Annex

Four Key Themes of Fund for Innovative Technology-in-Education

(1) *Driving transformation in pedagogies, curriculum, assessment and student development*

Innovative and breakthrough technologies have brought about drastic impact on how students learn. Indeed, technologies have also stimulated the wider adoption of different pedagogical models in universities, such as personalised learning, student-staff partnerships and peer teaching that enrich the spectrum of fit-for-purpose teaching strategies to recognise diversified needs, with a shift towards a student-centric philosophy in outcome-based teaching and learning. As part of the quality assurance process, current models of teaching and learning will therefore have to evolve to ensure students will continue to achieve the intended learning outcomes.

Moreover, the extensive adoption of innovative and breakthrough technologies also gives rise to opportunities for universities to integrate the curriculum of their academic programmes with new technological skills as an important part of students' educational experience to learn and appreciate the latest application of such technologies in their fields of study. Meanwhile, assessment methodologies will have to evolve in response to the development of new technologies with greater emphasis on critical thinking, authentic application and relevant transferrable skillsets. There is also strong potential for universities to make use of technologies for tracking, analysing and consolidating qualitative data on student development to support their growth in soft skills and develop relevant graduate attributes. Transformation in pedagogies, curriculum, assessment and student development will thus be the key to achieving teaching excellence and quality assurance in higher education in the next wave of paradigm shift.

(2) *Advancing digital competency for all*

Technologies have profound implications on the future of work, and a digitally competent workforce is key to Hong Kong's successful development as a digital economy and an international hub for innovation and technology. Universities may play a proactive role in encouraging all students, irrespective of academic background and with a stronger emphasis on those in non-STEM (Science, Technology, Engineering and Mathematics) programmes, to unleash their potentials and enhance their digital competency through the development of digital skillsets and exposure to innovative and breakthrough technologies as part of their university education. Initiatives under this key theme may also include professional development for faculty members and staff to hone their digital skills and facilitate wider application in teaching activities.

(3) ***Promoting technological social responsibilities and academic integrity***

Technologies have immense benefits but there are ethical issues and various challenges as well. In addition to academic integrity, the legal and ethical dimensions of data privacy and security are also important. In fact, artificial intelligence security and data security are relevant aspects of national security. Faculty members and students therefore need to shoulder technological social responsibilities through acquiring a good understanding of the underlying risks and consequences of improper technology adoption, as well as through developing an appreciation of the far-reaching societal implications of scientific and technological evolution. In addition, students may also put forward initiatives that put technologies to good uses for socially beneficial objectives such as sustainable development, thereby reinforcing values education and contributing towards healthy character formation of the younger generation in the digital age.

(4) ***Fostering academia-industry collaboration for authentic learning experience***

The universities may collaborate with relevant industries and organisations to incorporate elements on real-world application of technologies in their curriculum design. This will benefit students by helping them to acquire more relevant skills and understand the evolving trends in technology adoption in the workplace. Most importantly, the private sector has a unique role to play in offering hands-on experience and industry insights that enrich formal course contents with practical learning experiences for students in their respective fields. The collaboration may take various forms, such as bringing in industry practitioners to classrooms to enlighten students on industry practices and evolving trends, university-arranged credit-bearing placements and attachments for co-training at the workplace, or even joint efforts in curriculum design and teaching materials development. Academia-industry collaboration will support Hong Kong's economic development through providing students with opportunities to gain practical experience as well as equipping them with matching technological skillsets and an entrepreneurial spirit. This will also motivate students in life planning, enhance their employability, boost their confidence and raise their competitiveness as they serve the community upon graduation.