

LCQ3: Elective subjects of the senior secondary curriculum

Following is a question by Hon Mrs Regina Ip and a written reply by the Secretary for Education, Mr Kevin Yeung, in the Legislative Council today (February 27):

Question:

Under the arrangements of the New Senior Secondary academic structure, apart from the four compulsory core subjects, schools may decide on their own to offer a certain number of elective subjects (with the average number of last school year being 11) out of 20 subjects which are Key Learning Area elective subjects, Applied Learning courses and six other language courses, and their students may choose to take two to three subjects among the subjects offered. It is learnt that in respect of some elective subjects (e.g. Combined Science, Integrated Science as well as Design and Applied Technology), the numbers of students taking and the numbers of schools offering such subjects have been persistently on the low side in recent years. In this connection, will the Government inform this Council:

(1) whether it has assessed if there are faults in the curriculum designs of those subjects with persistently low student enrolments; if it has assessed and the outcome is in the affirmative, whether the Government will conduct a comprehensive review of the curriculum designs of such subjects; if it has not assessed, of the reasons for that; and

(2) whether it will consider consolidating those elective subjects which are offered by a small number of schools and have a low student enrolment, so that the schools concerned may concentrate their teaching resources on other elective subjects; if so, of the details; if not, the reasons for that?

Reply:

President,

Our consolidated reply to the questions of Hon Mrs Regina Ip is as follows:

The primary aim of the senior secondary curriculum under the New Academic Structure (NAS) is to provide students with a broad and balanced curriculum under which they take two or three elective subjects (four at most) on top of four core subjects (i.e. Chinese Language, English Language, Mathematics and Liberal Studies). The curriculum is also supplemented by a wide range of activities for "Other Learning Experiences" to broaden students' horizons and foster their whole-person development. Under the open curriculum framework, schools can offer students an appropriate and adequate choice of elective subjects from 20 senior secondary elective subjects, some 30 Applied Learning (ApL) courses and six Other Languages. This arrangement

not only caters for students' interests and needs, but also provides schools with sufficient flexibility to develop their school-based curricula in the light of their contexts as well as the needs of students.

Being an international city boasting a blend of Chinese and Western cultures, it is of the utmost importance for Hong Kong to nurture a pool of talent in various fields. The design of the senior secondary curriculum under the NAS is based on the development of both Hong Kong and the world, as well as local socio-cultural, economic and geographical factors, and reference has been made to the trends in curriculum development in other countries/regions. The senior secondary curriculum should also cater for students' diverse needs so as to enable them to choose suitable subjects according to their interests, aspirations and abilities. The student enrolment of each elective subject in every school year depends on an array of factors. In particular, the continuous decline in student population over the past few years has directly affected the student enrolment of elective subjects, while the requirements for admission to different departments of universities (e.g. prerequisite or non-prerequisite elective subjects) impact on the number of elective subjects taken by students. For instance, some universities or departments might set the order of admission priority based on the attainments in the best five or six subjects of candidates meeting the General Entrance Requirements. This might have led some candidates to focus on their strong subjects or even drop individual subjects in Secondary 5 or 6 in order to strive for better results. In this regard, the high or low student enrolment of an elective subject may not necessarily bear a relationship to whether there is room for improvement in its curriculum design.

We are aware that the numbers of students taking individual senior secondary elective subjects, such as Literature in English, Integrated Science, Technology and Living, Music and individual ApL courses (e.g. Applied Learning Chinese (for non-Chinese speaking students), Animal Care, Entrepreneurship for Small and Medium Enterprises), have been rather low. Yet, as stated above, in the context of the holistic design of school curriculum, we have to consider students' needs and school contexts from a professional angle to offer different senior secondary elective subjects including those with low student enrolments. In doing so, students with different aptitudes, abilities and backgrounds are provided with an adequate choice of subjects, hence catering for learner diversity and supporting students in multiple study and career pathways. Taking Combined Science and Integrated Science as examples, we provide two integrated science subjects, in addition to the traditional science subjects (including Physics, Chemistry and Biology), to not only meet students' need for taking science subjects to master essential scientific knowledge, but also give students space to consider acquiring the domains of knowledge in connection with subjects under other Key Learning Areas. In fact, given the increasingly diverse pathways to further studies, local tertiary institutions also offer bachelor's degree and diploma programmes of a cross-disciplinary/integrated nature which go beyond traditional subject learning.

