LCQ9: Electronic teaching materials

      Following is a question by the Hon Ma Fung-kwok and a written reply by the Secretary for Education, Mr Kevin Yeung, in the Legislative Council today (December 9):

Question:

      To prevent the spread of the Coronavirus Disease 2019 epidemic in schools, schools replaced face-to-face classes with online teaching and learning on a number of occasions this year, leading to a surge in the demand for electronic teaching materials. Some members of the education publishing sector have relayed that during the epidemic, they have provided teachers and students with a large quantity of electronic teaching materials for free, and the additional expenditure so incurred has aggravated their heavy financial burden. Regarding electronic teaching materials, will the Government inform this Council:

(1) of the additional electronic teaching materials in support of online teaching and learning provided to schools by the Education Bureau (EDB), since the outbreak of the epidemic; how the EDB ensures that adequate electronic teaching materials are available to schools and students to meet their needs of online teaching and learning;

(2) whether the EDB has provided support to the education publishing sector for producing electronic teaching materials; if so, of the details; if not, the reasons for that; whether the EDB will introduce in the coming year subsidy schemes for production of electronic teaching materials; and

(3) whether the EDB will, making good use of the opportunity arising from the surge in the needs for electronic teaching materials due to the epidemic, review the Fourth Strategy on Information Technology in Education in the long run, with a view to formulating new strategies and implementation measures for strengthening the support for schools, teachers, students, parents and the education publishing sector, so as to promote e-learning; if so, of the details; if not, the reasons for that?

Reply:

President,

      There is a wide range of learning and teaching resources from diversified sources. Apart from those produced by the Education Bureau (EDB) from time to time, there are also textbooks, lesson plans shared among teachers, teaching materials provided by publishers, as well as the learning and teaching materials produced by universities, other government departments and various organisations, which are available for use. It is considered part of the professional and regular duties of teachers to select suitable teaching materials and make adaptation to the content of the materials to support learning and teaching in accordance with the curriculum aims and

objectives as well as the abilities and learning needs of their students. Despite the volatile development of the Coronavirus Disease 2019 (COVID-19) epidemic, students are still able to learn during class suspension and maintain a certain extent of learning at home through the joint efforts of the EDB and schools to flexibly deploy various innovative methods. The survey and preliminary findings of focus inspections conducted by the EDB showed that schools have adopted diversified strategies to support students in their home learning through electronic means during the class suspension period. Such electronic means include producing teaching videos, conducting real-time online teaching, using online platforms/learning management systems to support students' learning, as well as distributing learning and teaching materials to students via emails/intranets. Besides, schools have also devised and implemented learning plans for different subjects at all levels so that students could continue to learn systematically. Some of the schools have also adopted non-electronic means like encouraging students to read extensively and engage in thematic explorations. Most schools considered that the progress of implementation of home learning plans for students met the pre-set targets.

My reply to the question raised by the Hon Ma Fung-kwok is as follows:

(1) At present, schools may, having regard to their operational needs for information technology (IT) in education, flexibly deploy different subsidies including the Composite Information Technology Grant, the Information Technology Staffing Support Grant and the Expanded Operating Expenses Block Grant to procure various online learning resources and teaching software and hardware, as well as strengthen their IT staffing support.

In addition, to assist schools in adopting e-learning modes to support students' home learning, the EDB has implemented a series of support measures:

(i) Teaching and learning resources:

In view of the COVID-19 epidemic, we have launched a dedicated webpage "Online Learning 360°" (www.hkedcity.net/home/en/learning) in collaboration with the Hong Kong Education City (HKEdCity) to consolidate existing e-learning resources and propose learning schedules for the reference of schools, teachers, parents and students. In addition, the "EDB One-stop Portal for Learning & Teaching Resources" (www.hkedcity.net/edbosp) also provides resources covering various subjects at both the primary and secondary levels to support teachers in teaching students how to fight the virus and the knowledge of related matters. Schools can also make use of the assessment tools and assessment items covering the subjects of Chinese Language, English Language and Mathematics from primary to junior secondary levels provided online by the Student Assessment Repository (STAR) (star.hkedcity.net). The "Resources Depository" (resources.hkedcity.net) set up by the HKEdCity also encourages teachers and related organisations to share quality learning and teaching resources through the platform. Schools can continue to make use of the teaching resources provided by the EDB, including applying for funding under the priority theme of "IT in Education" under the Quality Education Fund. By utilising both the external and internal

resources, schools will be able to formulate comprehensive learning and teaching strategies to meet the learning needs of students.

