

Press Release
For Immediate Release

## The Academy of Sciences of Hong Kong launches the Science, Technology and Mathematics Education in the Development of the Innovation and Technology Ecosystem of Hong Kong Report

Promoting Science Education Strengthening Innovative Capacity

Hong Kong, 5 January 2017 – The Academy of Sciences of Hong Kong ("ASHK") today launched its report on **Science, Technology and Mathematics Education in the Development of the Innovation and Technology Ecosystem of Hong Kong.** Professor Lap-Chee Tsui, Founding President of the ASHK and one of the four authors of the report said that as information and technological changes gather pace, the amount of knowledge to be acquired by our next generation was becoming increasingly formidable.

"We have found that both our senior secondary curriculum and university admission systems need flexibility to adapt to the new world's needs of scientific talents, the driving force of our future economy," Professor Tsui pointed out.

"As STEM education is an integral component of the ecosystem of innovation and technology, as well as the overall literacy of our knowledge economy, all stakeholders including businesses, governments, non-governmental agencies, students and parents must develop an open mind to embrace new perspectives when designing what is best for our future generations," he added.

Established in 2015, The ASHK is committed to promoting the development and advancement of science and technology in Hong Kong, and fostering Hong Kong as a centre of scientific excellence. "Promote and advance the teaching of science and technology in Hong Kong" is one of the key functions of The ASHK. The report attempts to look at one facet of the ecosystem underlying the development of STEM education in Hong Kong; namely STEM at senior secondary education. As part of the study, the authors conducted extensive consultations and roundtables discussions since May 2016.

The other three authors are Professor Henry N. C. Wong, Honorary Secretary of the ASHK; Mr. Siu-Leung Ma, Chief Executive Officer of Fung Kai Public School and Ms. Rita Lun, Honorary Advisor of the ASHK.



Ms. Rita Lun points out that although HK students have good achievement in international science and mathematics tests, few of them enrol into Science and Advanced Mathematics subjects in senior secondary education. Even for those who enrol, most of them study only one science subject, leading to a weak foundation of scientific knowledge. These will hamper Hong Kong's ability to develop into a knowledge-based economy as well as to nurture the talents needed for innovation and technology development.

To enhance the STEM literacy and raise the science and technology expertise in Hong Kong, the report has come up with five recommendations. (1) Trim the Core Subject requirement of the senior secondary curriculum to achieve a balance between Science and Non-Science education; (2) Introduce module flexibility by offering basic and advanced level syllabuses to provide space for students in choosing Science subjects; (3) Give proper recognition to Advanced Mathematics to stimulate enrolment; (4) Universities to review the 3-3-2-2 common minimum entrance requirement and individual programme admission requirements to encourage students to take more Science subjects; and (5) Proper recognition in the form of diploma should be given to students who have attained adequate senior secondary education. In other words, secondary school certification should be decoupled from tertiary admission standards

In conclusion, Professor Lap-Chee Tsui said, "Hong Kong needs to raise the overall STEM literacy, build upits innovative capacity in order to diversify into a knowledge-based economy."

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## **About The Academy of Sciences of Hong Kong**

The objective of The Academy of Sciences of Hong Kong is to promote the advancement of science and technology in Hong Kong. The membership conferred by the Academy is Hong Kong's highest academic honour. Membership is for life and is not restricted to scientists of Chinese nationality. Any local or overseas scientists who have made a distinguished contribution to the advancement of science and technology in Hong Kong, regardless of their nationality, are eligible. Currently, the Academy has 27 members.

The Academy promotes and advances the teaching of science and technology, educate and inform the public on relevant issues, cooperates with the industrial and commerce sectors to strengthen the application of research results, and conducts independent studies on issues relating to public policy on science and technology research and education.

The Academy was inaugurated on 5 December 2015 at the Government House, witnessed by the Chief Executive, The Hon C Y Leung, Minister of Science and Technology, Professor Wan Gang, President of the Chinese Academy of Sciences, Professor Bai Chunli, and representatives from fellow academies, foreign consuls and community leaders of various sectors in Hong Kong.

Operating as an independent registered non-profit company limited by guarantee, the Academy receives donations from members of society. The operation of the Academy is also supported by grants from the Hong Kong SAR Government. The current President is Professor Lap-Chee Tsui.

More information about ASHK is available at <a href="http://www.ashk.org.hk/">http://www.ashk.org.hk/</a>.

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