At present, schools in general are offering about 11 elective subjects

at the senior secondary level. To give students a wider choice of subjects, the Education Bureau (EDB) has been providing schools with the Diversity Learning Grant (DLG) since the 2009/10 school year to encourage collaboration among schools on offering joint-school curricula of different senior secondary subjects (e.g. Music, Physical Education, Design and Applied Technology, Ethics and Religious Studies), hence optimising the use of resources across schools as well as catering for students' diverse interests. For now, over 150 secondary schools are involved in offering the joint-school curricula. The funding from the DLG can also be used to make arrangements for students to take Other Languages and/or ApL courses offered by course providers in order to cater for students' diverse learning needs. ApL courses cover six areas of studies, namely Creative Studies; Media and Communication; Business, Management and Law; Services; Applied Science; and Engineering and Production. Fewer than 5 000 students are enrolled in some 30 courses, each of which is taken by a fairly small number of students; however, taking into consideration the potential for broadening students' learning experiences and enabling them to learn fundamental theories and concepts through application and practice, ApL courses are meaningful subject choices.

The EDB has been monitoring the development of the senior secondary curriculum under the NAS since its launch in 2009. Regular meetings are also held by the committees on various senior secondary subjects under the Curriculum Development Council (CDC) to review the implementation of the subjects. Given that curriculum development is an ongoing process, the committees on various senior secondary subjects under the CDC will, in a timely manner, review and update the design of the curricula of senior secondary subjects as well as the examination and assessment arrangements in the light of the ongoing renewal of the school curriculum to respond to changes in society and students' needs.

Budget Speech by the Financial Secretary (13)

A Caring Society

170. I will continue to provide resources for the Government to implement support measures for the needy to build a caring society.

Welfare Facilities

171. When planning for the provision of more welfare facilities, we are often faced with a shortage of venues. This problem is particularly prevalent in densely-populated areas, where demand for welfare services is indeed acute. I will allocate \$20 billion for the purchase of 60 properties for accommodating more than 130 welfare facilities, including day child care

centres, neighbourhood elderly centres, on-site pre-school rehabilitation services, etc., which are expected to benefit about 86 000 people.

172. Provision of technology products in elderly and rehabilitation facilities can facilitate service enhancement. I will allocate some \$200 million for the Lotteries Fund to launch a four-year pilot project providing Wi-Fi service to around 1 350 service units operated by subvented organisations under the Social Welfare Department (SWD) to encourage them to make use of technology products to improve elderly and rehabilitation services. The SWD will also provide Wi-Fi service to 180 welfare facilities which it operates. This is expected to benefit a total headcount of about 100 000 per day.

Elderly Services

173. We will continue to enhance elderly services. In the next two years, the Government expects to provide more than 500 additional residential care places and 300 subsidised day care places for the elderly. Apart from ongoing provision of visiting medical practitioner services, the Government has recently launched a four-year pilot scheme to provide professional outreach services, including social workers and physiotherapists, etc., for some 45 000 residents in private residential care homes for the elderly. The additional recurrent expenditure for launching the new measures in 2019-20 is around \$1.36 billion. As mentioned earlier, I will provide, on a one-off basis, an additional \$1,000 worth of Elderly Health Vouchers to benefit elderly persons.

Rehabilitation Services

174. The Government will introduce measures to enhance the quality of existing rehabilitation services to step up support for persons with disabilities. Major new initiatives for 2019-20 include increasing 835 rehabilitation service places and purchasing 300 places from private residential care homes for persons with disabilities, gradually setting up five additional District Support Centres for Persons with Disabilities and two additional Support Centres for Persons with Autism, and strengthening the rehabilitation and support services provided by the centres by increasing the manpower of social workers and therapists. These initiatives will involve a total annual recurrent expenditure of around \$290 million and benefit about 9 000 service users a year.

Child and Youth Services

175. As regards child care, the Government will allocate an additional funding of about \$156 million from 2019-20 onwards to increase the level of subsidy for services provided by child care centres to alleviate parents' financial burden; improve the manning ratio of qualified child care workers in day and residential child care centres and enhance training to improve service quality; and provide in phases a total of about 400 additional aided standalone child care centre places in North District, Kwun Tong, Sha Tin, Kwai Tsing and Yuen Long to provide long full-day child care services for

children aged below three.

176. I will also allocate additional resources to increase professional and supporting manpower for the Neighbourhood Support Child Care Project to strengthen training for home-based child carers so as to enhance the quality of services. Incentive payments to these carers will also be raised. Furthermore, the Government will restructure the services of the existing Mutual Help Child Care Centres and deploy additional social workers and supporting staff. The above initiatives will involve an additional annual recurrent provision of around \$52 million.

