EDUCATION BUREAU CIRCULAR MEMORANDUM NO. 108/2020

From : Secretary for Education To Heads of Primary Schools

(excluding ESF schools and

Ref. : EDB/CDI/TE/07-15-02 International schools)

Date : 17 July 2020

Revised "Computational Thinking – Coding Education: Supplement to the Primary Curriculum"

Summary

This circular memorandum aims to announce the revised "Computational Thinking – Coding Education: Supplement to the Primary Curriculum" as endorsed by the Curriculum Development Council (CDC) and the related implementation details.

Background

2. In line with the development in Technology Education (TE) and STEM education, the Education Bureau (EDB) published the "Computational Thinking – Coding Education: Supplement to the Primary Curriculum (Draft)" (supplementary document) by the end of 2017 for schools' reference and adoption. The curriculum aims to develop computational thinking and problem solving skills among students through enhancing the coding education at the upper primary level. Since its implementation, the EDB has collected views on the supplementary document from stakeholders through different channels such as school visits and regular contact with schools. The CDC Committee on TE set up an Ad Hoc Committee in early 2019 to review the supplementary document. The Ad Hoc Committee held in-depth discussions and proposed recommendations on revision of the curriculum document based on the implementation experience of schools. The revised supplementary document was endorsed by the CDC in May 2020, and will be implemented from the 2020/21 school year.

Details

- 3. The revised "Computational Thinking Coding Education: Supplement to the Primary Curriculum" retains the original two proposed implementation modes, namely implementation through school-based curriculum and cross-curricular theme-based teaching. The revision mainly includes adjustment to the Chapter 3 "Learning Elements" as follows:
- (i) Trimming the learning content of the strand "Connecting Computing" and "Applications and Impacts" to focus on the teaching of coding;
- (ii) Streamlining the learning content of the strand "Computational Thinking Practices" to better suit the learning needs of upper primary students;
- (iii) Re-organising the content structure to highlight the basic concepts of computational thinking, namely abstraction, algorithm and automation;

- (iv) Adding the learning element on "Forming a System Connected with Physical Objects" to align with the implementation of STEM education.
- 4. Schools are recommended to make reference to the revised supplementary document for curriculum planning on coding education, in order to offer coding education for all upper primary students. The revised supplementary document can be downloaded from the EDB website (https://www.edb.gov.hk/en/curriculum-development/kla/technology-edu/curriculum-doc/index.html).



5. To enable schools to have a better understanding of the revised supplementary document, the EDB has uploaded a video to the EDB website to introduce the details. (https://www.edb.gov.hk/en/curriculum-development/kla/technology-edu/resources/computer-edu/seminars.html) for teachers' reference.



Support Measures for Schools

- 6. The EDB will continue to organise Professional Development Programmes (PDPs) to support teachers to implement coding education effectively. We have started a new series of training programmes. Besides providing foundation courses to introduce the basic concepts of computational thinking and coding, training courses on applications of coding in different subjects and STEM-related activities are also offered to further equip teachers with the related pedagogical knowledge.
- 7. We will also keep on developing learning and teaching resources for teachers' reference to facilitate schools to nurture computational thinking skills among students through coding education. Teachers can browse the related learning and teaching resources at the EDB website (https://www.edb.gov.hk/en/curriculum-development/4-key-tasks/it-for-interactive-learning/modular-computer-awareness-programme/index.html#8).



Enquiry

8. For enquiries, please contact Ms. NGAN Wing Ki of the Technology Education Section, Curriculum Development Institute on 3698 3130.

Dr Gloria CHAN for Secretary for Education

c.c. Heads of Sections for information