressing Ethical Considerations in AI Education

While Hong Kong's universities enthusiastically embrace AI, they are not blind to the ethical challenges. Across all FITE-funded projects, there's a strong emphasis on responsible AI practices and ethical considerations.

At PolyU, Chen's team is at the forefront of efforts to address the ethical implications of AI in education. This approach ensures academic integrity and teaches students to use AI responsibly. "Learning to work with AI is rapidly becoming a critical capability for many, if not most, graduates," she adds. "We need to ensure that students are not just tech-savvy but also responsible digital citizens, and UGC's funding is a timely support for such important endeavors."

Ethics has been a central component of HKU's AI Hackathon. Tsao explains, "We challenged students to consider not just what AI can do but what it should do. They grappled with issues like data privacy, algorithmic bias, and the societal impacts of their solutions. We must instill this ethical mindset early in their engagement with AI."

"Learning to work with AI is rapidly becoming a critical capability for many, if not most, graduates," Julia Chen, the director of the Educational Development Centre at The Hong Kong Polytechnic University (PolyU) adds. "We need to ensure that students are not just tech-savvy but also responsible digital citizens, and UGC's funding is a timely support for such important endeavors."



Shaping the Future of Global Higher Education

This spirit of cooperation, fostered by FITE and the UGC, is not just transforming local institutions — it's offering a potential blueprint for global higher education.

"Without this funding, we couldn't have developed our AI coaching system," says Lai of CUHK. "It's allowing us to experiment and innovate on a scale we've never seen before."

Looking ahead, Chen sees potential for an even broader impact. The collaborative model pioneered by FITE could extend beyond Hong Kong, influencing how universities worldwide approach AI integration. "We're not just preparing students for the current job market," she explains. "We're shaping a workforce that will drive innovation in AI across all sectors."