177. For early identification of, and to provide assistance to pre-primary children and their families with welfare needs, the Government has allocated \$990 million from the Lotteries Fund to launch a three-year pilot scheme to provide social work services in phases for about 150 000 pre-primary children and their families in subsidised/aided child care centres, kindergartens and kindergarten-cum-child care centres. The first phase of services was launched in February 2019.

178. To enhance support for divorced families and their children, the Government will set up five centres to be operated by NGOs to provide one-stop co-parenting support services from 2019-20, and strengthen the manpower of the SWD. These will involve an additional annual recurrent provision of around \$69 million.

179. To enhance teenagers' mental health and stress resilience, the Government will implement the measure of "two school social workers for each school" in more than 460 secondary schools in Hong Kong from the 2019/20 school year, and increase supervisory manpower accordingly. The annual recurrent expenditure involved will be around \$310 million.

Social Enterprises

180. Social enterprises (SEs) in Hong Kong have developed steadily in recent years. The Enhancing Self-Reliance Through District Partnership Programme has given impetus to the development of local SEs, and delivered long-term and sustainable benefits since its launch. To render continuous support to the development of SEs and the socially disadvantaged, I will provide an additional funding of \$150 million for the ongoing operation of the programme.

(To be continued.)

Budget Speech by the Financial

Secretary (12)

Smart City

154. The Government published the Hong Kong Smart City Blueprint in December 2017. A number of major initiatives were launched, including opening up government data, formulating a pro-innovation government procurement policy, as well as launching the FPS. We will set up a Smart Government Innovation Lab this April to engage the industry and solicit their assistance in using IT to improve public services, foster public-private partnership, and create business opportunities for start-ups and SMEs in Hong Kong. Furthermore, we are preparing for three smart city infrastructure projects, including providing an electronic identity for all Hong Kong residents, installing multi-functional smart lampposts, as well as enhancing the government cloud services and building a big data analytics platform. We have allocated over \$900 million to these projects, which will be completed progressively in the coming two years.

155. Through collecting, processing and analysing geographic information, the Government has acquired a large volume of relevant data. Accessibility of inter-connected geospatial data can facilitate policy planning and formulation by government departments. The DEVB is working with the ITB and major user departments to press ahead with the setting up of the Common Spatial Data Infrastructure (CSDI) for the consolidation, exchange and sharing of geospatial information to tie in with the development of various smart city applications by the community. I will earmark \$300 million to expedite the development of digital infrastructure, with a view to facilitating the dissemination, utilisation and innovative application of geospatial data. With the CSDI coming into full operation by the end of 2022 and the high-quality 3D digital maps of the whole territory being made available in phases, more spatial data which are easier to search and use will be provided for organisations in the public and private sectors.

156. Digital infrastructure is essential for a smart city to develop. All eyes are now on the development of the fifth generation mobile communications technology (5G). With its technical characteristics of high speed, high capacity, high reliability and low latency, 5G has immense potential for application in various business services and a smart city in the long run. The Government will assign and auction spectrums in different frequency bands in batches to prepare for the development of 5G networks and services.

Arts and Culture

157. Following the grand opening of the Xiqu Centre last month, other major facilities in the West Kowloon Cultural District will be coming on stream. The development plans for various cultural facilities put forward in my last year's Budget are also underway for the progressive commissioning of facilities in the next few years.

158. To enrich the arts and cultural life of our city and consolidate Hong Kong's position as an international cultural metropolis, I will provide an additional funding of \$176 million in total to the LCSD for hosting large-scale world-class performing arts programmes and arranging telecasts of selected mega shows in different places across the territory in the coming five years. The LCSD will also collaborate with the District Councils to strengthen community arts activities in phases.

159. To further promote the development of arts in Hong Kong, I will increase again the subvention for arts groups in 2019-20, which will involve about \$54 million. The subvention, which will benefit arts groups of various sizes, the Hong Kong Arts Development Council and the Hong Kong Arts Festival Society, can be used for improving staff remuneration, encouraging artistic creation, and organising more cultural exchange activities outside Hong Kong.

160. The Hong Kong Film Archive under the LCSD is dedicated to preserving Hong Kong's film heritage, fostering research and bringing film art to the community. I will allocate \$20 million to employ additional technicians and acquire specialist equipment for digital conversion of sole copies of films and celluloid films in urgent need of archiving. This will enable our younger generations to learn about and appreciate the invaluable film heritage of Hong Kong.

