EDUCATION BUREAU CIRCULAR MEMORANDUM NO. 109 /2023

From : Secretary for Education

To : Heads of Government, Aided (including Special Schools), Caput and Direct Subsidy Scheme (DSS) Schools

Ref. : EDB/CSD/TE/08-40/01

Date : 19 June 2023

Curriculum Modules on Innovation and Technology Education -
"Enriched Module on Coding Education for Upper Primary Level" and
"Module on Artificial Intelligence for Junior Secondary Level"

Summary

The purpose of this circular memorandum is to announce the two captioned modules for adoption by schools to further promote innovation and technology (I&T) education.

Background

2.   To dovetail with the Chief Executive's 2022 Policy Address, the Education Bureau (EDB) has stepped up the promotion of STEAM (Science, Technology, Engineering, the Arts and Mathematics) education in primary and secondary schools and I&T education for all students, thereby strengthening the cultivation of students' interest in and capability of learning information technology (IT) and I&T.   EDB has been incorporating I&T learning elements into both the primary and secondary curricula and is now launching the "Enriched Module on Coding Education for Upper Primary Level" and "Module on Artificial Intelligence for Junior Secondary Level", aiming to help teachers integrate I&T elements into classroom learning more systematically.   The two modules are adapted from the project deliverables of "Coolthink@JC"[1] and "CUHK Jockey Club AI for the Future Project"[2] initiated and funded by The Hong Kong Jockey Club Charities Trust (HKJCCT). Views on the content of the two modules were collected from the Committee on Technology Education of Curriculum Development Council, and their support was sought.

Details

3.   EDB launches the captioned curriculum modules on I&T education for all publicly-funded schools to adopt.   Schools are expected to conduct timely and appropriate curriculum planning to implement enriched coding education at the upper primary level and incorporate artificial intelligence elements at the junior secondary level with a view to further developing students' computational thinking and strengthening I&T learning.   The implementation arrangements and details of the curriculum modules are as follows:

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[1] "CoolThink@JC" is initiated and funded by The Hong Kong Jockey Club Charities Trust (HKJCCT) and co-created by The Education University of Hong Kong, Massachusetts Institute of Technology, and City University of Hong Kong.

[2] "CUHK Jockey Club AI for the Future Project" is funded by the HKJCCT and co-organised by Faculty of Engineering and Faculty of Education of The Chinese University of Hong Kong.

"Enriched Module on Coding Education for Upper Primary Level"

- EDB launches the "Enriched Module on Coding Education for Upper Primary Level" for use in Primary 4. It covers basic computational thinking concepts, namely abstraction, algorithm and automation. Curriculum modules for Primary 5 and Primary 6 will be launched in phases in the 2023/24 school year.

- The "Enriched Module on Coding Education for Upper Primary Level" is designed in accordance with the revised "Computational Thinking – Coding Education: Supplement to the Primary Curriculum" ("the supplementary document") issued in 2020. Schools should plan their curriculum with reference to the supplementary document and the curriculum module to meet the learning needs of students, and incorporate 10 to 14 hours of enriched coding education for all upper primary students at each level every year.

"Module on Artificial Intelligence for Junior Secondary Level"

- The "Module on Artificial Intelligence for Junior Secondary Level" covers topics on AI basics, AI ethics, computer vision, computer speech and language, virtual reality, robotics, societal impact and future of work, etc. Schools are advised to allocate 10 to 14 hours of AI learning at the junior secondary level to teach the AI curriculum module in the ICT knowledge category under Technology Education Key Learning Area.

4. The above modules have been uploaded to the EDB website (https://www.edb.gov.hk/IandT/en).

Support Measures for Schools

5. Following the briefing sessions held for upper primary and junior secondary teachers in June, the Bureau will organise relevant professional development programmes, including workshops, starting from the 2023/24 school year to equip teachers to implement the above curriculum modules and enhance curriculum planning. These professional development programmes aim at enabling teachers to further master relevant teaching strategies, thus strengthening the implementation of STEAM education and I&T learning for all students. Details of the professional development programmes will be announced on the EDB Training Calendar.

Enquiries

6. For enquiries, please contact Ms Jacqueline TSE (coding education for upper primary level) or Ms Kathy FAN (AI for junior secondary level) of the Technology Education Section, Curriculum Support Division, Education Bureau on 3698 3133 or 3698 3130 respectively.

Henry LIN
for Secretary for Education

cc: Heads of Sections – for information