(ii) Training of teachers:

The EDB has set up a dedicated webpage (www.edb.gov.hk/ited/eh) with videos uploaded elucidating the skills of using e-learning platforms, flipped classroom approach and real-time online teaching. We have been organising webinars on different topics every week since late January this year to share updated information and experiences of online teaching. Also, a new series of webinars have been launched since mid-August this year covering themes such as the major findings of focus inspections and good practices of schools, e-teaching pedagogies for different subjects, successful experiences in supporting students' home learning through the effective use of various learning and teaching resources, and the needs of school leaders to make plans in a holistic manner and pay attention to students' physical and mental well-being. As at late November, we have organised more than 80 webinars.

(iii) Support services and strategies:

The IT in Education Centres of Excellence set up by the EDB continue to offer remote or on-site support services to schools and share strategies on supporting students in home learning according to school-based needs. We also continue to provide advice and support for teachers in need through hotlines, mobile communication applications and online self-learning courses, etc. In March this year, we issued a set of principles for the adoption of e-learning to support students' home learning for schools' reference. Recently, we have consolidated the experiences of the parties concerned, which include the questionnaire survey conducted by the EDB in July this year and the preliminary findings of focus inspections, and updated the aforesaid principles. We issued letters to inform schools of the updated principles and uploaded them to the EDB's dedicated webpage (www.edb.gov.hk/ited/eh) in August this year to provide guidelines on the related matters to schools. To support students in their home learning, schools should make reference to the above implementation principles and adopt suitable modes of learning and teaching according to their own circumstances and the needs of students at different stages of learning. In addition, we will continue to conduct relevant focus inspections, understand schools' circumstances and share successful experiences with the sector.

(2) The EDB does not subsidise publishers to produce teaching materials. The EDB launched the e-Textbook Market Development Scheme (EMADS) in 2012 to facilitate and encourage the participation of potential and aspiring e-textbook developers to develop a diverse range of e-textbooks in line with the local curricula for use by schools, as well as to try out a quality assurance mechanism for e-textbooks. The submission of e-textbooks for review has become a regular practice upon the conclusion of the EMADS and there are three submission periods each year. The e-textbooks approved under the quality assurance mechanism will be listed on the Recommended e-Textbook List together with those developed under EMADS for adoption by schools.

During the period of class suspension, many IT companies, educational

publishers, universities, charitable organisations and non-government organisations allowed the school sector to use their e-learning platforms and resources for free. Some of the links to the relevant websites were uploaded to the dedicated webpage launched by the EDB during the class suspension period for schools' reference. In addition, to support schools' promotion of extensive reading, subsidies have been provided by the EDB for schools to participate in the free use of the HKEdCity's eRead Scheme from July to December 2020. The eRead Scheme provides a wide range of quality Chinese and English e-books in various categories at the primary and secondary levels. We would like to thank the education publishers for their proactive support for e-learning during this difficult period, which benefited many students. We welcome the exchange with and the contribution of the educational publishers and will continue to work with the HKEdCity to explore the setting up of more useful platforms to enable students, parents and schools to know about various kinds of learning and teaching resources available in the sector. The EDB plans to work with the HKEdCity in the 2020/21 school year to explore and build a more comprehensive and user-friendly teaching resources sharing platform to optimise the use of the learning and teaching resources as well as to encourage teachers to share quality learning resources. The EDB will continue to maintain close communication with the publishers and the HKEdCity through regular mechanisms to discuss ways to improve the e-learning resources, including the technical and functional design of e-textbooks, in order to enhance their quality to meet the teaching needs.

(3) The EDB launched the Fourth Strategy on Information Technology in Education (ITE4) in 2015/16 school year to enhance schools' IT environment in terms of hardware, resources and teacher training, thus enabling schools to devise school-based plans for the implementation of e-learning having regard to their school contexts and development needs, with a view to enhancing learning and teaching effectiveness with the use of IT. In promoting e-learning, the EDB encourages schools to adopt the right technology in teaching and learning at the right time when considering whole school planning and applying IT in teaching. To continuously enhance various support measures under the ITE4, we have been reviewing the progress and effectiveness of relevant measures through different means such as school visits, questionnaire surveys and focus group meetings.

     To enable the education sector to meet the needs of the development of IT in education, the Policy Address this year has proposed that the Government will earmark $2 billion under the Quality Education Fund to launch a three-year programme to assist schools to implement the blended mode of learning and teaching. In particular, about $1.3 billion will be set aside for schools to purchase mobile computer devices for loan to needy students, and about $130 million for the provision of Wi-Fi routers and mobile data cards for students who do not have access to appropriate Internet services because of their living environment. At the same time, we will set aside $500 million to support new e-learning initiatives. Besides, as mentioned in (2) above, the EDB will work with the HKEdCity to explore and build a more comprehensive and user-friendly teaching resources sharing platform. The EDB will continue to review and enhance all relevant measures including teacher training and parent education to further support schools in implementing the

blended mode of learning under the new normal.