Sports

161. Hong Kong athletes made remarkable performance, and achieved outstanding and encouraging results in major international sports events last year. In 2019, our teams also excelled in cycling, table tennis, fencing, football and other events. I strongly believe that Hong Kong athletes will continue to shine and thrive.

162. Athletes strive for excellence in the arena but most of them retire from sports before the age of 40. It is important to plan early for turning a new chapter in life. In recent years, the Government has been providing additional resources and working jointly with universities to support athletes in pursuing athletic training and academic studies at the same time. I will inject \$250 million into the Hong Kong Athletes Fund to increase scholarship awards in support of the dual-track development of athletes, and will provide more cash incentives for full-time athletes when they retire from sports.

163. The LCSD is conducting a comprehensive review of the Sports Subvention Scheme. Before the outcome is available, I will allocate an additional recurrent provision of \$25 million and an extra two-year subsidy of \$17 million per year to enhance the financial assistance for 60 national sports associations (NSAs). The funds can be used to support participation in overseas competitions, offering squad training programmes and supporting under-privileged athletes, as well as other operating costs. Moreover, I will provide a one-off grant of \$15 million for staff training, further studies, procurement of equipment, improvement of office facilities, etc. In other words, the additional resources to be allocated to NSAs in the coming

two years will amount to almost \$100 million. When concrete recommendations are available upon completion of the review, I will provide the required resources as necessary.

Environmental Protection

164. In my previous two Budgets, I set aside a total of \$1 billion for departments to install renewable energy facilities at government buildings and venues and community facilities. Responses have been positive. In support of the Policy Address, I will provide another \$1 billion for departments to install relevant facilities.

165. The Government announced last month the relaxation of eligibility criteria of the "One-for-One Replacement" Scheme for electric private cars, raising the number of eligible vehicles under the scheme substantially by 30 per cent to over 250 000. Moreover, providing corresponding charging facilities is essential to promoting wider use of electric vehicles (EVs) in Hong Kong. We will explore ways to encourage the installation of EV charging facilities at car parks in existing buildings. In parallel, I will allocate \$120 million to extend the public EV charging networks at government car parks. Over 1 000 additional public chargers are expected to be in place by 2022, bringing the total number of chargers to 1 700. We will also identify suitable on-street parking spaces to install EV chargers on a trial basis and explore suitable locations to set up pilot quick charging stations for EVs.

Building the City

Harbourfront Enhancement

166. Following the gradual completion of the planning for the harbourfront areas and the commissioning of the related major infrastructure projects on both sides of the Victoria Harbour, the Government will adopt a forward-looking approach in pursuing harbourfront enhancement and vigorously seek to open up continuous and accessible harbourfront promenades. We will embrace versatile designs, management models and uses to make our harbourfront more vibrant. Harbourfront enhancement projects funded by a \$500 million allocation in early 2017 have been rolling out one by one. I will earmark another \$6 billion for developing new harbourfront promenades and open space as well as improving harbourfront facilities. It is the Government's plan to extend the length of the harbourfront promenades from the current 20-odd kilometres to 34 kilometres in about 10 years, and provide 35 hectares of open space on both sides of the Victoria Harbour.

Urban Forestry Support Fund

167. To strengthen public education and promotion on proper tree care and uplift the professional standards of practitioners, I propose to set up a \$200 million Urban Forestry Support Fund for the implementation of various initiatives. These include encouraging students to pursue studies in arboriculture, and rolling out arboriculture and horticulture trainee programmes, as well as providing more training and internship opportunities

for new recruits to tie in with the Specification of Competency Standards for the arboriculture and horticulture industry to be published by the end of this year, as a prelude to the introduction of a future registration system for tree management personnel. Moreover, we will organise international urban forestry conferences to facilitate exchanges with neighbouring regions, in a bid to upgrade the expertise and practice standards of the local industry. We will also strengthen co-operation with community organisations to provide the public with more information on tree planting and caring.

Traffic Improvement

168. Apart from constructing trunk roads, the implementation of electronic road pricing is also an effective way to tackle traffic congestion. The TD is conducting a feasibility study on the Electronic Road Pricing Pilot Scheme in Central and its Adjacent Areas. It expects to consult stakeholders in the first half of this year. Electronic road pricing does not aim to increase government revenue. As such, the Government will consider providing additional recurrent resources broadly equivalent to the net revenue to be generated from the pilot scheme for implementing measures to improve public transport services and encourage wider usage.

Municipal Facilities Improvement

169. Further to earmarking resources for the Market Modernisation Programme in last year's Budget, I will allocate more resources to the Food and Environmental Hygiene Department for refurbishing its public toilets by phases, improving ventilation and other facilities, as well as enhancing their cleanliness and hygiene. It is estimated that a total expenditure of over \$600 million may be incurred, involving about 240 public toilets in the coming five years.

(To be continued.)

Budget Speech by the Financial Secretary (11)

A Liveable City

129. People work hard every day to enhance the quality of life. We will also strive for economic development to make Hong Kong a more ideal place for living. The Government will continue to make good use of our resources to achieve this goal and serve people's needs.

Land Resources

130. I will ensure that adequate resources are provided to support fully the short, medium and long-term measures to increase land and housing supply.

Land for Housing

131. Over the past two years, we increased short-term land supply through land sale, rezoning, railway property development and projects of the URA, etc. 78 sites were identified, capable of providing about 93 000 units.

132. The estimated public housing production for the next five years is about 100 400 units, including about 74 200 units for public rental housing and under the Green Form Subsidised Home Ownership Scheme, and about 26 300 other subsidised sale units.

133. Housing land supply increased steadily in the past few years. In 2018, 21 000 private residential units were completed, a record high in 14 years. The supply of first-hand private residential units is expected to remain at a relatively high level in the coming three to four years, including 9 000 unsold units in completed projects, 64 000 units under construction and not yet sold through pre-sale, and 20 000 units from disposed sites where construction may start anytime. Based on preliminary estimation, the private sector will, on average, complete about 18 800 residential units annually in the next five years (i.e. from 2019 to 2023), representing an increase of about 20 per cent over the annual average of the past five years.

134. The 2019-20 Land Sale Programme comprises a total of 15 residential sites, including seven new sites, capable of providing 8 800 plus residential units in total. Together with railway property development projects, the URA's projects and private development/redevelopment projects, the potential land supply for the whole year is expected to have a capacity to provide about 15 500 units. The Secretary for Development will announce the details of the Land Sale Programme for the next financial year tomorrow.

135. On the property market, residential property transactions and prices fell in the latter half of last year, but current flat prices are still out of line with people's affordability. The Government has no intention to withdraw any demand-side management measures at this stage. The global economic slowdown, coupled with political and economic uncertainties, may affect investment sentiment and intensify the volatility in the global financial markets. Members of the public must carefully assess the risks and their own financial position before making a home purchase decision.

136. Apart from continuing to rezone sites and increase development density, we will press ahead with a number of new development area projects this year. These include seeking funding approval respectively for the first batch of infrastructure works of Kwu Tung North/Fanling North and Hung Shui Kiu new development areas, and gradually commencing land resumption and clearance for the projects for commencing construction as soon as possible. In parallel, we will initiate the statutory planning procedures for the Yuen Long South development this year. These three development projects, together with the Tung Chung New Town Extension project of which reclamation works are

in progress, will provide about 210 000 residential units in phases from 2023.

Transitional Housing

137. Transitional housing serves to alleviate the housing problem of those living in inadequate accommodation. To facilitate community-initiated transitional housing projects, the Transport and Housing Bureau (THB) has set up a task force to co-ordinate and provide one-stop support. The task force will work with relevant bureaux and departments to render appropriate assistance. I will set aside \$2 billion to support NGOs in constructing transitional housing. The THB will map out the detailed arrangements and seek funding approval.

Industrial/Commercial Land

138. The Government has all along strived to increase the supply of commercial floor area to meet the needs of industrial and commercial development. The Government will include seven commercial sites in the 2019-20 Land Sale Programme, estimated to provide about 814 600 square metres of floor area, including the provision of a maximum of about 2 900 hotel rooms. Among the seven commercial sites, the one above the West Kowloon Station of the Guangzhou-Shenzhen-Hong Kong Express Rail Link is the largest one for sale by the Government in recent years, capable of providing a total floor area of about 294 000 square metres. A number of commercial sites will be put up for sale in the next few years, including those at the Kai Tak Development Area, the new Central Harbourfront, Caroline Hill Road and Queensway Plaza.

Optimising the Use of Government Land

139. In last year's Budget, I set aside \$1 billion to support NGOs in using vacant government sites and restoring school premises for various short-term uses that are beneficial to the community. The initiative has been well received by the community. I welcome the funding approval by LegCo earlier and the DEVB has started inviting funding applications.

140. We will expedite the implementation of the "single site, multiple use" model in multi-storey development on government land, so as to optimise the use of limited land resources to meet the community's demand for public services and provide more "Government, Institution or Community" (G/IC) facilities. The Government Property Agency will take forward multi-storey projects with cross-department facilities. Moreover, the Planning Department will tighten the reservation of a government site by any single department and recommend a higher development density as appropriate to optimise the development potential of government land. I have set aside about \$22 billion to take forward the first batch of projects under the "single site, multiple use" initiative, which will include redevelopment of Tuen Mun Clinic, development of a proposed ambulance depot near Sheung Wan Fire Station, and consolidation of several government sites in Tsuen Wan town centre.

Long-term Land Development

141. Last week, the Government announced full acceptance of the recommendations tendered by the Task Force on Land Supply to take forward eight land supply options. I will ensure that adequate resources are provided for the purposes. The Steering Committee on Land Supply, which I chair, will be re-structured to strengthen the co-ordination of land supply. Priority will be accorded to a number of strategic issues. These include using a vision-driven and forward-looking approach in realising our vision, re-assessing our land demand and setting the target of land reserve, and adopting an infrastructure-led and capacity building mindset in planning strategic transport infrastructure. So long as we make concerted efforts and persevere in our endeavours, we can resolve the problem of undersupply and provide sufficient land for the long-term development of Hong Kong.

Lantau Tomorrow

142. Lantau Tomorrow is a grand vision. The Government will take forward the projects concerned in phases to open up more land for improving our living environment and quality as well as meeting the need for social development. Apart from providing an ample supply of land, Lantau Tomorrow entails the construction of strategic road and rail networks linking the coastal areas of Tuen Mun, North Lantau, artificial islands in the Central Waters and Hong Kong Island North. This will improve the efficiency of the traffic network in the North West New Territories and Hong Kong as a whole.

143. The Government is financially capable of realising the Lantau Tomorrow Vision. In formulating the implementation strategies, we will conduct a detailed financial analysis, taking into account factors like the Government's fiscal sustainability and affordability, and implement the projects in phases.

144. Regarding the construction of the 1 000-hectare artificial islands near Kau Yi Chau and the related major transport networks, the Government will kick off studies as soon as possible. As to the study on near-shore reclamations covering Lung Kwu Tan, Sunny Bay and Siu Ho Wan, the Government plans to apply for funding approval within this year. Separately, we will conduct a planning study on the coastal areas of Tuen Mun, taking into account land uses and ancillary transport infrastructure in Lung Kwu Tan and the River Trade Terminal.

Healthcare

145. Our healthcare and supporting teams in the public sector have been safeguarding the health of the community with professionalism and passion. Yet, surges in demand coupled with manpower and facility constraints have added to their workload. They are no doubt hard-pressed. In last year's Budget, I proposed the second 10-year hospital development plan and measures to strengthen healthcare manpower training, which aim to take forward long-term planning to meet growing service demand. We have tentatively included 19 projects under the second 10-year hospital development plan, providing

about 9 000 additional hospital beds. The nine projects under the first 10-year hospital development plan have already commenced and made good progress.

146. Meanwhile, the Government will provide sufficient resources to support the operation and development of the public healthcare system. The estimated recurrent government expenditure on public healthcare services will increase by 10.9 per cent to \$80.6 billion in 2019-20, accounting for 18.3 per cent of the total recurrent expenditure.

Hospital Authority

147. Our public healthcare system comes under even greater pressure in each outbreak of influenza. The long waiting time at the accident and emergency departments and the overloaded occupancy rates of wards have given rise to wide public concern. The Hospital Authority (HA), our frontline public healthcare provider, must properly plan and manage public hospital services and take timely and effective measures to cope with influenza surge and other possible public health challenges so as to live up to the expectations of the public. The Government will provide resources to fully support the work of the HA.

148. In view of the heavy workload of frontline healthcare workers, I have earlier asked the HA to propose ways to boost morale and retain talent. Having regard to the concrete recommendations from the HA, I will provide additional recurrent funding of over \$700 million for the HA to introduce the following measures:

(a) increasing the rate of allowance for on-call medical officers, the rate of Special Honorarium Scheme allowance and the salary of ward supporting staff;

(b) increasing the number of Advanced Practice Nurse posts to enhance evening ward services;

(c) increasing the number of allied health professional posts to improve promotion prospects; and

(d) allocating additional resources to continue implementing the Special Retired and Rehire Scheme.

The HA will strive for early implementation of the above measures in 2019-20 to benefit its frontline staff.

149. The HA spends on average about \$1 billion each year for upgrading and acquisition of medical equipment. I will earmark an additional \$5 billion for the HA to expedite the work in this area, so as to enhance the healthcare quality and efficiency. The additional resources will be used for general medical equipment, introducing advanced medical devices for treating cancer and other diseases requiring specialty services, as well as providing relevant training.

150. To facilitate resource planning by the HA, the current-term Government has adopted a triennium funding arrangement to increase progressively the recurrent funding for the HA having regard to population growth and demographic changes. In view of the importance of public healthcare, I will earmark \$10 billion to set up a public healthcare stabilisation fund so as to prepare for any additional expenditure which may be incurred by the HA in case of unexpected circumstances.

Subsidising Drug Treatments

151. I will provide an additional recurrent subvention of \$400 million for the HA to expand the scope of the Drug Formulary, with a view to including more drugs for patients. The HA's total expenditure on drugs will increase to \$6 billion in 2019-20. Complemented by the new measures to relax the means test mechanism for the Samaritan Fund and the CCF, this would alleviate the financial burden of patients' families arising from drug expenses. In addition, the HA has increased the frequency of the exercise for including self-financed drugs in the safety net to twice a year, hence shortening the lead time for including suitable new drugs in the scope of subsidy. With these measures in place, the total subsidy under the Samaritan Fund and the CCF Medical Assistance Programmes will double to \$1.5 billion in 2019-20, benefiting more needy patients.

Primary Healthcare

152. The Government will allocate resources to push ahead with district-based primary healthcare services to enhance public awareness of disease prevention and their self-health management capability. Hong Kong's first district health centre (DHC), located in Kwai Tsing, is expected to commence operation from the third quarter of this year. I have earmarked over \$150 million to meet the operating expenditure and staff cost of the centre, and will continue to provide resources needed for the future expansion of the network of DHCs.

Hong Kong Genome Project

153. The Policy Address announced the launch of the Hong Kong Genome Project to promote the clinical application and innovative scientific research on genomic medicine. I will allocate about \$1.2 billion to establish the Hong Kong Genome Institute and take forward the project, under which 40 000 to 50 000 whole genome sequencing will be performed in the next six years.

(To be continued.)

LCQ8: Use of e-textbooks and e-learning resources in schools

Following is a question by the Hon Cheung Kwok-kwan and a written reply by the Secretary for Education, Mr Kevin Yeung, in the Legislative Council today (February 27):

Question:

It was pointed out in Report No. 71 of the Director of Audit published in October last year that in the 2016-2017 school year and on class-level basis, among the primary and secondary schools, only 24 per cent and 8 per cent respectively of them used e-textbooks, and 65 per cent and 66 per cent respectively of them used e-learning resources. In this connection, will the Government inform this Council:

(1) whether it has formulated specific strategies and long-term goals for promoting the wider use of e-textbooks and e-learning resources by schools; if so, of the details; if not, the reasons for that;

(2) given that as at April last year, the number of e-textbooks (49 sets) available on the recommended textbook lists of the Education Bureau (EDB) was far lower than that of printed textbooks (479 sets), whether the Government will consider launching a new round of the e-Textbook Market Development Scheme or taking other measures to promote the development and use of e-textbooks; if so, of the details; if not, the reasons for that;

(3) whether it has studied if the use of e-learning resources by students has resulted in any improvement in their academic achievements and in their interest and confidence in learning, as well as how this affects the students' health; if it has studied, of the outcome; if not, the reasons for that; and

(4) whether officials of the EDB conducted any overseas visit in the past five years to learn from the experience of other places in using information technology to enhance teaching and learning; if so, of the countries/regions visited and the experience gained; if not, the reasons for that?

Reply:

President,

The Education Bureau (EDB) launched the Fourth Strategy on Information Technology in Education (ITE4) in the 2015-16 school year to enhance the information technology (IT) environment such as hardware, resources and teacher training in schools. It enables schools to devise school-based plans for practising e-learning in consideration of their school contexts and development needs, so as to make good use of IT to enhance learning and teaching effectiveness. Schools are encouraged to promote e-learning by using

the right technology in teaching and learning at the right time when considering whole school planning and use of IT for teaching. The promotion of e-textbook development aims to provide schools with another option of quality learning and teaching resources in addition to printed textbooks. It should be stressed that as one of the many learning modes, e-learning, which is ever evolving and diversified, is open and flexible. There is no so-called best practice or standard which schools should follow.

The EDB values the views of the sector for improving the relevant work. The Steering Committee on Strategic Development of Information Technology in Education advises the EDB on the strategic direction, implementation and evaluation of integrating IT into education and the implementation of e-learning in schools, including the use of e-learning resources and e-textbooks. To improve the measures on supporting the needs of schools in the development of IT in education, the EDB continues to explore and enhance different strategies by maintaining close communication with the relevant stakeholders and making reference to the information gathered through different means such as school visits and questionnaire surveys. We will continue with the relevant work in order to understand the views of the stakeholders.

My reply to the question raised by the Hon Cheung Kwok-kwan is as follows:

(1) and (2) Teachers' professional capabilities of using e-learning resources to enhance learning effectiveness and the availability of quality e-learning resources already developed in the market are two crucial factors for promoting e-learning. On teachers' professional training, the EDB has been enhancing teachers' professional capabilities of using e-learning resources (including e-textbooks) in teaching various subjects through professional development programmes. In addition to continually strengthening relevant professional development programmes for teachers, the EDB will also form learning communities among schools for teachers to share their successful experiences and effective pedagogical practices in e-learning with each other, with a view to fostering a paradigm shift in the mode of teaching and enhancing the effectiveness of learning and teaching for the benefit of students.

The EDB launched the e-Textbook Market Development Scheme (EMADS) with the aim of facilitating and encouraging the participation of potential and aspiring e-textbook developers to develop e-textbooks for various subjects in line with the local curricula, and trying out a quality vetting and assurance mechanism for e-textbooks. At present, the submission of e-textbooks for review has become a regular arrangement which has been extended to all subjects. The publishers are in general familiar with the arrangement of the submission and publishing of e-textbooks, and have gained related experiences. The EDB continues to communicate with the publishing industry to improve the technical and functional design of e-textbooks so as to create favourable conditions for promoting the development and use of e-textbooks. Given that in principle the supply of e-textbooks is market driven, we have no plan to launch another round of the EMADS.

As stated above, e-learning is an open and flexible learning mode and there is no so-called best practice or standard which schools should follow. Moreover, e-learning measures are not necessarily more effective than conventional measures in every case. As such, schools are not compelled to follow any fixed standards or practices. In fact, schools should exercise their professional judgement in selecting and using suitable learning and teaching resources (including e-textbooks and other e-learning resources) that suit students' needs and school contexts so as to cater for learner diversity.

(3) The EDB launched the ITE4 so as to enhance interactive learning and teaching experience. To continuously enhance various support measures under the ITE4, we have been reviewing the progress and effectiveness of the relevant measures through different means such as school visits, questionnaire surveys and case studies. Schools hold a positive view towards e-learning and generally agree that it is conducive to strengthening the learning motivation and self-directed learning ability of students.

The EDB attaches great importance to students' health and has been promoting the information related to e-learning and health through joint efforts with various stakeholders. The framework on "Information Literacy for Hong Kong Students" was updated in 2016 to enable schools to incorporate information literacy into their curriculum so as to foster students' ability to use information with the correct attitudes, under which the issue on healthy use of the Internet is covered. Moreover, relevant professional development programmes and an information kit on e-learning are available for teachers. To assist schools in undertaking relevant parent education, we have produced video clips in collaboration with various government departments and non-governmental organisations. Through seminars, assistance has been given to parents on ways of helping their children develop good habits in using IT in their daily life and study, such as maintaining their own physical and mental health and not indulging in Internet surfing. Besides, a telephone hotline has been set up to provide individual support to parents, teachers and students in need. To further support teachers to develop students' proper attitude, we have produced the "Smart e-Master" Information Kit on e-Learning which contains information that promotes e-learning and health.

(4) Over the past five years, the EDB officials have visited places such as the Mainland, the United Kingdom, the United States, Canada, Singapore and Finland to better understand their latest development of IT in education. Through attending relevant international conventions and exhibitions and visiting various organisations and schools, we have learnt from their experiences of promoting e-learning, including relevant curriculum planning, development of learning and teaching resources for teachers' reference and encouraging teachers to use these resources in teaching, and understanding how schools in different places made good use of various e-resources, such as tablet computers to facilitate interactive learning. From our observation, teachers in Hong Kong, as teachers of other places will select e-learning resources from various sources to cater for the learning topics and their students' learning needs. Taking into account the development needs of our schools, we will learn from the successful experiences in different places,

such as innovative pedagogical practices in e-learning, e-learning resources and the latest IT teaching tools and devices and share them with the education sector.